Note: This agenda may be amended subject to the provisions of A.R.S. §38-431.02

NOTICE OF PUBLIC MEETING & AGENDA
Yavapai County Planning and Zoning Commission
October 22, 2026 – 9:00 AM
Board of Supervisors' Hearing Room, First Floor
10 South 6th St. Cottonwood, Az. 86326

Citizens are encouraged to watch the meeting virtually at https://yavapaiaz.gov/meetings/pz. Notice is hereby given that the public will have physical access to the meeting place fifteen (15) minutes before the scheduled start time of the meeting.

Note: During the course of the meeting the Yavapai County Planning & Zoning Commission may convene into executive session for legal advice, consultation and discussion pursuant to A.R.S. §38-431.03(A)(3) regarding any item listed on the agenda. Items may be taken out of the order listed below at the call of the Chair. One or more of the Commissioners may attend telephonically or virtually and will be announced at the meeting.

Written public comments on current agenda items will be received through the survey links provided for the cases on the Planning Unit website: https://yavapaiaz.gov/devserv/Divisions/Planning-Division/Planning-Zoning-Cases or planning@yavapaiaz.gov no later than twenty-four (24) hours prior to the scheduled Commission meeting.

PLEDGE OF ALLEGIANCE

1. **Yavapai County Planning and Zoning Commission is conducting this meeting in accordance with the Arizona Open Meeting Laws, pursuant to A.R.S. § 38-431.01(A).**
2. **Roll call.**
3. **Disclosure of Ex Parte Contacts.**
4. **Approve the minutes of the Planning & Zoning Commission meeting held on September 17, 2026.**
5. **Select Commission member to represent the Planning & Zoning Commission on December 2, 2026. Board of Supervisors hearing.**
6. **Explanation of Meeting Procedures.**

PUBLIC HEARINGS:

NEW BUSINESS:

7. **Use Permit: PLA25-000070; APN: 800-20-056X, -056W, -043S, -044H, -044P, -044U, and -044V**
   Owner: Arizona State Land Department
   Applicant: Agua Fria, LLC, A Delaware Limited Liability Company d/b/a Agua Fria AZ, LLC in Arizona – Longroad Development Company, LLC
   Project: Agua Fria Solar/Storage Facility Use Permit
   Request: Consideration of a transferrable Use Permit for a period of 40 years to allow for the development of a solar field of photovoltaic modules (450 MW), an onsite project substation, a battery energy storage system (BESS), a gen-tie line connection to existing transmission network at the Dugas substation, an operation and maintenance building, and associated infrastructure located on seven parcels, totaling 4,215 acres of Arizona State Land, in the RCU-2A zoning district, subject to the conditions of approval. The request includes waivers for Section 608 Solar Facilities requirements. Located north of Cordes Junction, east of Old Sycamore Road and spanning both sides of approximately three miles of Interstate-17 between the community of Mayer and the Agua Fria National Monument. Staff: Matthew Blake, AICP. (District 2 – Dee Jenkins).

   This item is tentatively scheduled to be considered by the Board of Supervisors during their regularly scheduled meeting on December 2, 2026, unless continued.

OTHER BUSINESS:

1. Staff update on Board of Supervisors meeting results regarding Development Services items.
2. Upcoming Commission hearing agenda items.
3. Chairman's Corner.

Commissioners are forbidden by law from discussing or taking legal action on matters raised during the Chairman's Corner unless the matters are properly noticed for discussion and legal action.

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PLANNING AND ZONING COMMISSION
YAVAPAI COUNTY, ARIZONA

Cottonwood, Arizona September 17, 2026

MINUTES OF THE PLANNING & ZONING COMMISSION REGULAR MEETING HELD ON SEPTEMBER 17, 2026, 9:00 A.M., in the BOARD ROOM located at 10 S. 6th STREET, Cottonwood, Arizona.

CALL TO ORDER

Chair Griffis called the meeting to order at 9:00 a.m.

PLEDGE OF ALLEGIANCE

ROLL CALL

Members Present:
Linda Buchanan, Vice Chair, District 2
Bob Cothern, Secretary, District 2
Randy Garrison, District 3
Michael Eastwood, District 4
Sandy Griffis, Chair, District 5
Michael Schumacher, District 5

Absent:
Harry Oberg, District 1
Raymond Paiz, District 1
Dan Cherry, District 4

Roll call was conducted by Recording Clerk Andrea Shelton, noting that Commissioners Cherry, Paiz, and Oberg were absent, and a quorum was confirmed.

Also present were Jacob Armstrong, YCDS Director and Planner, Stephanie Johnson.

- Disclosure of Ex Parte contacts.

- Approval of the Minutes of July 2, 2026, Planning and Zoning Commission meeting. **COMMISSIONER GARRISON MADE A MOTION TO APPROVE THE MINUTES OF JULY 2, 2026, 2024; SECONDED BY COMMISSIONER EASTWOOD; APPROVED UNANIMOUSLY.**

- Selection of Commission member for representation at the Board of Supervisors Hearing on October 21, 2026. **COMMISSIONER GARRISON VOLUNTEERED TO ATTEND.**

- Explanation of Meeting Procedures.

NEW BUSINESS:

Items listed in these minutes are schedules to be considered by the Board of Supervisors on October 21, 2026, unless otherwise noted.

Rezoning: PLA26-000029; APN: 407-30-002L
Property Owner: Almasomos LLC
Applicant/Agent: Mattaforma by Lindsey Wikstrom
Project Name: Rancho Almasomos PAD Rezoning
Request: Consideration of a rezoning from RCU-2A to PAD (Planned Area Development) to allow for development with agricultural hospitality, commercial, and open space uses on a 102.45-acre parcel, subject to the conditions of approval. Located north of the community of Cornville and west of the community of Page Springs. Staff: Stephanie Johnson. (District 2 - Supervisor Jenkins).

Stephanie Johnson, Planner, opened the staff presentation by displaying the location of the subject parcel, the surrounding zoning, and the history of the property. She reported that staff had received 23 letters of support and no opposition. She stated that the proposal was consistent with Yavapai County's Comprehensive Plan agricultural hospitality designation. She explained that the proposal included overnight lodging, event spaces, farm and beverage sales, offices, educational and wellness uses, and agricultural operations. She noted that the applicant was requesting a rezoning of 102.45 acres from RCU-2A to a PAD for agricultural hospitality, commercial, and open space uses. She added that the plan proposed approximately 86,000 square feet of structures, representing 1.9 percent lot coverage, along with deed-restricted open space totaling 25.62 acres. Ms. Johnson said stated that the surrounding land consisted of similarly zoned RCU-2A property, with the Coconino National Forest located to the north, east, and south, the City of Cottonwood to the north, and Arizona State Trust land to the west. She noted that an agricultural use exemption applied to existing farm structures on the east side of Spring Creek; however, the proposed uses were not covered by that exemption or by RCU-2A zoning, necessitating the requested rezoning. She explained that the PAD framework would create a custom zoning district tailored to the property, with all uses and allowances determined at the rezoning hearing. She stated that, if the rezoning were approved, future development would be restricted to the uses, densities, building envelopes, and layouts in general conformance with the approved site plan unless a PAD amendment were pursued. She stated that the property carried an Agricultural Hospitality land use designation, requiring a minimum of five acres of agricultural use alongside a hospitality component. She referenced Section 2.7 of the Comprehensive Plan, which supported planned area developments over lot splitting and encouraged preservation of small-town rural character and locally owned businesses. She noted that Section 440 allowed up to 50 percent lot coverage, although the applicant proposed approximately 86,000 square feet of structures, equating to 1.9 percent coverage. She added that Section 440(E) required a minimum of 25 percent open space, and the applicant agreed to deed restrict 25.62 acres as open space in perpetuity, limited to compatible passive outdoor recreation and environmental stewardship. Ms. Johnson cited a creekside wedding with temporary seating as an example of an allowed use. She described the proposed uses, noting that C1 areas were designated for overnight lodging and parking, while C2 areas included a beverage stand, banquet space, farm shop, offices, library, game room, meditation center, the Casa Juntos event space, a wellness center, parking, and fuel storage tanks. She stated that RCU uses would remain on the east side of the creek and that all existing and proposed structures were set back at least 150 feet from Spring Creek. She explained that access to the site was via State Route 89A to Oak Creek Valley Road, then Willow Point, and finally Waddell Road. She stated that Willow Point and Waddell Road crossed State Trust land, and the State Land Department required the applicant to obtain a right-of-way for legal public access. She reported that ADOT had no requirements and that Public Works requirements were included in the conditions of approval. She described Spring Creek as a natural resource of state significance and a perennial riparian habitat within the Upper Verde River watershed. She stated

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that Arizona Game and Fish had identified several protected species in the area, including the spikedace, loach minnow, northern Mexican gartersnake, yellow-billed cuckoo, common black hawk, Arizona toad, and Mexican spotted owl. She noted that Conditions 7 and 9 were drafted specifically to protect the FEMA floodplain and the creek. She stated that comments from the Verde Valley Fire District were included in the staff report, noting that existing roads would be widened rather than new roads constructed, that all fire apparatus roads would meet required standards, and that four turnarounds were provided on the site. She reported that agency comments were received from the Cornville Community Association, Verde Valley Fire District, Coconino National Forest, Arizona State Land Department, Arizona Game and Fish, and ADOT, and all were included in the packet. She concluded by noting that pre-application notices were sent to HOAs, neighbors, and interested parties within a half-mile radius, and that an on-site meeting was held on March 28, 2026, with 12 attendees. She stated that staff received 14 letters of support before the packet was finalized and 9 additional letters afterward, with no opposition and no Survey 123 responses. Ms. Johnson explained that staff recommends approval of the PAD rezoning. With the proposed conditions of approval and the safeguards included in the building permit process, staff indicated they have no concerns regarding the request and find it consistent with the site plan, narrative, and Section 440 requirements. She stated that, regarding waiver requests, staff had reported that two waivers were submitted with the application. Under Section 602, the applicant had requested a waiver of the asphaltic concrete requirement for parking and driving surfaces to allow permeable materials, noting that the waiver would not apply to ADA parking spaces. Staff had explained that permeable surfaces would help capture stormwater runoff and hydrocarbon pollutants, and that either a first flush basin or a geogrid system would absorb contaminants and prevent them from entering the creek. She said that staff had found this waiver appropriate. She continued that, under Section 567, the applicant had requested a waiver of the required six-foot block wall adjacent to residential uses, proposing that the existing natural vegetation serve as the barrier. She stated that staff had noted that substantial vegetative screening already existed between the project site and the Waddell property, and that the north, east, and south boundaries were adjacent to public lands. She said that staff indicated that the existing vegetation adequately met the intent of the screening requirement.

She concluded the presentation by stating that there were thirty-three (33) conditions of approval, that included Public Works requirements that were being offered for consideration should the Commission choose to recommend approval.

Chair Griffis asked if there were any questions for Staff.

Commissioner Schumacher asked if the parking lot for dry well for containment into the creek.

In response to Commissioner Schumacher, staff clarified that the parking area is not exempt from containment requirements, the request is a waiver to permit permeable surfaces and that the existing exemption on the property is an agricultural use exemption covering the farm structures and barns east of the creek.

Commissioner Buchanan asked about the Public Works requirement included in the packet, specifically regarding the request for the applicant to block irregular access and inquired how that request had been developed.

Ms. Johnson deferred the question to Public Works and the applicant, noting that they had been the parties working directly on that issue and had been in ongoing discussions with Public Works.

Commissioner Buchanan also asked whether any additional input had been provided by the Cornville Community Association after the packet was forwarded to the Commission.

Ms. Johnson responded to Commissioner Buchanan by stating that there had not been any additional communication from the Cornville Community Association beyond the letter included in the packet. She explained that she had referred to it as a letter of approval because that was how

it was characterized in the document, although she acknowledged that the Association's approval was accompanied by conditions that were very restrictive.

Commissioner Buchanan asked for clarification on Condition of Approval No. 8 regarding the abandonment of a well. She noted that he had not seen such a requirement before and asked whether it had been mandated by ADWR and how it fell under County authority to enforce.

Ms. Johnson responded that the requirement had not been mandated by any agency. She explained that the well was shallow, not producing adequately, and located close to Spring Creek. She stated that the applicant planned to abandon the shallow well and rely on deeper wells farther from the creek, and that this proposal had been discussed during the review process.

Commissioner Buchanan then addressed Conditions 19 and 20 regarding the frequency and size of large events. She questioned whether defining large events as those with "100 attendees or more" without an upper limit could allow events of an impractical scale. He also asked whether the combination of 24 large public events and up to 104 private events could allow approximately 130 events per year.

Chair Griffis responded that she shared similar concerns and suggested that the Commission direct those questions to the applicant for more definitive clarification. She then asked about the reference to Willow Creek in the Road Valley area, noting that she found the reference intriguing and intended to discuss it further with the applicant. She stated that Public Works had requested certain actions from the applicant even though the applicant did not own the property in question.

Chair Griffis also referenced the site plan, noting the area labeled as restricted open space in green, including the agricultural field and portions of Spring Creek. She stated that the site plan narrative also referenced upland slope habitat, which was not indicated on the map, and asked whether that omission had been intentional or accidental.

Ms. Johnson stated that Chair Griffis was correct and acknowledged that she had not included that portion in the site plan. She clarified that the 25 percent restricted open space shown in green did not encompass the protections addressed in Conditions of Approval Nos. 7 and 9, noting that those conditions provided additional safeguards beyond the dedicated open space.

Chair Griffis asked if there were further questions of Staff. There being none, the Applicant was asked to come forward.

Lindsay Wickstrom, Founding Principal of Mattaforma & Architecture and Site Strategy Company, provided a presentation outlining the history and purpose of the Rancho Almasomos project. After concluding her overview, she turned the floor over to the property owner, Kat Massey, who described her vision for the project along with its history and mission. Ms. Wickstrom then asked whether the Commission had any questions for the applicant.

Commissioner Buchanan asked the applicant to address the questions that had previously been posed to staff.

Ms. Wickstrom explained that the Public Works requirement for road improvements involved a short section of Willow Point Road, approximately 300 feet between Oak Creek Valley Road and Waddell Road, which she stated was owned by the Arizona State Land Department. She clarified that Oak Creek Valley Road was maintained by the County and that Arizona State Land required Rancho Almasomos to obtain a right-of-way for that portion of Willow Point Road. She noted that Public Works was responding both to that requirement and to the conclusions of the traffic impact study commissioned by Rancho Almasomos.

Ms. Wickstrom reported that the traffic study determined a left-turn lane was warranted on Oak Creek Valley Road for vehicles turning from State Route 89A onto Willow Point Road. She stated that Public Works requested a 200-foot turn lane, to be funded by Rancho Almasomos, and explained that construction of the turn lane would cross an existing ad-hoc access point. As a result, Public Works required that the ad-hoc access be blocked as part of the improvement. She

added that she was not certain about the status of a second access point on Willow Point Road and noted that discussions with Public Works regarding those requirements were ongoing. She further clarified technical review comments from the Arizona State Land Department, noting that the agency addressed both the Willow Point and Waddell easements. She stated that, as described by Karen Dada, the process for securing the necessary right-of-way required completing due diligence for the roadway segment proposed to be added to the existing easement.

Commissioner Buchanan expressed concerns regarding the cultural resources survey requirements outlined by the Arizona State Land Department. She noted that there were multiple references to these requirements in the technical review comments and stated that she wished to draw this to the attention of the Board of Supervisors and others reviewing the case.

Ms. Wickstrom explained her understanding of the cultural resources survey requirements. She stated that, in order to complete the right-of-way process for Willow Point Road, Arizona State Land required a site survey that included a seven-foot buffer on either side of the roadway. She clarified that the purpose of this buffer was not only to evaluate grading and roadway geometry but also to assess the edge of the corridor for cultural resources. She noted that this was the full extent of the cultural resources survey requirement.

Ms. Wickstrom addressed the next question previously raised by Commissioner Buchanan. She stated that the most recent letter from the Cornville Community Association (CCA) referenced curfews and event limits, which had also appeared in the Association's first letter. She explained that two official responses had been received from the CCA and noted that Ms. Massey had attended several of the Association's meetings and spoken with members on multiple occasions. She stated that the applicant incorporated the CCA's feedback by adding both the curfew and the event-limit provisions.

Ms. Johnson clarified that the second letter referenced by Ms. Wickstrom pertained to a prior application for the property that did not move forward. She stated that only the letter relevant to the current application was included in the packet.

Ms. Wickstrom continued by noting that the curfew and event-limit provisions were added in direct response to feedback from the Cornville Community Association (CCA). She stated that the 10 p.m. curfew for outdoor music events and the limits on large events reflected the Association's requests. She also noted that the applicant revised terminology in the application, changing "full kitchen bistro bar" to "beverage stand and food check," as recommended by the CCA.

Commissioner Buchanan asked for clarification on the proposed limit of 150 attendees and asked if the number was too low. She also asked about the second bullet point regarding limits on large events of 100 attendees or more. She noted that the Cornville Community Association had requested a limit of five such events per year, while the condition of approval allowed several times that number, creating a significant discrepancy.

Ms. Wickstrom explained that 150 attendees was the planned occupancy of the large event space and that some events would be limited to that number. She added that the project also intended to host occasional seasonal festivals, which historically attracted up to 300 attendees, and that these larger events would be infrequent. She stated that this was why a strict 150-person cap would not align with the project's overall mission. Ms. Wickstrom responded that large public events were proposed to be limited to two times per week. She acknowledged the earlier concern about adding an upper attendance limit and stated that the applicant did not intend to leave the definition open-ended. She explained that large public events would include festivals, movie nights, or other community gatherings that were publicly advertised, noting that even one such event per week was likely more than would occur. She stated that private events, such as weddings, would be limited by the capacity of the building, which accommodated up to 150 attendees.

Commissioner Buchanan expressed concerns about the impact of frequent large events on the grassy, naturally vegetated areas within the open space. She stated that twice-weekly events with up to 150 attendees could cause substantial disturbance and questioned whether such use aligned with the intent of passive recreation. She noted that temporary setups, including chairs or hay bales for creekside weddings, could further affect sensitive areas and emphasized the importance of maintaining adequate buffering. She added that the weight and movement of hundreds of attendees could create impacts similar to livestock pressure and questioned whether such activity was environmentally appropriate for the creekside setting. She remarked that the scale of activity proposed differed significantly from what the Cornville Community Association appeared to support in its letter and reiterated her concerns regarding the overall frequency and intensity of use in the open space throughout the year.

Ms. Wickstrom stated that the concern was duly noted and commented that hay bales could be a possible solution to the seating. Commissioner Buchanan responded that hay bales could be appropriate if properly processed to prevent invasive species, and while they might fit the rural theme, she emphasized that any seating must be environmentally appropriate for the creekside particularly at a scale of potentially 300 events per year.

Kat Massey, Owner, acknowledged the potential impacts to the riparian area and stated that most weddings at the site were expected to have fewer than 100 attendees, with larger weddings occurring infrequently. She emphasized the team's commitment to environmental stewardship and stated that decisions regarding event locations would be made based on wedding size and recent site activity. She also noted that weddings and larger events were seasonal and that the land would be rested at periods throughout the year, allowing for agricultural work and natural recovery.

Commissioner Buchanan stated that she appreciated Ms. Massey's commitment to stewardship but clarified that the Commission was evaluating the land use and rezoning rather than the business plan. She noted that future owners could operate differently while still meeting agricultural and open-space requirements. She expressed concern that the conditions of approval were broad, not seasonal, and allowed up to 150 event days per year, which she felt was significant in terms of rural character and neighborhood impact. She added that she did not know the extent of discussion held with staff or neighbors to arrive at those figures but appreciated the applicant's explanation. She then asked whether Ms. Wickstrom believed this covered the items previously noted, including the condition regarding the abandoned well, and stated that it appeared the applicant included the well abandonment because of its proximity to the stream subflow and potential safety concerns.

Ms. Massey responded that the well-abandonment condition was determined by Development Services and stated that she believed it was consistent with the overall intention to protect the creek.

Chair Griffis stated that she shared Vice Chair Buchanan's concerns regarding the number of attendees, the open-ended nature of the event limits, and private wedding capacities. She emphasized that the stipulations needed to be clearly defined and agreed upon, noting that the Commission would be making a land-use recommendation to the Board of Supervisors. She added that the applicants and staff would need to work toward agreed-upon numbers for the frequency and size of events.

Ms. Wickstrom responded that she understood.

Chair Griffis then noted her concern that items related to Public Works, including right-of-way requirements and the traffic analysis, were not reflected in the conditions of approval. She stated that these issues should be discussed when the Commission reviewed the stipulations and indicated she would raise the matter at that time.

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Commissioner Buchanan added that public participation and community outreach were important components of a proposal of this scale. She stated that she appreciated the applicant's outreach materials and had reviewed the website, noting that it included ten template letters for supporters to use. She explained that the Commission typically received feedback showing a geographic distribution of respondents and their proximity to the site, but in this case many responses came through email without a clear relationship to the land or community and appeared to rely on the applicant's templates. She acknowledged that these letters could still be sincere but stated that the lack of geographic context made the feedback more difficult for the Commission to evaluate. She added that public testimony can be intimidating for some residents, especially when responding to a well-organized outreach effort and wanted to acknowledge the dynamic for the record.

Chair Griffis asked whether there were any further questions for the Applicant. Hearing none, she opened the floor for public participation.

Emily Morin, 345 Coronado Trail, Sedona, stated that she was in favor of the request and supported the project, its vision, and its benefits to the community.

Kevin Wheeler, 3605 Moki Drive, Sedona, stated that he was in favor of the request and supported the project and its vision for the community.

Dean Taraborelli, 2605 S. Cactus Road, Cornville, stated that he was in favor of the request and supported the project and its vision for the community.

Rod Moser, 3780 E. Del Rio Drive, Cottonwood, stated that he was in favor of the request. He identified himself as a member of the company's management group and the development lead for the Rancho Almasomos project. He stated that the project aligned with all county requirements.

Amy Waddell, 10050 E. Waddell Road, Cornville, stated that she was in support of the request. She expressed that she would appreciate a wall or other sound-mitigating design between the parking area and the Waddell Studio property, and she requested that the Waddell Road name be retained. She added that she supported the project and its vision.

Paul Waddell, 10050 E. Waddell Road, Cornville, stated that he was neutral on the request. He noted that he was the closest neighbor and lived full-time on the Waddell Ranch property.

Chair Griffis asked whether anyone wished to speak in favor of or in opposition to the item. Hearing none, she closed the floor to public participation and returned the matter to the Commission for further discussion and/or a motion.

Chair Griffis recessed the meeting at 10:58 a.m. and reconvened the session at 11:05 a.m.

Staff brought forward the conditions of approval for the Commission to review individually.

The Commission agreed that Condition #1 was acceptable as written.

Staff then presented Condition #2. The Commission agreed that the condition was acceptable as written and expressed no concerns.

Condition of Approval #3 was presented, and the Commission stated that they had no concerns and agreed that it was acceptable in its current form.

Condition of Approval #4 was presented, and the Commission discussed the item.

Commissioner Garrison asked staff about Condition #4. He stated that he understood the purpose of a PAD and the effort to maintain the intent of the application. He noted that he appreciated the inclusion of a 10 percent increase on the cumulative total, even though the cumulative total was a restricted allowance. However, he expressed concern about the limitation preventing an administrative application from allowing an additional 400 square feet of gross floor area. He stated that a 400-square-foot shed seemed minor and that such an increase should be allowed under the administrative process, provided it remained within the overall 10 percent allowance recommended by the PAD. He stated that the 400-square-foot restriction felt onerous and should

be removed. Commissioner Garrison concluded that if the Commission approved the intent of the paragraph, administrative amendments should be permitted up to the 10 percent cumulative allowance without stopping at the 400-square-foot limit.

Ms. Johnson explained that minor PAD amendments were handled internally without a public hearing. Staff stated that allowing up to 400 square feet of additional gross floor area provided flexibility rather than locking in the exact structure sizes shown on the current site plan. She clarified that the intent was not to allow an additional 400 square feet on every structure but to provide limited flexibility if a structure needed up to that amount, which could apply to a few structures. She added that staff wanted a clear cap rather than relying solely on the 10 percent cumulative total among all structures. Ms. Johnson noted that this process was administrative rather than public, and any major PAD amendment would be returned to the Commission and the Board for consideration.

The Commission agreed that Condition #4 was acceptable as written.

Staff presented Condition of Approval #5.

Commissioner Buchanan asked why condition of approval #5 was there if the county doesn't have domain over it.

Ms. Johnson clarified that Section 440 for PADs require that the property owner or developer put the open space into a deed into a restrictive deed as approvable by the board. Specifically in the ordinance it does state that the county is not to be responsible for the private deeds, since they are private and civil matters and the county does address violations by complaints and if there was a complaint of the violation for the open space the county could evaluate that against these conditions of approval, ensuring that there is a deed restriction in place, in that deed restriction it should be stating who is responsible for that oversight.

Commissioner Griffis expressed concerns that the open space percentage should be much larger in order to preserve the land.

Commissioner Griffis then polled the Commission on Condition of Approval #5 to determine whether they agreed with the way it was written. After further discussion, the Commission agreed that Condition #5 was acceptable as written, and no edits were made.

Condition of approval #6 was presented to the Commission for consideration.

After discussion, the Commission agreed that Condition #6 was acceptable as written, and no edits were made.

Conditions of Approval #7 & #8 were presented to the Commission for consideration.

After Chair Griffis polled the Commission on each condition, the Commission agreed that all three conditions were acceptable as written, and no edits were made.

Condition of Approval #9 was presented to the Commission.

Commissioner Buchanan asked staff about tying the top of the creek bank to a site plan with a specific date. He requested clarification on how staff developed this condition.

Counsel John Paladini suggested removing the term "recreational use" for clarity and recommended revising the wording so it clearly states that shade structures, docks, ramps, and bridges are subject to the appropriate permitting. He noted that the current punctuation made it appear that shade structures required only zoning clearance while docks, ramps, and bridges required flood control approval.

Ms. Johnson clarified that docks, ramps, and bridges would be permitted exclusively through Flood Control, while shade structures would require zoning clearance, which Flood Control also reviews.

Mr. Paladini recommended adjusting the language to ensure it clearly conveys that all structures must follow the appropriate permitting requirements.

Chair Griffis asked the applicant whether they agreed to the changes to Condition of Approval No. 9 as written. The applicant indicated their agreement.

After much discussion the commission agreed to amend the condition of approval #9 to read:

Development of any future commercial or residential structures is prohibited within one hundred fifty (150) feet of the top of the Spring Creek bank (according to the Site Plan dated May 26, 2026), or anywhere within the FEMA Floodplain of Spring Creek. Open shade structures under four hundred (400) square feet may be allowed ~~for recreational use~~ at a minimum of twenty (20) feet from the top of the Spring Creek bank with a Zoning Clearance permit.~~,~~ ~~and~~ **D**ocks, ramps, or bridges **are allowed if** ~~as may be~~ permitted by the Yavapai County Flood Control District.

Staff presented Condition of Approval #10 to the Commission.

Ms. Johnson explained how staff developed the condition and stated that it was tied to the certificate of compliance because the process through Arizona State Lands would take no less than two years to complete. She noted that the certificate of compliance is the final step in that process, and tying the condition to it would allow the applicant sufficient time to navigate the lengthy state review.

There were no concerns from the commission and agreed to condition #10 as written.

Staff presented condition of approval #11.

Ms. Johnson said that these are the conditions that public works provided.

Commissioner Buchanan noted under Item 11.a that it included a reference to cultural requirements, which she had raised earlier, and she expressed appreciation that the matter had been addressed.

Chair Griffis then polled the Commission, and the Commissioners indicated they had no concerns with the wording. She subsequently asked about Item 11.c., inquiring whether it was too early for the developer to select which option they were leaning toward for the stipulations, and at what point that decision would be made. She directed the question to Ms. Wickstrom.

Ms. Wickstrom stated that the applicant's preference was to pursue Option B, which would transfer maintenance responsibilities to the County. She added that Option A might still need to be outlined to determine whether it would be feasible, but Public Works was aware of the applicant's preference based on prior meetings.

Mr. Paladini explained that Item 11.c specified that the latest point at which the decision must be submitted in writing to Public Works was prior to final development plan approval. He noted that the developer would need to choose an option before the development plan could be approved and formally indicate that choice in writing.

Commissioner Garrison clarified that Option B required the County to adopt it through action by the Board of Supervisors. He stated that the Commission might be attempting to make a decision for the Board that the Board may not choose to make, in which case Option A would become the available alternative.

After extensive conversation, the Commission agreed that Condition #11 was acceptable as written and no edits were made.

Staff presented condition of approval #12 to the Commission for consideration.

Commissioner Buchanan recommended that the word continually be stricken from the sentence.

The Commission agreed to the amendment, and Condition of Approval #12 was revised to read as presented:

12. The developer shall initiate coordination with Arizona State Land, Coconino National Forest, and Yavapai County as early as practicable and shall provide the County with copies of applications, agency correspondence, approvals, permits, legal descriptions, and executed agreements related to the required right-of-way and maintenance arrangements. Because the required right-of-way crosses State Land and the proposed work affects a roadway subject to a cooperative agreement with the Forest, the developer shall not assume that the necessary approvals can be obtained within the County's ordinary development review timeframe. The developer shall ~~continually~~ demonstrate that it is actively pursuing the required agency approvals.

Staff presented Condition of Approval #13 to the Commission for consideration.

Mr. Paladini suggested that, although the condition reflected Public Works' recommended language, the word "forest" should be capitalized and updated to "USFS" for formality. He explained that references to "Forest Service" or "the Forest" with a capital "F" were typically intended to mean the U.S. Forest Service, and that a more formal designation would be appropriate.

Ms. Johnson noted that the condition involved coordination with both the Coconino National Forest and Arizona State Land.

Mr. Paladini acknowledged this but reiterated that the condition used the term "Forest" with a capital "F," which he presumed referred specifically to the Forest Service. He further pointed out that subsection 13.c used the term "forest coordination," along with another capitalized reference, supporting the need for clarity.

Ms. Johnson stated that the recommended update had appeared in previous conditions and that she would need to make the appropriate adjustments now in order for the Commission to approve them. She then reviewed the earlier conditions to incorporate the modification recommended by counsel.

Earlier conditions that were modified to incorporate the modification recommended by counsel:

Previous Condition of approval #11 Option A second and third bullets were updated to read:

- Coordinate with the County and the **USFS** ~~Forest~~ regarding removal of that section of Willow Point Road from the existing Cooperative Forest Road Agreement between Yavapai County and Coconino National Forest. New limits of maintenance for Willow Point Road will have to be agreed upon between the Forest and the County, likely beginning just north of the removed section.
- Obtain written confirmation, acceptable to the **USFS** ~~Forest,~~ that the applicable portion of Willow Point Road has been removed from the cooperative agreement and that the developer (or other legally responsible entity) will assume all ongoing maintenance for that section of Willow Point Road.

Previous Condition of approval #12 was updated to now read with the additional modifications made by counsel:

13. The developer shall initiate coordination with Arizona State Land, Coconino National Forest, and Yavapai County as early as practicable and shall provide the County with copies of applications, agency correspondence, approvals, permits, legal descriptions, and executed agreements related to the required right-of-way and maintenance arrangements. Because the required right-of-way crosses State Land and the proposed work affects a roadway subject to a cooperative agreement with the **USFS** ~~Forest~~, the developer shall not assume that the necessary approvals can be obtained within the

County's ordinary development review timeframe. The developer shall ~~continually~~ demonstrate that it is actively pursuing the required agency approvals.

After the modifications were made to the earlier conditions, the Commission continued its review of Condition of Approval #13.

Ms. Wickstrom questioned the condition and stated that, prior to final development plan approval, the condition appeared to require extensive coordination that could delay progress on the PAD, building permits, and related uses. She asked for clarification on what the condition was intended to prevent and whether it mirrored the language associated with the certificate of completion. She noted that coordination under subsections A through D would be lengthy and could create an unintended bottleneck.

Chair Griffis stated that she did not interpret the condition as prohibitive and asked counsel for assistance.

Mr. Paladini provided additional context, pointing out references to approval deadlines in Condition 11.c., and asked whether development plan approval was a separate administrative process or part of the PAD approval. He also noted that the condition required the developer to indicate the option selection prior to final development plan approval.

Ms. Johnson clarified that the requirements related strictly to Public Works and were generally tied to the certificate of completion. She noted that she could not speak directly on behalf of Public Works.

Ms. Wickstrom stated that she believed the intent of Conditions 12, 13, and 14 was to ensure timely coordination following PAD approval. She explained that Condition 12 described ongoing coordination, Condition 13 required specific documentation once available, and Condition 14 required initiation of coordination within 60 days. She proposed removing the timestamp from Condition 13, explaining that the complexity of the coordination across multiple agencies made it difficult to guarantee a specific timeline.

Mr. Paladini noted that the Commission could use language such as "as soon as practicable," similar to Condition 14, if desired.

Commissioner Buchanan suggested that an additional clause could be added to the end of Condition 12 stating that the developer shall demonstrate active pursuit of the required agency approvals, noting that the existing language already implied this and cautioning against creating unnecessary complexity.

Chair Griffis recommended striking Condition of Approval No. 13 entirely.

Chair Griffis then asked the applicant if they were comfortable with the removal of Condition #13, and the applicant confirmed their agreement

The Commission and counsel agreed, and Condition #13 was stricken.

Condition of Approval No. 14 was presented to the Commission for consideration.

Commissioner Garrison expressed concerns regarding the requirement for monthly updates, suggesting that the wording be changed to "as necessary" because some agency processes could take up to two years, making monthly reporting burdensome and unhelpful.

Commissioner Buchanan also raised concerns, questioning whether Condition #14 could instead be incorporated as an additional clause under Condition #12. She noted that regular communication with Public Works was already implied and that the requirement, as written, seemed onerous for all parties involved.

Chair Griffis recommended striking Condition of Approval #14. The Commission agreed to its removal and noted that the Board of Supervisors could determine whether additional reporting was necessary.

Mr. Paladini added that the developer would initiate right-of-way and agency coordination immediately, regardless of the condition, and that a 60-day requirement appeared arbitrary. He agreed with Striking Condition #14.

Chair Griffis asked the applicant whether they were comfortable with the removal of Condition 14. The applicant confirmed their agreement.

Condition of Approval #14 was stricken and removed at the request of the Commission.

Commissioner Garrison stated that he did not believe Condition of Approval #15 was necessary and commented that leaving the matter to the CFO would be adequate.

Chair Griffis asked counsel for their thoughts.

Mr. Paladini agreed with Commissioner Garrison and reiterated that it seemed self-evident that, until the roadway was adequate to accommodate a certain level of traffic, the County could restrict the type or size of events occurring on the property. He noted that Public Works was not present but questioned whether the condition was intended to imply that limitations could be placed on operations prior to issuance of the certificate of compliance. He also asked whether phased implementation was anticipated or whether all improvements were intended to occur in a single phase. He concluded that the condition did not appear necessary and was largely redundant with existing requirements.

Staff agreed and stated that no operations could occur until the certificate of compliance was issued. Staff explained that the certificate confirmed all conditions had been met and noted that the applicant had not proposed any phased development, as indicated in the PAD narrative.

Mr. Paladini stated that no events or activities permitted under the PAD zoning could occur until the certificate of compliance had been issued, meaning all conditions had been satisfied. He emphasized that no interim projects or activities could take place on the property prior to that point.

Chair Griffis noted that the Commission was only approving the zoning so the applicant could begin working through the required steps. She recommended striking Condition of Approval #15.

Chair Griffis asked the applicant whether they were comfortable with the removal of Condition of Approval #15. The applicant indicated that they were fine with its removal.

Condition of Approval #15 was stricken and removed at the request of the Commission.

Condition of Approval #16 was presented to the Commission for consideration.

Commissioner Buchanan stated that she viewed the condition similarly to the others that had just been removed, noting that if a requirement was not open to interpretation, there was no need to further define that interpretation.

Chair Griffis asked counsel for input.

Mr. Paladini stated that the condition appeared to be an unnecessary “belt-and-suspenders” measure from Public Works. He explained that conditions duplicating existing regulatory requirements were not needed because another condition already required compliance with all applicable county laws and regulations. He recommended striking the condition, noting it was already covered elsewhere.

Chair Griffis then asked the applicant if they were comfortable with removing Condition of Approval #16. The applicant indicated they agreed, and the Commission concurred.

Condition of Approval #16 was stricken.

Condition of approval #17 was presented to the Commission for consideration.

Mr. Paladini stated that he believed the requirement had already been addressed elsewhere.

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Commissioner Buchanan noted that Condition 11.a already defined financial responsibility and stated that the only additional element referenced in Condition #17 was the guarantee, or "acceptable security form," if such language was necessary. She recommended removing Condition of Approval #17.

Chair Griffis asked the applicant whether they agreed with the removal of Condition #17. The applicant confirmed their agreement, and the Commission concurred.

Condition of Approval #17 was stricken.

Condition of Approval #18 was presented to the Commission for consideration.

Chair Griffis recommended striking Condition #18. The Commission agreed to remove it, and counsel concurred. Chair Griffis then asked the applicant whether they agreed with the removal of Condition No. 18. The applicant agreed.

Condition of Approval #18 was stricken.

Condition of Approval #19 was presented to the Commission for consideration.

Ms. Johnson stated that staff had slightly modified the condition after distribution of the packet and noted that the language referenced a "certificate of completion," whereas the correct term was "certificate of compliance." She recommended updating that portion unless the Commission wished to make additional changes.

Chair Griffis asked why this condition was necessary, explaining that similar subdivisions and PADs had not included anything comparable. She questioned the purpose of adding it.

Ms. Johnson agreed with the Chair's concern.

Mr. Paladini stated that the certificate of compliance already served the function described and that the wording appeared to have been copied from a phased-project template, even though the current project was not phased. He noted that the requirement was already addressed elsewhere in the conditions and appeared redundant.

Chair Griffis asked staff why the additional condition had been included.

Ms. Johnson responded that she could not answer, as she had not been the one to add it.

Chair Griffis then asked Ms. Wickstrom whether she supported striking the condition. Ms. Wickstrom stated that all of the recently stricken conditions had been added by Public Works only days earlier. She requested that Condition No. 19 also be removed, noting that the applicant wished to be treated like a typical PAD applicant.

Condition of Approval #19 was stricken.

Condition of Approval No. 20 was presented to the Commission for consideration.

Commissioner Buchanan asked whether the condition represented a deviation from County standards, noting that she was unsure why it would otherwise be included.

Mr. Paladini explained that, because the project involved a PAD, there were several possible setback requirements—C1, C2, RC2UA, and open space—and it appeared the condition was intended to establish a consistent standard throughout.

Ms. Wickstrom requested that screening elements for parking be exempted from the setback requirement. She explained that the parking design included shade-structure screening located within the 30-foot setback from the Waddell easement, and that the placement had been intentional to provide screening as part of the guest experience. She noted that the exemption would prevent the need to redesign the parking layout shown on the site plan.

Ms. Johnson provided additional background, stating that staff had previously discussed this screening element and its location, but the exemption had not been included in the condition

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language. She clarified that only a small corner of one screening structure encroached into the setback and that it provided a benefit to neighboring properties.

Chair Griffis asked staff to provide the language that had been discussed earlier but not included, and to add it to the condition.

Staff updated condition #20 to now read:

20. All structures**, with the exception of parking screening elements,** will maintain a minimum setback of thirty (30) feet from the Waddell Road easement, equivalent to the minimum exterior side setback for the RCU-2A zoning district.

The Commission agreed that Condition of Approval No. 20 was acceptable as written. Counsel and the applicant also indicated their agreement.

Condition of approval #21 was presented to the Commission for consideration.

The Commission agreed that Condition of Approval # 21 was acceptable as written, and no modifications were made.

Condition of approval #22 was presented to the Commission for consideration.

The Commission agreed that Condition of Approval # 22 was acceptable as written, and no modifications were made.

Condition of approval #23 was presented to the Commission for consideration.

The Commission agreed that Condition of Approval # 23 was acceptable as written, and no modifications were made.

Condition of approval #24 was presented to the Commission for consideration.

The Commission agreed that Condition of Approval # 24 was acceptable as written, and no modifications were made.

Condition of approval #25 was presented to the Commission for consideration.

The Commission agreed that Condition of Approval # 25 was acceptable as written, and no modifications were made.

Condition of approval #26 was presented to the Commission for consideration.

The Commission agreed that Condition of Approval # 26 was acceptable as written, and no modifications were made.

Condition of approval #27 was presented to the Commission for consideration.

The Commission agreed that Condition of Approval # 27 was acceptable as written, and no modifications were made.

Condition of approval #28 was presented to the Commission for consideration.

Commissioner Buchanan stated that she intended to cross-reference the condition with input from the Cornville Community Association. She noted that the Association's first bulleted recommendation suggested capping attendance at 150 people, which was half of what had been proposed. She indicated she was comfortable forwarding the matter to the Board of Supervisors but believed the Commission should acknowledge the potential benefits of a lower cap and the importance of considering the Association's input. She added that the Association was not present but could provide more specific recommendations prior to the Board's decision.

Chair Griffis stated that the Cornville Community Association had consistently been a valued partner and that their recommendations were taken seriously and played an important role in zoning discussions and modifications.

Mr. Paladini asked whether it would make more sense to cap the number of attendees at any one time, noting uncertainty about whether the site could accommodate parking for as many as 300

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people. He suggested setting a realistic number, such as 150 or 200, based on the maximum capacity of the site.

Commissioner Garrison stated that a cap was unnecessary because parking limitations would naturally restrict attendance. He cautioned that establishing an official cap would create enforcement challenges and potentially require intervention from emergency or law enforcement agencies. He emphasized that the physical constraints of the property would serve as a practical limit on attendance.

Mr. Paladini asked whether parking would occur on the roadway.

Ms. Wickstrom responded that roadway parking had never been contemplated and noted that the roadway must remain fully accessible for fire apparatus at all times, significantly limiting any potential parking there. She stated that the roadway's steep topography further restricted parking opportunities.

Mr. Paladini suggested that a more appropriate condition might be to require all parking to occur on the site, prohibiting parking along the roadway unless designated pullouts were provided. He noted that fire-access requirements already imposed significant limits.

Commissioner Garrison remained adamant that the condition should not be changed and expressed concerns about modifying it further.

Mr. Paladini stated that, under the condition as written, any event with 100 or more attendees would be considered a large event and therefore limited to 24 occurrences per year, with no more than one allowed per week.

After extensive discussion, Chair Griffis asked the Commission whether they were comfortable leaving Condition of Approval #28 as written. The Commission agreed that the condition was acceptable as written.

Condition of Approval #29 was presented to the Commission for consideration.

Commissioner Garrison expressed concern that the condition did not prevent large public events from occurring on the same day as a private wedding, noting that simultaneous events could unintentionally create two large events at once.

Commissioner Buchanan stated that one key distinction in the condition was the use of the terms "attendees" and "occupants." She emphasized that the primary concern was the impact of vehicle ingress and egress on the surrounding neighborhood.

Ms. Wickstrom explained that explained that the separation was based on indoor occupancy limits for weddings and noted that outdoor public events did not have the same cap. She acknowledged that a combined cap could simplify the condition while maintaining its intent.

Commissioner Garrison supported keeping the condition as written, stating that the separation provided clearer limits and better reflected community concerns.

The Commission amended Condition of Approval #29 and was revised to read as presented:

29. Private ~~weddings~~ **events** with 100-150 occupants will be limited to two (2) times per week.

Condition of approval #30 was presented to the Commission for consideration.

Mr. Paladini said he approves of this condition, and it makes it clear which takes priority.

The Commission agreed to Condition of approval #30 as written.

Condition of approval #31 was presented to the Commission for consideration.

Mr. Paladini suggested an amendment, noting that under ARS 11-814, the Board of Supervisors has three options following notification and a public hearing: it may grant an extension, determine

compliance, or cause the property to revert. To accurately reflect that reversion is not automatic and requires Board action, he recommended replacing the word “shall” with “may”.

The Commission agreed to the amendment as recommended by counsel.

Condition of approval #31 was amended by the Commission to now read:

31. Applicant must obtain all required building permits within four (4) years from the date of Board of Supervisors approval. Failure to obtain building permits within the four (4)-year time period ~~shall~~ **may** cause the PAD District classification to become null and void and any property rezoned in conformance with the PAD District to revert to its former zoning classification by action of the Board of Supervisors pursuant to A.R.S. § 11-814(I).

Condition of approval #32 was presented to the Commission for consideration.

Condition of approval #32 was amended by the Commission to now read:

32. Certificate of Compliance to be issued within six (6) years of the Board of Supervisors approval confirming all stipulations have been satisfied, the use is operating in conformance with all approvals, all building permits have been issued, and the use is in conformance with the applicable County, state and federal regulations or the Rezoning ~~will~~ **may** become null and void and any property rezoned in conformance with the PAD District to revert to its former zoning classification by action of the Board of Supervisors pursuant to A.R.S. § 11-814(I).

Condition of Approval #33 was presented to the Commission, and the Commission accepted it as written with no revisions.

COMMISSIONER GARRISON MOTIONED TO RECOMMEND APPROVAL TO THE BOARD OF SUPERVISORS OF REZONING PLA26-000029 WITH THE AMENDED CONDITIONS OF APPROVAL AS PRESENTED. SECONDED BY COMMISSIONER EASTWOOD.

Chair Griffis called for a roll call vote.

At the request of the Chair, Andrea Shelton, Recording Clerk, polled each Commissioner individually for their vote and statement of reasoning.

Commissioner Cothern voted to approve, stating that all necessary changes had been made and were appropriate.

Commissioner Buchanan voted to approve, noting that the Commission had thoroughly vetted the application.

Commissioner Garrison voted to approve, commenting that the project would be a great addition to the community and encouraging continued opportunities for limited public access to support environmental education.

Commissioner Eastwood voted to approve and remarked that the venue was impressive and in support of the project.

Commissioner Griffis voted to approve, stating that the PAD rezoning was significant and that the project was sound.

Commissioner Schumacher voted to approve, stating that the proposal represented smart growth.

Commissioner Buchanan exited the meeting at 1:15pm.

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OTHER BUSINESS:

1. Staff update on Board of Supervisors meeting results regarding Development Services items.

Jacob Armstrong, YCDS Director, addressed the Commission and provided a brief update. He reported that the Board of Supervisors meeting included no Development Services items; therefore, he had nothing to present to the Commission.

2. Upcoming Commission hearing agenda items.

Mr. Armstrong provided a brief update on the upcoming Commission hearing agenda for the October 8 meeting in Prescott. He reported that the agenda would include the Reynolds Use Permit and a Zoning Ordinance Amendment regarding data centers and small modular reactors. He also informed the Commission of a Joint Session meeting scheduled for October 15, 2026, at 9am and that additional information and an agenda would be provided in advance.

Mr. Armstrong then announced several staffing updates from the Planning Department. He noted that Stephanie would be leaving the department at the end of the week and that the presentation delivered that day had been her final one before the Commission. He further reported that BJ Ratlief had recently departed the Planning and Development Services group. He concluded by introducing David Chana, who would be joining the team as a new planner.

3. Chairman's Corner.

Commissioners are forbidden by law from discussing or taking legal action on matters raised during the Commissions' Corner unless the matters are properly noticed for discussion and legal action.

ADJOURNMENT:

There being no further business to discuss, the Planning & Zoning Commission meeting held on September 17, 2026, adjourned at 1:22 p.m.

_____
Sandy Griffis, Chair

ATTEST:

_____
Recording Clerk, Andrea Shelton

CERTIFICATION: I hereby certify that the foregoing minutes are true and correct copy of the minutes of the Regular meeting of the Planning & Zoning Commission of Yavapai County, Cottonwood, Arizona, held on September 17, 2026. I further certify that the meeting was duly called and held and that a quorum was present.

Dated this _____ day of _____, 2026.

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YAVAPAI COUNTY
DEVELOPMENT SERVICES

OCTOBER 22, 2026
PLANNING & ZONING MEETING
AGENDA ITEM #7

Yavapai County Development Services
1120 Commerce Dr., Prescott AZ 86305
Phone 928-771-3214
10 S. 6th Street, Cottonwood AZ 86326
Phone 928-639-8151

ASSESSOR PARCEL NUMBER: 800-20-056X, 056W, 043S, 044H, 044P, 044U, 044V
APPLICATION NUMBER: PLA25-000070
HEARING ITEM NUMBER: 7
SUPERVISOR DISTRICT: 2, Supervisor Jenkins

OWNER:	Arizona State Land Department
AGENT/APPLICANT:	Agua Fria, LLC, A Delaware Limited Liability Company d/b/a Agua Fria AZ, LLC in Arizona – Longroad Development Company, LLC
PROJECT:	Agua Fria Solar/Storage Facility Use Permit

REQUEST/DESCRIPTION OF PROPOSAL: The applicant is requesting consideration of a transferrable Solar Facility Use Permit for a period of 40 years to allow for the development of a solar field of photovoltaic modules, an onsite project substation, a battery energy storage system (BESS), a gen-tie line connection to existing transmission network, an operation and maintenance building, and associated infrastructure within a 1,909-acre Development Area located in a leased area of 4,215 acres on seven parcels totaling 6,258.3 acres of Arizona State Land, in the RCU-2A zoning district, subject to the conditions of approval. The request includes waivers for Section 608 Solar Facilities requirements.

REQUESTED WAIVERS:

1. Waiver of buffer zone requirement to allow for a reduction of the minimum 500-foot buffer zone surrounding the Development Area. This would include approximately 136 acres for fencing, retention basins, solar tracker units, and electrical collection systems.

2. Waiver of development standards requirement to allow a reduction of the minimum setback of one mile from dwellings. This would include six dwellings within a distance of no less than 0.33 miles from the Development Area.

3. Waiver of development standards requirement to allow a reduction of the minimum setback of 150 feet from any hillsides with slopes of 10% or greater with a total elevation of 50 feet or more. This would include approximately 80 acres of encroachment but would not apply to encroachments into the required setback for any lake, creek, perennial or intermittent stream, river, major tributaries, riparian areas, wetlands, or seeps, or any delineated Federal Emergency Management Agency (FEMA) Floodplains.

4. Waiver of development standards requirement for a minimum setback of 500 feet from significant archeological, paleontological, or historic sites as identified in the Cultural Resources Management Plan, or sites already formally recognized by the State Historic Preservation Office; or 1,000 feet from identified cultural ruins of

documented significance as determined by the Board of Supervisors. In place of the required setbacks, the applicant would only be required to adhere to the established Arizona State Land Department process, which would include consultation with the State Historic Preservation Office, and may determine avoidance, minimization, or mitigation measures for potential adverse impacts to significant cultural resources.

5. Waiver of financial assurance requirements to allow the same financial assurance funds to be used to satisfy the requirements of both Yavapai County and the Arizona State Land Department. Both authorities would be listed as a party to the same financial assurance, which would be posted as a Payment Surety Bond, Letter of Credit, or a combination of both methods to be considered for approval by the Board of Supervisors as part of the Development Agreement.

PROPERTY LOCATION/LAND USE: The property is located north of Cordes Junction spanning both sides of approximately three miles of Interstate-17 between the community of Mayer and the Agua Fria National Monument. The subject parcels are surrounded by adjacent Arizona State Land, Prescott National Forest, Agua Fria National Monument, Arcosanti, Orme Ranch, Gaia Academy (formerly Chauncey Ranch Camp) and other developed and undeveloped private land.

ADJACENT ZONING:

- **North:** RCU-2A (Residential)
- **South:** RCU-2A and PAD (Planned Area Development)
- **East:** RCU-2A
- **West:** RCU-2A and PAD

UTILITIES AND SERVICES:

- **Fire:** Mayer Fire District
- **Water:** Hauled Water/Storage Tanks
- **Sanitary:** Onsite Wastewater (to be developed)

ACCESS: Planned access to the Project Area would be from the Dugas Exit off Interstate-17 to connecting roads on either side of the three-mile stretch of I-17 that bisects the Project Area.

ZONING: The property is currently zoned RCU-2A, which is the required zoning for a Solar Facility Use Permit per Section 608.

BACKGROUND/PREVIOUS ACTION: The current applicant acquired this project in late 2024 and began discussions with Development Services in 2025. They received a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission for the generation tie line (gen-tie) interconnection between the proposed project and the existing Dugas Substation in May 2025.

As part of the preapplication requirements listed in Section 608 (Solar Facilities), a concept plan and preliminary site investigations were submitted for discussion with Development Services. These Desktop Studies covered initial findings related to habitat and wildlife, Recreational Resources and public lands, cultural resource surveys, water

resources and watercourses, and Visual Resources within five miles of the Project Boundary. Plans submitted with the application incorporated information discovered in the preliminary site investigations (see Attachments).

A Solar Facility Use Permit application was submitted in August 2025, and the Technical Review began in January 2026. Discussions regarding waiver requests by the applicant continued through June, and a study session in which the applicant provided an overview of the proposed project to the Planning & Zoning Commission was held on August 8, 2026.

VIOLATIONS: Development Services has not received any violation complaints for the subject parcels.

CITIZEN PARTICIPATION PROCESS: The applicant sent informational mailers in December 2024 and January 2025 to the neighboring property owners within one half-mile of the Project Boundary, extended up to five miles for additional property owners and identified stakeholders. One in-person and one online open house were held in January 2026. Additional stakeholder and public outreach is described in the Citizen Participation Report, along with discussion of how the applicant plans to address public concerns (Attachment #30).

The applicant noted seven main topics of concern raised during their outreach:

1. Impact on wildlife habitat and movement through Project Area
2. Accessibility of Project Area for non-utility uses such as grazing, hiking, or hunting
3. Impact on water levels and water usage
4. Glare from panels, tracking panels
5. Temperature changes near Project Area
6. Consideration of pathway around the perimeter of Project Area for safer movement on foot near highway corridor and potential firebreak
7. Stormwater management

The applicant contracted a sign company to post 4’x4’ notice of hearing signs near the Dugas Exit of Interstate-17 on Old Sycamore Road, Stagecoach Trail at Cordes Junction, Spring Road in Spring Valley, and along the segment of I-17 that bisects the Project Area, on October 7, 2026. Development Services sent notification letters to a similar updated list on October 6, 2026, and posted hearing information and a survey online. As of the date of the drafting of this staff report, October 9, 2026, no comments have been received by Development Services.

CONFORMANCE WITH COUNTY COMPREHENSIVE PLAN: The subject property is currently owned by the State of Arizona and has no specified designation in the Comprehensive Plan at this time. If the land were to be sold to private parties, the designation would be assigned to match the underlying residential zoning as: Residential 0-1 du/acre. This land use type includes areas that are used for residential dwelling units on lots of at least 1 acre but less than 5 acres. The intent is to provide for large lot communities. Districts assigned this land use type may include (but are not limited to) R1L, RMM, R1, RCU and PAD (YCCP, pg. 13).

TECHNICAL REVIEW COMMENTS:
The Solar Facility Use Permit application was sent to all applicable internal and external reviewing agencies for review and comment. Independent third-party reviews by subject matter experts were conducted for the Development Plan (Attachments #5-7), Cultural Resources Management Plan (Attachments #13-14), Public Safety, Fire Protection, and Emergency Management Plan (Attachment #22), Stormwater Management Plan (Attachments #15-18), Noise Study (Attachment #26), and Preliminary Decommissioning and Reclamation Plan (Attachment #27).

An updated Stormwater Management Plan was requested by reviewers before further review could continue, but the applicant has chosen to wait for a Use Permit approval before submitting updated Plans for review.

Arizona Department of Transportation (ADOT) and Yavapai County Public Works reviewed the Traffic Plan (Attachment #23). ADOT will require additional information and a Glare Study if the Use Permit is approved (Attachment #33). Public Works noted there is a recorded Resolution for a 66-foot-wide right-of-way (ROW) establishment for Old Sycamore Road (Attachment #34). Old Sycamore Road is currently an unpaved connector between State Routes 69 and 169 that is maintained by the County. As it crosses Arizona State Land, Public Works submitted a requirement for the applicant to perfect the ROW status with the State, but this would be dependent on whether the State will agree. The applicant has proposed reserving a half-street 33 feet from the road centerline if the ROW cannot be established. A Traffic Impact Analysis and road improvements and maintenance requirements would also continue to be evaluated if the Use Permit is approved.

Arizona Game and Fish Department review was completed prior to application submission (Attachments #12) and the applicant would continue to work with the Department to establish appropriate wildlife corridors and movement through the Project Area, as well as managing a continued wildlife monitoring program which would provide data about wildlife and movement within a utility-scale Solar Facility project.

Plans requiring finalization and approval are noted in the conditions of approval, and additional applicant responses to review comments may be found in Attachment #35.

STAFF ANALYSIS, SUMMARY AND EVALUATION: The applicant is requesting consideration of a transferrable Solar Facility Use Permit for a period of 40 years to allow for the development of a solar field of photovoltaic modules, an onsite project substation, a battery energy storage system (BESS), a gen-tie line connection to existing transmission network, an operation and maintenance building, and associated infrastructure within a 1,909-acre Development Area located in a leased area of 4,215 acres on seven parcels totaling 6,258.3 acres of Arizona State Land, in the RCU-2A zoning district, subject to the conditions of approval.

The purpose of Section 608 of the Planning & Zoning Ordinance is to provide requirements and performance standards for the siting, design, construction, operation, monitoring, modification, and removal of Solar Facilities in Yavapai County. These standards address factors that would help determine appropriate sites for such large-scale projects. Concerns for public safety and welfare are important to consider while also

minimizing and mitigating impacts on natural, cultural, and recreational resources, and ensuring adequate financial assurance for decommissioning of facilities and reclamation of the land. Additional consideration is given to protect wildlife populations and corridors, viewsheds, vegetative communities, dark skies, air quality, and natural quiet, which continue to be among the values County residents prioritize. It is also important to consider whether the project provides clear benefits to the County, such as revenue generation, job creation, and economic or environmental benefits. Some of these items are addressed in the Solar Facility Report provided by the applicant (Attachment #4).

Many of the requirements and standards have been met by the project, with five waivers being requested by the applicant.

Waiver #1: A waiver of the requirement for a 500-foot buffer surrounding the Development Area would include approximately 136 acres for fencing, retention basins, solar tracker units, and electrical collection systems. The reduction in buffer distance is significant in some portions, which may be seen in the Detailed Waiver Request Maps (Attachment #32). While some encroachment in areas near roads and adjacent state land may be reasonable, staff would not recommend for the Development Area, inclusive of all ground disturbance and fencing, to be closer than 300 feet from the I-17 ROW, 30 feet from the Arizona Public Service (APS) ROW under power lines except where easement access is granted for necessary connections, or 30 feet from the Old Sycamore Road ROW or 33-foot half-street reservation as indicated in Condition #38 of the conditions of approval. The buffer zone is intended to provide mitigation of the effects of the Solar Facility on surrounding properties, wildlife, and resources, both within and outside of the Project Area and community at large.

Waiver #2: The applicant is also requesting to reduce the minimum setback of one mile from dwellings. This would include six dwellings within a distance of no less than 0.33 miles from the Development Area. Staff recognize the difficulty in maintaining a full mile setback from every dwelling and have no concerns with the reduction if there is no objection from the property owners. The applicant should be prepared to address the extent of their outreach with these affected property owners, and whether they have received responses either for or against the dwelling setback waiver request. Additional outreach to affected owners is documented by the applicant in Attachment #36.

Waiver #3: The waiver request to allow a reduction of the minimum 150-foot setback from any hillsides with slopes of 10% or greater, with a total elevation of 50 feet or more, was not flagged as a concern by the Flood Control District and effects on soil erosion or viewshed would be difficult to visualize at this stage, even with detailed comparison of encroachment areas to topography maps. These areas of encroachment would include approximately 80 acres, and staff have no specific concerns as long as these encroachments are not within the setbacks required from watercourses, the I-17 ROW, or delineated Federal Emergency Management Agency (FEMA) Floodplains.

Waiver #4: A waiver from the minimum setback requirement of 500 feet from significant archeological, paleontological, or historic sites as identified in the Cultural Resources Management Plan, or sites already formally recognized by the State Historic Preservation Office, or 1,000 feet from identified cultural ruins of documented significance as determined by the Board of Supervisors has also been requested. In place of the required

setbacks, the applicant would prefer to largely adhere to the established Arizona State Land Department process, which would include consultation with the State Historic Preservation Office, to determine the extent of avoidance, minimization, or mitigation, including inventory, recovery, and removal measures for potential adverse impacts to significant cultural resources. The applicant has discussed the known sites (which are confidential) with staff and has agreed to avoid and buffer over a dozen of the more significant sites entirely. Staff have no concerns with this request.

Waiver #5: Since the Arizona State Land Department (ASLD) also requires financial assurance for project decommissioning and reclamation, a waiver is requested to allow the same financial assurance funds to be used to satisfy the requirements of both Yavapai County and ASLD. Both authorities would be listed as a party to the same financial assurance, which would be posted as a Payment Surety Bond, Letter of Credit, or a combination of both methods to be considered for approval by the Board of Supervisors as part of the Development Agreement. Staff have no concerns with this request as long as the funds continue to be adjusted in the manner described in Section 608 over the course of the 40-year period of operation granted with an approved Solar Facility Use Permit.

Another consideration to address is the location of the project spanning both sides of I-17 for a stretch of approximately three miles. While some ground level visual mitigation is proposed for the BESS facility which is currently planned to be 300 feet from the ROW, the project will affect what is considered to be a scenic drive unique to Arizona, with transitions through six distinct natural biomes from desert to alpine tundra across a relatively short distance that is not seen anywhere else. A project of this magnitude so close to the interstate will impact this visual corridor through Yavapai County, which should be weighed into the decision for approval at this location.

Staff also note that while the applicant has sought to design the BESS facility with safety features, there are still concerns about the proximity of such a large energy storage site (35 acres or 1.45 million square feet) to the high-traffic interstate route in a fire-prone area. An extensive review of BESS requirements and associated issues with fire safety was conducted by an independent third-party subject matter expert, with recommendations for all phases of the BESS facility development (Attachment #10).

CONCLUSION: Should the Commission find that the proposed use is an appropriate land use and choose to forward a recommendation of approval regarding the Agua Fria Solar/Storage Facility Use Permit, PLA25-000070, staff recommends that the permit be subject to the following conditions of approval.

CONDITIONS OF APPROVAL

1. Transferable Use Permit for a period of forty (40) years to allow for the development of a 450-MW Solar Facility with a solar field of ground-mounted photovoltaic modules, an onsite project substation, a 450-MW battery energy storage system (BESS), a 500-KV gen-tie line connection to existing transmission network, an operation and maintenance building, and associated infrastructure within a 1,909-acre Development Area located in a leased Project Area of 4,215 acres within 6,258.3 acres of Arizona State Land consisting of seven parcels, in the RCU-2A zoning district.

2. The Solar Facility shall be designed, constructed, tested, and operated to fully comply with all applicable County, state, and federal laws, regulations, codes, and requirements. The Solar Facility shall also comply with the most current standards set forth by industry regulating bodies, including the Western Electricity Coordinating Council (WECC) and North American Electric Reliability Corporation (NERC) planning standards, as approved by the Federal Energy Regulatory Commission (FERC), the National Electric Safety Code (NES) standards, and Federal Aviation Administration (FAA) regulations.

3. Upon decommissioning of the Solar Facility, the owner of the substation included in this Solar Facility Use Permit may apply for a new Use Permit or other zoning approval to allow the continued use of the substation and associated transmission lines.

4. Plans submitted for the Solar Facility Use Permit application are subject to final review by the Development Services Director to determine conformance with Section 608 Solar Facilities requirements. If the Director determines there have been significant deviations from the Plans submitted and considered during the Solar Facility Use Permit hearing process, the revised Plans may be submitted with the Development Agreement for approval by the Board of Supervisors.

5. Public Safety, Fire Protection, and Emergency Management Plan must be finalized and approved by the Development Services Director, after review by all relevant public safety entities, including the Fire Authority, Yavapai County Sheriff's Office, and Yavapai County Office of Emergency Management, prior to the issuance of any construction permits.

6. Yavapai County Flood Control District approval of the Stormwater Management Plan and a General Construction Permit from Arizona Department of Environmental Quality (ADEQ) must be obtained prior to issuance of any construction permits.

7. The Solar Facility owner or operator shall be responsible for maintaining all stormwater facilities associated with the project, as designated in the Stormwater Management Plan. The Flood Control District may also require a performance bond or other financial surety, to be approved by the Board of Supervisors, as deemed necessary to ensure compliance with the County's stormwater regulations or to correct nonfunctioning or inadequate stormwater controls or necessary maintenance, which may be included in the Solar Facility Development Agreement.

8. Glare Impact Study to be completed and reviewed by Arizona Department of Transportation prior to submission of the Traffic Plan for final approval.

9. Traffic Impact Analysis must be finalized and approved by the Development Services Director and County Engineer, after review by Arizona Department of Transportation, prior to the issuance of any construction permits.

10. Any newly constructed public roads shall be designed and constructed to standards approved by Yavapai County Public Works and the Fire Authority, in coordination with any required public safety, fire protection, and emergency management plans.

11. Solar Facility owner or operator shall work with the Arizona State Land Department (ASLD) to perfect and establish the Old Sycamore Road right-of-way (ROW), as identified by the County in the 1939 unnumbered Resolution for establishment of a sixty-six (66)-foot ROW, or thirty-three (33) feet from each side of centerline, including any and all compensation required by ASLD. ROW will need to be perfected through entirety of Old Sycamore Road for access to the development.

12. Solar Facility owner or operator shall provide a recommendation for structural improvement to Yavapai County Public Works and implement the improvement to existing paved roadways used as haul roads by the project, including the portions of Orme Road and Dugas Road currently in poor condition, to support the development access and continued operation of these roadways.

13. A Road Maintenance Agreement as acceptable to the County Engineer must be included as part of the Solar Facility Development Agreement and shall address the need to provide continual maintenance during the duration of the project including dust abatement/dust palliative application. Solar Facility owner or operator shall maintain roadways at current condition or better during the duration of the project and roadways must remain open at all times. Maintenance shall include road surface grading (without removal of existing material) and will require addition of plating material as needed to maintain conditions. No drainage improvements or modifications to the roadways will be allowed without consultation with Yavapai County Public Works Department. Construction activities on or near the roadways will require proper traffic control that is permitted and provided to Public Works for approval. The Road Maintenance Agreement will require monitoring by a third-party consultant, paid for by funds provided by the Solar Facility owner or operator, to assess road conditions and report to the County Engineer weekly to ensure the roadways are maintained in current conditions.

14. Detailed Decommissioning Plan must be finalized and approved by the Development Services Director, after review by Yavapai County Finance Department, prior to issuance of construction permits. The Development Services Director may defer approval to the Board of Supervisors as a separate hearing item if substantial changes have been made since submittal of the Preliminary Decommissioning Plan.

15. Updates to the estimate of decommissioning and reclamation costs must be recalculated no less than every five (5) years by an independent third-party Arizona licensed professional engineer using the most current industry standards, with estimate preparation costs paid by the Solar Facility owner or operator. Funds must be deposited into the approved instrument of financial assurance based on the recalculation, as described in Section 608 Solar Facilities.

16. Solar Facility owner or operator must notify the Development Services Director in writing of the proposed date of discontinued operations and plans for decommissioning and reclamation no less than one (1) year prior to the proposed date.

17. Solar Facility owner or operator must notify the Development Services Director in writing of the intention to apply for a one-time ten (10)-year extension of the Solar Facility Use Permit no later than one (1) year prior to the Solar Facility Use Permit expiration date, or an extension will not be considered.

18. If the Solar Facility is abandoned for a period of twelve (12) months or receives an unsatisfactory Annual Report or other unsatisfactory inspections, as described in Section 608 Solar Facilities, the Development Services Director may initiate proceedings to remedy the issue or seek termination of the Solar Facility Use Permit through a public hearing process as described in subsections 608.D.8 and 608.M.5. If a decision of termination is made by the Board of Supervisors, the Solar Facility shall be decommissioned and reclaimed at the Solar Facility owner or operator's expense.

19. Following a six (6)-month period of failure to maintain the site, the County will have the option to hire professionals to perform needed maintenance using the surety funds designated in an approved Development Agreement.

20. If the Solar Facility owner or operator, or their successors, fail to decommission the Solar Facility as detailed in an approved Decommissioning Plan, the County shall have the right, but not the obligation, to commence decommissioning and reclamation activities and shall have access to the property, and shall have the right to draw on securitized funds up to the amount of the actual decommissioning costs, and the rights to the solar generation equipment and BESS equipment and materials remaining on the property.

21. An intensive Class III Survey containing a field inventory of cultural resources within the Development Area must be completed and submitted to the Arizona State Land Department and State Historic Preservation Office prior to submission of a Final Site Plan for approval by the Board of Supervisors. The submitted Final Site Plan will reflect all areas of avoidance, which may remain unlabeled as a matter of confidentiality.

22. Outdoor lighting shall be limited to levels required for safety and security and avoid crossing into wildlife corridors. All outdoor lighting must comply with Section 603 Outdoor Lighting Standards, with poles not to exceed eighteen (18') feet in height and correlated color temperature (CCT) not to exceed three thousand (3,000K) kelvins. Outdoor lighting must be approved in conjunction with the Final Site Plan.

23. A Final Site Plan for the entire project must be approved by the Board of Supervisors prior to issuance of any construction permits. This approval must be obtained within ten (10) years from the date of Solar Facility Use Permit approval by the Board of Supervisors.

24. Post-Construction Monitoring Plan must be approved by the Arizona Game & Fish Department within two (2) years from the date of Final Site Plan approval by the Board of Supervisors.

25. Development of the Solar Facility shall be in conformance with the Solar Facility Report submitted with this application, dated July 2026, and the Development Plan submitted in three parts, dated December 3, 2025. The project may be modified within the extent of the Development Area designated on the revised Initial Site Plan with Waiver Requests, dated June 30, 2026, with only those waiver requests approved by the Board of Supervisors.

26. Any development exceeding the parameters approved by the Board of Supervisors, including project component dimensions described in the Solar Facility Report submitted with this application, dated July 2026, or later requested by the applicant, will require a Solar Facility Use Permit Amendment.
    - Solar Field (PV modules): not to exceed 1,850 acres
    - Substation: 5-10 acres
    - Battery Energy Storage System (BESS) Facility: 35 acres
    - Operation & Maintenance Building: not to exceed 10,000 square feet

27. Development Agreement detailing development, maintenance, decommissioning, and reclamation must be approved by the Board of Supervisors within ten (10) years from the date of Solar Facility Use Permit approval by the Board of Supervisors. All associated financial assurances must be posted prior to the issuance of any construction permits.

28. Site Maintenance Agreement to be fully executed prior to issuance of any construction permits.

29. Disturbance of land is limited to what is required for the approved scope of the project. All undeveloped portions of the subject property shall be maintained in a natural, undisturbed, and debris-free condition. The project operator shall monitor noxious weed density and provide ongoing mitigation to eradicate or prevent the spread of such weeds based on the approved Landscaping Plan and Site Maintenance Agreement.

30. Construction Management Plan including estimated construction schedule and hours of operation must be provided to the Development Services Director prior to the start of construction.

31. All grading, groundcover, berms, fencing, trees, and other forms of landscaping shall be installed in accordance with an approved Development Agreement within one (1) year of the commencement of construction. Phasing of landscaping installation may be considered for approval as part of the Development Agreement if all approved phases are completed no later than two (2) years after the commencement of construction.

32. Any signs associated with the Solar Facility must comply with Section 601 Sign Code and will require a separate sign permit. Only signs related to Solar Facility

use and safety will be permitted, including directional signs for emergency purposes proposed in consultation with the Fire Authority, Sheriff's Office, and Emergency Management staff.

33. Certificate of Compliance to be issued by Development Services within ten (10) years of the date of approval by the Board of Supervisors confirming that all stipulations have been satisfied, the use is operating in conformance with all approvals, and in conformance with all applicable County, state and federal regulations or the Solar Facility Use Permit will become null and void.

34. A compliance monitoring report (Annual Report) must be prepared by the Solar Facility operator and submitted to the Development Services Director annually beginning one (1) year from the date of commencement of operation, in a form to be determined in the Development Agreement.

35. County employees and designated third-party inspectors shall have access to the Solar Facility to conduct inspections within 48 hours of notice.

36. These Solar Facility Use Permit conditions of approval and all Section 608 Solar Facilities requirements shall be binding on the applicant, owners, and operators, or their successors, assignees and transferees, and any affiliates, agents, or lessees of the applicant who have a contractual relationship with the applicant concerning the construction, operation, maintenance, or reclamation of the project.

37. In the event the owner of the subject property files a claim under ARS Section 12-1134 regarding this Solar Facility Use Permit, this Solar Facility Use Permit shall be null and void.

38. Waiver of Section 608 Solar Facilities buffer zone requirement to allow for a reduction of the minimum 500-foot buffer zone surrounding the Development Area. This will include approximately 136 acres for fencing, retention basins, solar tracker units, and electrical collection systems, designated as Waiver #1 in the Solar Facility Report, dated July 2026, and on Pages 1 to 6 of the Detailed Waiver Request Maps submitted with this application, dated June 17, 2026. The Development Area, including all fencing, will maintain a minimum thirty (30)-foot setback from the perfected sixty-six (66)-foot Old Sycamore Road right-of-way.

39. Waiver of Section 608 Solar Facilities development standards requirement to allow a reduction of the minimum setback of one mile from dwellings. This will include six dwellings within a distance of no less than 0.33 miles from the Development Area, designated as Waiver #2 in the Solar Facility Report, dated July 2026, and on Page 7 of the Detailed Waiver Request Maps submitted with this application, dated May 13, 2026.

40. Waiver of Section 608 Solar Facilities development standards requirement to allow a reduction of the minimum setback of 150 feet from any hillsides with slopes of 10% or greater with a total elevation of 50 feet or more. This will include approximately 80 acres of encroachment, designated as Waiver #3 in the Solar Facility Report, dated July 2026, and on Pages 8 to 14 of the Detailed Waiver

Request Maps submitted with this application, dated June 19, 2026. This waiver will not apply to encroachments into the required setback for any lake, creek, perennial or intermittent stream, river, major tributaries, riparian areas, wetlands, or seeps, or any delineated Federal Emergency Management Agency (FEMA) Floodplains.

41. Waiver of Section 608 Solar Facilities development standards requirement for a minimum setback of 500 feet from significant archeological, paleontological, or historic sites as identified in the Cultural Resources Management Plan, or sites already formally recognized by the State Historic Preservation Office; or 1,000 feet from identified cultural ruins of documented significance as determined by the Board of Supervisors. This waiver is designated as Waiver #4 in the Solar Facility Report, dated July 2026. In place of the required setbacks, the applicant will only be required to adhere to the established Arizona State Land Department process, which will include consultation with the State Historic Preservation Office, and may determine avoidance, minimization, or mitigation measures for potential adverse impacts to significant cultural resources. This will include all cultural resources identified in the Class III Survey of the Development Area and will conform to the avoidance measures described for each site listed in the confidential waiver discussion letter submitted to Development Services, dated May 28, 2026.

42. Waiver of Section 608 Solar Facilities financial assurance requirements to allow the same financial assurance funds to be used to satisfy the requirements of both Yavapai County and the Arizona State Land Department. This waiver is designated as Waiver #5 in the Solar Facility Report, dated July 2026. Both authorities will be listed as a party to the same financial assurance, which will be posted as a Payment Surety Bond, Letter of Credit, or a combination of both methods to be considered for approval by the Board of Supervisors as part of the Development Agreement.

ATTACHMENTS:

1. Letter of Intent
2. Initial Site Plan
3. Initial Site Plan with Waiver Requests
4. Solar Facility Report
5. Development Plan-Part 1
6. Development Plan-Part 2
7. Development Plan-Part 3
8. Initial Review Comments-Applicant Responses
9. Third Party Summary Review Comments
10. Third Party Technical Report
11. Wildlife Protection Plan
12. AZGFD Wildlife Plan Feedback
13. Cultural Resources Management Plan
14. Third Party Cultural Resources Review Comments
15. Stormwater Management Plan
16. Third Party Flood Stormwater Management Review Comments-1
17. Third Party Flood Stormwater Management Review Comments-2
18. Drainage Report Review Comments-Applicant Responses

19. Visual Impact Analysis
20. Simulations & Observation Points
21. Landscaping Plan
22. Public Safety, Fire Protection, & Emergency Management Plan
23. Traffic Plan
24. Airport Study
25. Land Use Impacts & Mitigation
26. Noise Report
27. Preliminary Decommissioning Plan
28. ACC Docketed Agua Fria Gen-Tie
29. Mayer Fire District Annexation
30. Citizen Participation Report
31. Development Area Perimeter Setbacks
32. Detailed Waiver Request Maps
33. ADOT Requirements
34. 1939 Alignment Map-Old Sycamore Road
35. Applicant Responses to Third-Party Review Comments
36. Applicant Correspondence-Neighboring Dwellings
37. Applicant-Provided Letters of Support
38. Cosanti Foundation Position Letter

December 5, 2025

Yavapai County Board of Supervisors
1015 Fair Street, Prescott, AZ 86305

RE: Agua Fria Solar and Storage Project
Letter of Intent for a Solar Facility Use Permit

To Whom It May Concern:

Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona, an indirect subsidiary of Longroad Development Company, LLC, is submitting this Letter of Intent for the Agua Fria Solar and Storage Project (Project) as part of the first application process for a Solar Facility Use Permit under the new Solar Facility Ordinance, which was approved by the Yavapai County Board of Supervisors in November 2024, and was considered to be in effect on December 6, 2024. This Letter of Intent is to designed to fulfill the requirements of the application phase of the permitting process.

The Project is currently in the Application phase. A Preliminary Planning Meeting was held with Yavapai County Development Services on January 10th, 2025. The Pre-Application documents were submitted to the County on March 28th, 2025.
A Pre-Application Meeting was held on June 10, 2025, to review the submitted documents and county staff comments. These comments were addressed in the Application documents, which were submitted on August 5th, 2025. The Application documents were resubmitted on December 5, incorporating edits based on additional county staff feedback.

The Project is located on approximately 4,215 acres of Arizona State Land in unincorporated Yavapai County, in the vicinity of Interstate-17 (I-17), several miles north of the junction with State Route 69. Access to the northern half of the Project (north of I-17) will be from Old Sycamore Road. Access to the southern half of the Project (south of I-17) will be accessed via the existing Dugas Road and a private access easement. The private access easement includes a bridge crossing over Ash Creek on private land. This location has favorable conditions for the siting of solar energy production due to the presence of an existing high voltage transmission line and substation as well as the lack of nearby residential development. The Project will consist of the following components:

- A solar field of photovoltaic modules;
- An on-site project substation;
- A battery energy storage system (BESS);
- A generation-tie line to connect the Project to the existing transmission network;
- An operation and maintenance building; and,
- Associated civil infrastructure including fencing, access driveways and gates, driveways, on-site parking, drainage channels, retention basins, and Project signage.

The Project is located on a portion of 7 parcels totaling approximately 4,215 acres. The parcel numbers and their respective acreages are listed below:

- 800-20-056X - 1,521 acres
- 800-20-043S - 652 acres
- 800-20-044P - 292 acres

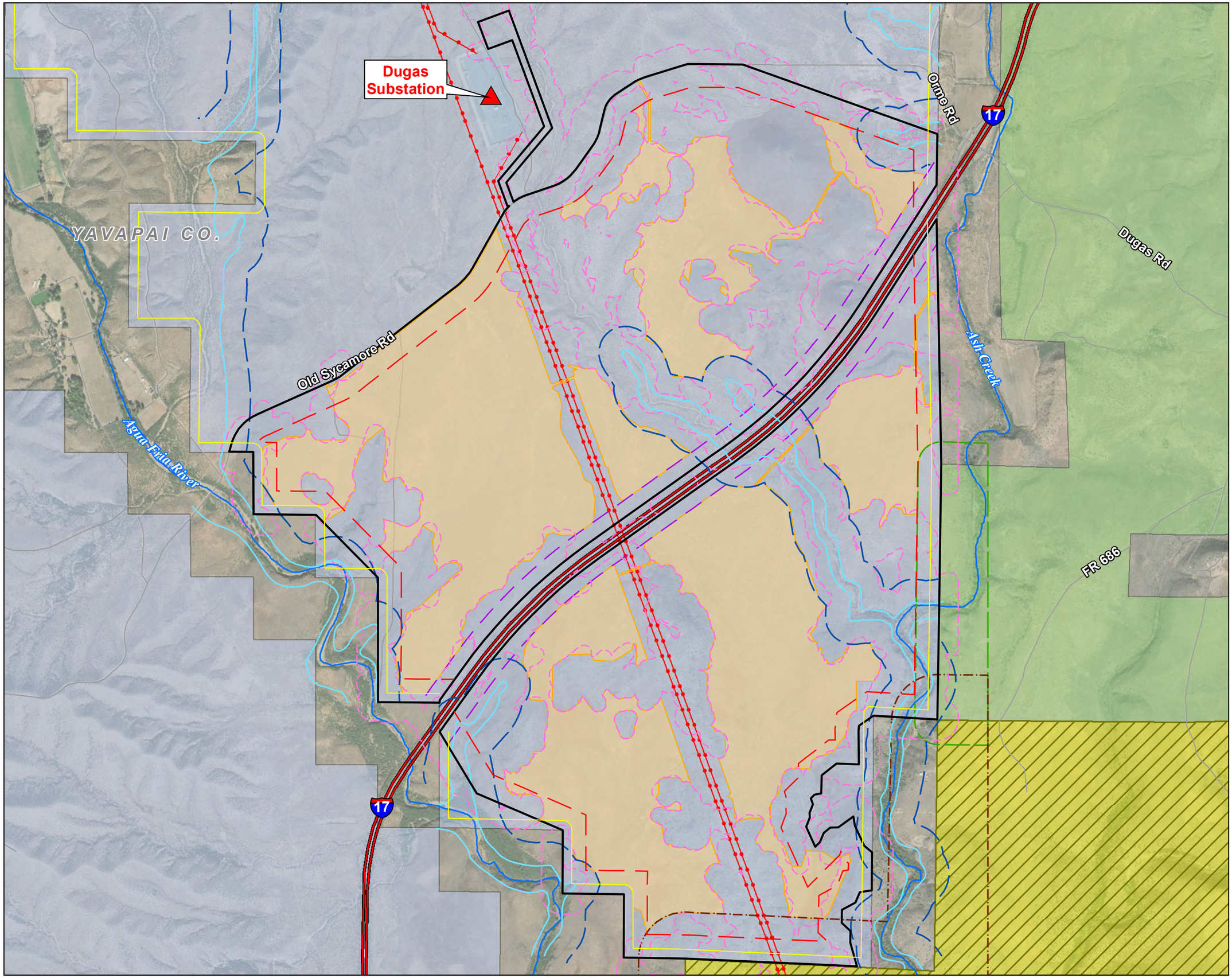
- 800-20-044H - 882 acres
- 800-20-056W - 33 acres
- 800-20-044U - 408 acres
- 800-20-044V - 427 acres

The corresponding Site Plan shows the preliminary layout of the Project components within the overall Project site. The Project is designed to produce up to 450 MW of clean solar power with an additional 450 MW of battery storage capacity to improve grid reliability. Construction of the Project is expected to take approximately 18-24 months, and is anticipated to require a workforce of approximately 400 persons. Once constructed, the Project will require minimal water and produce minimal noise. It is anticipated that up to five full-time employees would be onsite during operation and would not substantially increase traffic in the area.

The Project team has been in communication with several of the landowners in the area, including the Orme School and The Cosanti Foundation. Details of our community engagement to date are included in the Citizen Participation Report. We will continue to coordinate with local residents and stakeholders throughout the development process. Longroad Energy looks forward to discussing this Project in greater detail with the Board of Supervisors.

Sincerely,

Alyssa Menzel | Development Manager| Longroad Energy
303-263-7253 | alyssa.menzel@longroadenergy.com



Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Interstate Highway
- Road
- Watercourse
- 200' Buffer Zone - ASLD Property
- ALTA - FEMA Floodplain
- Agua Fria National Monument

Jurisdictional Land Ownership

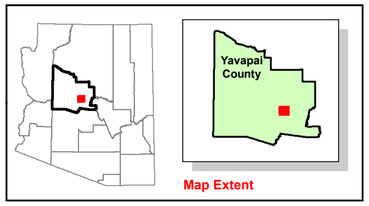
- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

Yavapai County Solar Ordinance Setbacks

- 500' Buffer Zone - Lease Area
- 500' FEMA Floodplain Setback
- 300' Interstate ROW Setback
- 150' 10% Slope Setback
- 500' Federally Managed Land National Forest Setback
- 1,000' National Monument Setback

0 0.25 0.5 Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



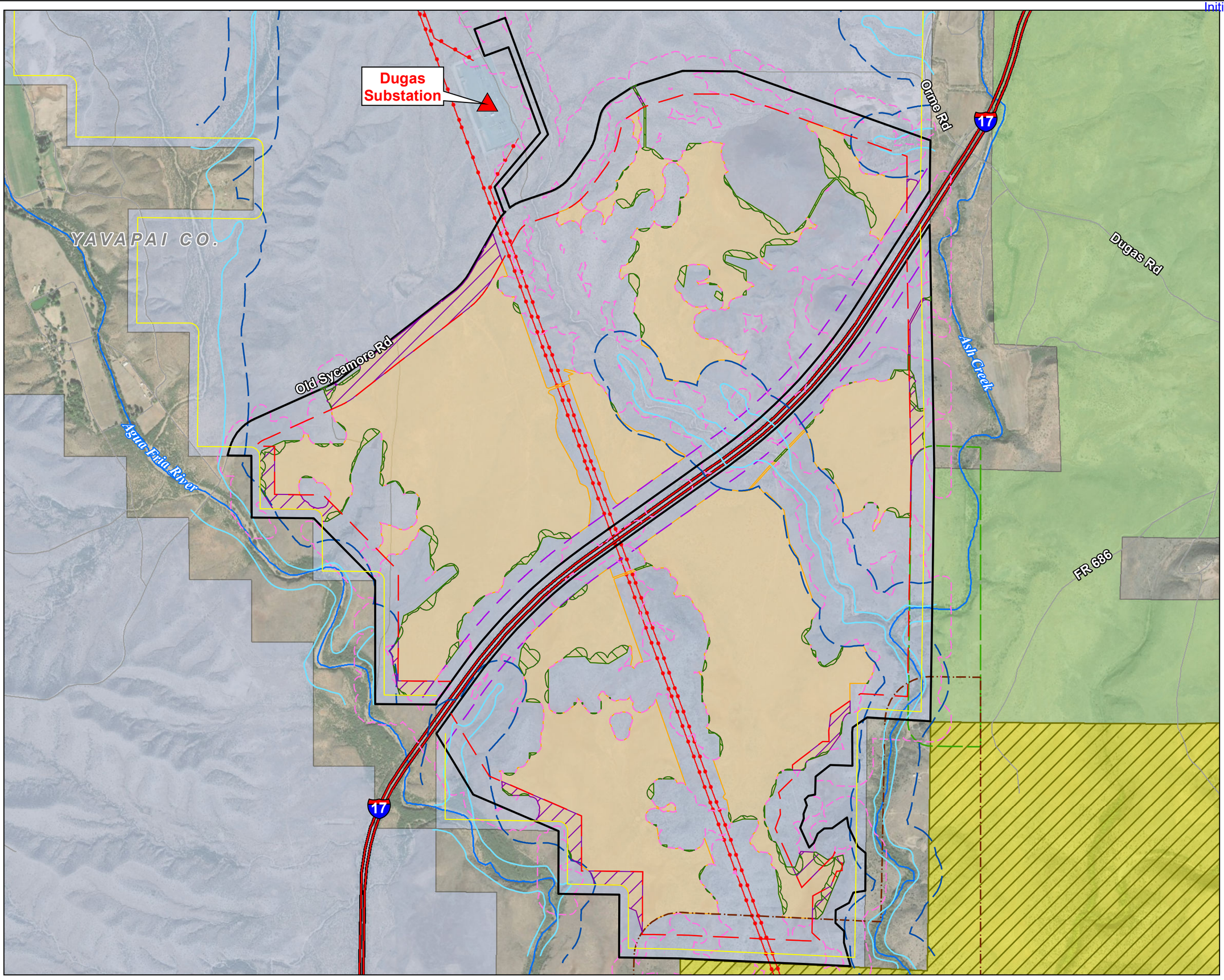
longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Development Area Map

Map Extent: Yavapai County, AZ

Date: 6.30.26		Author: ckv



Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Interstate Highway
- Road
- Watercourse
- 200' Buffer Zone - ASLD Property
- ALTA - FEMA Floodplain
- Agua Fria National Monument

Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

Yavapai County Solar Ordinance Setbacks

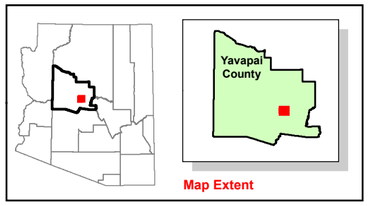
- 500' Buffer Zone - Lease Area
- 500' FEMA Floodplain Setback
- 300' Interstate ROW Setback
- 150' 10% Slope Setback
- 500' Federally Managed Land National Forest Setback
- 1,000' National Monument Setback

Waiver Area

- Waiver #1 Areas
- Waiver #3 Areas

0 0.25 0.5
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Development Area Map - Waiver Area

Map Extent: Yavapai County, AZ

Date: 6.30.26 | Author: ckv

Agua Fria Solar and Storage Project

Solar Facility Report

Yavapai County, AZ

Prepared for:

Yavapai County

Prepared by:

kp environmental

July 2026

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Figure 3. Project Estimated 35-Year Total Tax Revenue Breakdown

Executive Summary

The Agua Fria Solar and Storage Project is a proposed 450-megawatt (MW) solar photovoltaic and battery energy storage facility located on approximately 4,215 acres of Arizona State Trust Land (ASLD) in southeastern Yavapai County, north of Cordes Lakes community and adjacent to the existing Dugas Substation and I-17. Developed by Agua Fria, LLC, a subsidiary of Longroad Development Company (Longroad), the Project supports Arizona's growing energy needs while aligning with Yavapai County's Section 608 Solar Facilities Ordinance. Longroad has a strong track record of successful projects in Arizona, currently operating over a gigawatt of renewable energy generation in the state. The Agua Fria Solar and Storage Project will include solar arrays, a 450-MW battery energy storage system (BESS), a project substation, operations and maintenance building, and a 1.8-mile 500-kV gen-tie line interconnecting with the Arizona Public Service (APS) Dugas Substation. The site was selected for its proximity to existing transmission infrastructure, favorable solar resources, and minimal surrounding development. The project substation and BESS facilities were carefully sited to be located central to the Project, thus minimizing energy losses and taking advantage of existing electrical infrastructure, while avoiding unsuitable terrain and excessive ground disturbance. Economically, the Project is expected to generate over $34 million in property taxes for Yavapai County entities and $60 million in lease revenue for Arizona public schools over its 35-year life. Environmentally, it will avoid approximately 600,000 metric tons of CO_2 emissions annually, by generating power without burning fossil fuels. Designed with industry-leading technologies, including Tier-1 solar modules, inverters, trackers, and lithium iron phosphate (LFP) battery systems, the Project will employ best operational practices for safety, efficiency, and grid reliability. Overall, the Agua Fria Solar and Storage Project provides economic, environmental, and energy reliability benefits to Yavapai County and the State of Arizona while maintaining compliance with all applicable zoning and environmental standards.

The Agua Fria Solar and Storage Project complies with the Performance Standards in Subsection F of Yavapai County's Section 608 Solar Facilities Ordinance, meeting or exceeding nearly all requirements and proposing five minor waivers. The 1,909-acre Development Area is well below the 3,000-acre project limit, with over half of the 4,215-acre Project Area remaining undeveloped to preserve natural vegetation, wildlife movement, and scenic integrity. The site benefits from proximity to existing infrastructure, including Interstate 17 and the APS Dugas Substation, minimizing new disturbance and supporting efficient grid interconnection while still maintaining a minimum 300' setback from the edge of the I-17 ROW. The Project design avoids sensitive habitats, floodplains, steep slopes, and cultural or archaeological resources, with additional protection ensured through ASLD and SHPO oversight. Setbacks, height limits, screening, and noise standards are met through design features such as specialized fencing, natural vegetation buffers, and low-profile panels. Preliminary environmental studies confirm no conflict with wildlife corridors, no significant recreational or cultural impacts, and compliance with floodplain and water resource protections. Overall, the Project demonstrates strong conformance with Yavapai County solar standards, balancing clean energy generation with environmental stewardship, visual compatibility, and coordination with state and local agencies.

1.0 Introduction

The Yavapai County Zoning Ordinance has been revised to add Section 608 Solar Facilities with requirements, standards, and procedures for solar energy facilities. The revised Zoning

Ordinance was adopted on November 6, 2024, and took effect on December 4, 2024 (Yavapai County, 2024). This Solar Facilities Report was prepared to provide a detailed description of the project and containing a narrative overview of the Solar Facility pursuant to Section 608 Solar Facilities of the Yavapai Zoning Ordinance.

1.1 Project Location

The Agua Fria Solar and Storage Project (Project) is located in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project area including several existing high voltage transmission lines, the existing Dugas Substation, as well as Interstate 17 (I-17) which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott.

1.2 Project Components

The Project is an up to 450-megawatt (MW) nameplate capacity solar photovoltaic (PV) power plant. The Project consists of a solar field of PV modules (solar field), battery energy storage system (BESS), project substation, operations and maintenance building, and ancillary facilities. The Project would be located on Arizona State Trust Land managed by the Arizona State Land Department (ASLD) (ASLD Land), see **Figure 1**, and controlled by Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona (Applicant) via a solar lease.

The Project Area is approximately 4,215 acres. Within the Project Area, the Development Area includes approximately 1,909 acres, the BESS would be approximately 35 acres, and the project substation would be approximately 5 acres. In addition, there will be a generation tie (gen-tie) line associated with the Project to connect the power generated from the solar facilities to the grid at Dugas Substation. The gen-tie would be approximately 1.8 miles in length and sited within a corridor located north of I-17, south and east of the existing Dugas Substation, and directly east of the existing 500 kilovolt (kV) transmission line corridor. The Applicant received a Certificate of Environmental Compatibility from the Arizona Corporation Commission for the gen-tie in May 2025.

1.3 Project Purpose and Need

The Project would help Arizona utilities meet growing energy demand and support existing and future energy loads by producing and storing energy and delivering it to the regional transmission grid. The Project site is a favorable location for this land use due to the proximity to an existing high voltage transmission line as well as the Dugas Substation. The Project is located on ASLD Land and the solar lease with ASLD is already in place; the rent paid pursuant to this lease provides revenues to Arizona schools as the beneficiaries of the State Trust. The Project would also provide a new energy resource and electrical capacity to help satisfy energy needs and regional system reliability requirements.

2.0 Project Narrative Overview

2.1 Applicant, Owner, and Operator of the Solar Facility

Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona is the Applicant. The Applicant is a subsidiary of Longroad Development Company, LLC (Longroad), a US-based developer, owner, and operator of renewable energy projects, and is led by a team of industry veterans with a demonstrated track record of success while working together for more than 15 years. Longroad has a development pipeline in excess of 5,500 megawatts (MW) and, through a subsidiary, is contracted to operate and manage a wind and solar operating portfolio of over 6 gigawatts (GW). During its time together, the Longroad team has successfully developed over 20 utility-scale wind and solar projects. Longroad is principally funded by four groups that collectively manage over $400 billion. Over the past 5 years, Longroad has successfully constructed four large scale solar and storage projects in Arizona, which the company continues to own and operate. These include:

- Sun Streams 2: 200 MW solar project in Maricopa County on a combination of private land and Arizona State Land via a solar lease, completed in 2021
- Sun Streams 3: 285 MW solar and storage project in Maricopa County on a combination of private land and Arizona State Land via a solar lease, completed in 2024
- Sun Streams 4: 377 MW solar and storage project in Maricopa County on a combination of private land and Arizona State Land via a solar lease, completed in 2024
- Serrano: 220 MW solar and storage project in Pinal and Pima Counties on private land, completed in 2025.

Longroad has a fifth Arizona project currently under construction in Maricopa County. Through the success of these prior projects, Longroad has built strong relationships with key stakeholders, utilities and construction partners to apply to future projects like the Agua Fria Solar and Storage Project.

The Project Area is located on Arizona State Trust Land managed by the ASLD, controlled by the Applicant via a commercial solar lease which became effective in 2023. Longroad intends to be the long-term owner and operator of the Project, as it currently is for the company's entire Arizona portfolio. Longroad operates a 24/7 Remote Operations Center in Scarborough, Maine where it manages all operational projects with an experienced asset management team, on-site technical support, and a full back-office.

2.2 Current Uses and Physical Characteristics of the Project Area and Surrounding Area

The Project is located in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project area including several existing high voltage transmission lines, the existing Dugas Substation, along with I-17. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott.

Existing land use within a 2-mile radius of the Project primarily consists of rural development, large areas of undisturbed or undeveloped land, existing transportation infrastructure, and limited private land. Other existing land uses within a 2-mile radius include residential, recreational, and

institutional uses. There are limited existing residential areas in the Project Vicinity; the closest residence is located approximately 0.33 miles to the southeast of the Development Area.

The nearest school is Mayer High School, located approximately 2.7 miles southwest of the Project in the community of Spring Valley.

The Chauncey Ranch YMCA Camp is located approximately 0.25 miles northwest of the northwestern corner of the Project. It consists of a 5,000-acre working ranch primarily utilized as a summer camp, which consists of recreational, agricultural, and educational uses.

Arcosanti, an experimental town integrating the design of architecture with respect to ecology, is located approximately 1 mile south of the Project (The Cosanti Foundation, 2024). Existing uses in Arcosanti consist of residential, commercial, recreational, and institutional uses.

2.3 Intended Energy Provider to Interconnect to the Solar Facility and Location of Proposed Interconnection

The Project is proposed to interconnect into the existing Dugas Substation which is an Arizona Public Service (APS) operated substation. The Dugas Substation is partially owned by the federal government and part of the federal transmission system under the Department of Interior and managed by the Bureau of Reclamation (BOR).

2.4 Approximate Rated Capacity of the Solar Facility

The Solar Facility is an up to 450-megawatt (MW) nameplate capacity solar photovoltaic (PV) power plant. The Project is also proposed to include an up to 450 MW BESS. The exact capacity of the Project will be determined through design iterations and constructability analysis, power purchase agreements and contracting, and technology at the time of final design and construction.

2.5 Type and Location of Interconnection to Electrical Grid and Details of Coordination with the Local Energy Provider

The Project would interconnect to the regional power grid at Dugas Substation via a 500 kV gen-tie line from the project substation. The gen-tie would be a short 500 kV transmission line. The gen-tie route is located on Arizona State Trust Land, via the solar lease with ASLD already in place. In addition, the gen-tie route is located within the Project Area and adjacent to an existing 500 kV transmission line. The gen-tie route was approved by the Arizona Corporation Commission in May 2025.

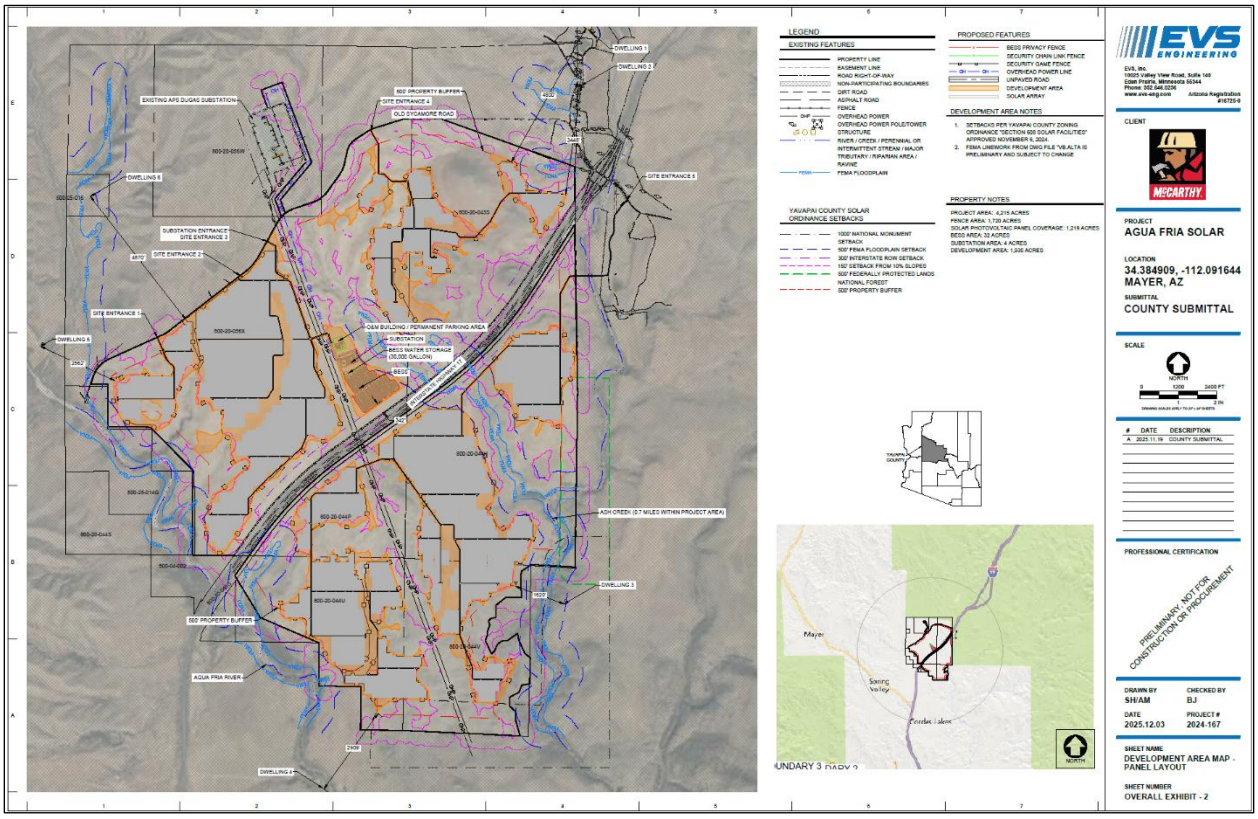
The Applicant has submitted an interconnection request to APS to study the ability of the Project to interconnect at the Dugas Substation. System Impact Study results from APS have indicated that the Dugas Substation is an acceptable point of interconnection and there is available capacity and need to interconnect the Project at this location. The Applicant will continue to coordinate with APS on the interconnection design at Dugas Substation, which will drive schedule for the Project construction.

2.6 Approximate Number of Panels and Representative Types[1]

The Project would consist of arrays of approximately 600,000 to 700,000 PV panels on approximately 1,219 acres. The exact number of PV panels is dependent on the technology type that is selected at the time of construction and final capacity of the Project. The solar field will consist of PV modules mounted on a single axis tracking or fixed rack system supported by driven posts, driven concrete piles, ground screws and/or concrete ballasts. The typical height of the photovoltaic modules, when mounted on the racks, will be approximately eight feet. The maximum height at full rotation will be approximately 12 feet. The height will also vary because the rack bases will be allowed to follow the natural contours of the ground to a limited extent. This reduces the need for grading on the site while allowing a uniform presentation of the panels to the sun.

2.7 Project Area and Solar PV Panel Coverage Expressed in Acres

The solar array blocks would be on approximately 1,219 acres.



Overall Exhibit 2 is in the Development Plan.

2.8 Inventory with Description of All Proposed Structures and Uses Including BESS Facilities, Inverters, and Substations

The solar field within the Project Area consists of arrays of PV modules with medium voltage collection lines. The solar field is anticipated to produce up to 450 MW of clean solar power.

[1] July 1, 2026 update: The acreage and exhibit presented in Section 2.6 and Section 2.7 are in the process of being updated by the Applicant's engineering team to reflect revised buffer zones. These components of the Solar Facilities Report may be refined prior to the Project's hearings.

The Project would include an onsite project substation located in the center of the Project Area, east of the existing 500 kV transmission line and north of the BESS site, see **Figure 1**, *Project Components*. The project substation would occupy an area of approximately 5 acres and would be separately fenced with security fencing.

The BESS would provide up to 450 MW of energy storage capacity and would be located in the center of the Project Area, east of the existing 500 kV transmission line and north of I-17 as shown in **Figure 1**, *Project Components*. The BESS infrastructure would be on approximately 35 acres, 1,524,600 square feet. The height of the BESS enclosures is dependent on final technology, typically ranging from 10-20 feet, and will comply with the 35-foot maximum structure height.

An operation and maintenance building would be constructed onsite for ongoing maintenance of the Project components.

The gen-tie would be a 500 kV transmission line. The gen-tie would interconnect to the regional power grid at Dugas Substation from the project substation. The gen-tie would originate at the project substation and terminate at the existing Dugas Substation (see **Figure 1**). The gen-tie would leave the project substation and travel northwest along the existing 500 kV transmission line corridor to the existing Dugas Substation.

2.9 Inventory of all Solar Facilities within two Miles of the Project Boundary

There are no known solar facilities within two miles of the Project Area.

2.10 Explanation of why the Proposed Site was Chosen

The Project Area is located adjacent to an existing 500 kV transmission line and the Dugas Substation. These were key reasons that the Project site was selected, as the proximity to an existing substation or transmission line is a site characteristic considered preferred in Section 608 Solar Facilities Ordinance. Coordination with APS has also indicated that this area of the electrical grid is optimal for a solar generating facility. The proposed site has a significant solar resource available making it well suited for solar energy generation. The site is largely in conformance with requirements of Section 608 of the County Ordinance and requires minimal waivers. Additionally, the Project Area meets some of the Preferred Site criteria identified in Section 608. Further details of the adherence to Section 608 are described in Section 2.13 of this report.

As discussed previously, the Project site is on ASLD land that has an active solar lease. Based on the results of the corresponding preliminary studies and the materials throughout the application, the Project anticipates minimal negative impacts on recreational resources, cultural resources, water resources or visual resources. The Project design includes significant open space to allow for wildlife to pass through the site and to maintain a similar aesthetic to adjacent land. The Project site is directly south of the existing Dugas Substation where it is proposed to interconnect, and the Project Area contains existing high voltage transmission lines. In addition, due to the topography and existing infrastructure in the Project vicinity, the Project would have minimal negative visual impact.

2.11 Explanation of How the Facility Provides Clear Economic and Environmental Benefits to the County

2.11.1 Economic Benefits

The Project is sited on Arizona State Land Department land under a commercial solar lease. The revenue from the lease goes directly to the beneficiaries of the State Land Trust. The beneficiary for the lands within the Project Area is the K-12 Common Schools. Once operational, the Project would provide approximately $60 million in revenue to Arizona public schools over the lifetime of the Project.

Currently, there are no taxes paid on vacant ASLD parcels throughout the state of Arizona. Once the Project is built, the Project will pay taxes on the improvements to the land. Based on an estimated assessed value for the full build out of the Project and the 2024 tax rates in Yavapai County, the Project expects to pay approximately $34 million in property taxes over the 35-year life of the Project, see **Table 1**. The various tax authorities that will benefit from this increase in property taxes include; Mayer Fire District, Mountain Institute Career & Technical Education District (CTED), Mayer School District, Yavapai County, Yavapai County Library District, Yavapai Community College, and Yavapai Flood Control District. A detailed breakdown of the estimated property taxes in Year 1 and over the 35-year life of the Project is shown below in **Table 1**, **Figure 2**, and **Figure 3**.

Table 1. Project Estimated Property Taxes
*Estimate based on 2024 tax rates and Solar + Storage project. Numbers will vary depending on the final capacity of the Project and tax rates.

Tax Authority	Breakdown of Year 1 Tax Revenue	Breakdown of Total Tax Revenue over Project 35 Year Life
Mayer Fire District	$621,049	$11,472,152
Mountain Institute CTED	$8,391	$155,003
Mayer SD #43	$572,346	$10,572,509
Fire District Assistance Tax	$13,510	$249,556
Yavapai County	$275,953	$ 5,097,460
Yavapai County Library Dist.	$22,589	$417,270
Yavapai Community College	$250,997	$4,636,478
Yavapai Flood Control Dist.	$28,094	$518,953
SEC Mayer SD #43	$53,148	$986,755
Total	**$1,846,347**	**$34,106,140**

Figure 2. Breakdown of Year 1 Tax Revenue

*Estimate based on Solar + Storage Project and 2024 tax rates

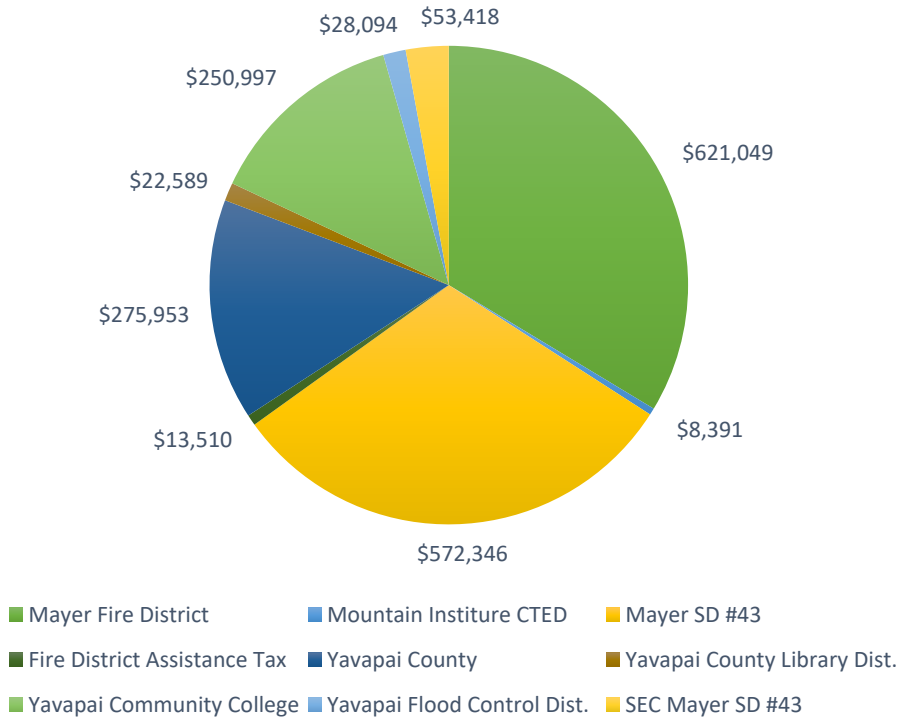
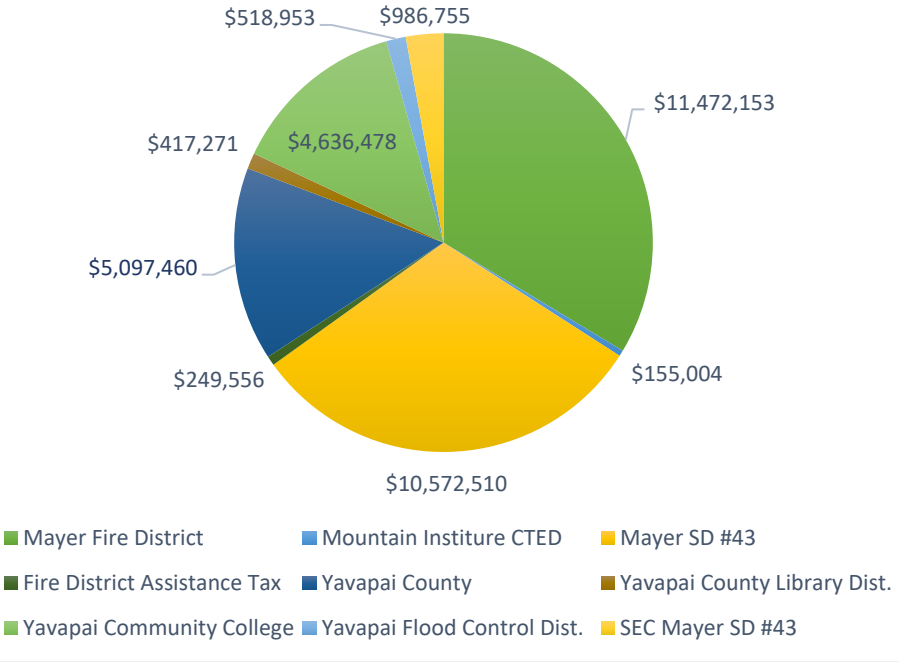


Figure 3. Breakdown of 35 Year Total Tax Revenue

*Estimate based on Solar + Storage Project and 2024 tax rate



2.11.2 Environmental Benefits

Solar energy diversifies the energy supply, reduces the country's dependence on foreign oil, improves air quality, offsets greenhouse gas emissions, and helps avoid the construction of additional fossil fuel powered plants. In warm climates like Arizona, solar energy is also beneficial for satisfying peak energy demands as solar energy is generated when the demand for electricity is at its peak (during daylight hours). The Project is anticipated to avoid approximately 600,000 mtCO2 annually during operation by generating power without burning fossil fuels. This is the equivalent of powering over 80,000 Arizona households each year.

The Project will support the Energy element of the Yavapai County Comprehensive Plan which "promotes the use of clean energy sources, such as solar, wind, geothermal, and biofuels." (Section 8.1 Yavapai County Comprehensive Plan 2023), recognizes that "alternative energy sources are needed to meet projected future energy demands within Yavapai County", and acknowledges that clean and renewable energy generation will "provide a higher level of resilience and security to the power grid by diversifying and localizing energy production" (Section 8.5 Yavapai County Comprehensive Plan 2023). Yavapai County's Comprehensive Plan also recognizes the growing societal awareness of the importance of renewable energy resources and technologies, as a departure from reliance on non-renewable energy resources. The Comprehensive Plan recommends the siting of utility-scale solar generation "as close as practical to existing transmission lines and power substations." Located adjacent to the Dugas substation and existing regional transmission lines, the Project supports the siting criteria of the Comprehensive Plan, in addition to the larger goals of the Energy element of the County.

2.12 Explanation of How the Facility's Design and Operational Procedures Apply Current Best Practices and Technologies

2.12.1 Operational Procedures

Longroad has extensive experience developing, constructing, and operating utility-scale solar and battery projects. In the past five years, Longroad has designed and constructed four large scale projects in Arizona. Through its subsidiary Longroad Energy Services ("LES"), Longroad is contracted to operate and manage 6 GW of operating or under-construction solar and wind projects across the United States, of which Longroad owns 4.1 GW. Plant operations are managed out of a secure operations and asset management remote operations center at Longroad's corporate office in Scarborough, Maine.

LES's Operation and Maintenance (O&M) plan is designed to manage all operational and commercial matters related to the facility. Longroad will provide the following resources at or for the Project facility to ensure safety and complete readiness by Commercial Operation Date (COD):

- Permanent staff recruiting;
- Staff training and safety;
- Policy and procedure guidance and manuals;
- Operations and engineering readiness;
- Maintenance services readiness; and

- Install Supervisory Control and Data Acquisition ("SCADA") and asset management systems.

LES employs a fully integrated, data-driven operations and maintenance strategy that maximizes project value. LES's in-house operations capabilities include real-time resource monitoring and analysis, on-site O&M personnel, and regional Commercial Asset Management staff.

A key to our success is early engagement in the development and construction process to ensure seamless transition to operations. During the operations phase, we combine advanced performance monitoring and analysis from our Remote Operations Center (ROC) with project financial data from our Asset Management team to continually optimize site performance. Decisions are made with a complete understanding of the short- and long-term financial implications to our projects. In addition to our experienced in-house staff, we partner with Tier-1 suppliers of major equipment such as modules, trackers, inverters and transformers to ensure high performance of the project throughout its expected life. For both solar and battery O&M we have signed an industry leading MSA that provides both price and performance certainty.

2.12.2 Design and Technology

Longroad sources field-proven components from financially stable vendors. Longroad has entered framework relationships with key balance of system component vendors to ensure competitive pricing, deliverability, and that capacity will be available upon commencement of construction. For the Agua Fria Project, Longroad plans to work with its key supply chain partners, many of whom have supported past Longroad projects and those under construction this year. Proposed technologies for the Project are described below, although final technology and vendors may change based on construction schedule, cost, and best available technologies and vendors at the time of procurement.

Modules: Jinko 615 watt (W) module, JKM615-66HL4M-BDV, or equivalent

Jinko is a leading global provider of solar PV modules and energy storage solutions. Jinko has deployed more than 28 GW in the U.S. and Canada and more than 300 GW deployed globally. Considered a Bloomberg Tier-1 manufacturer, Jinko has been manufacturing modules in Jacksonville, FL since 2018 and has plans to expand domestic manufacturing in the US. The company's 615 W modules come with a 30-year linear performance warranty, and a 12-year limited product warranty.

PV Inverters: Sungrow US 4400 or equivalent.

Sungrow, a global leader in renewable energy technologies, has pioneered power solutions for over 27 years. As of June 2024, Sungrow has installed 605 GW of power electronic converters worldwide. Sungrow is recognized as the world's No. 1 PV inverter shipments and its clean energy projects are installed in over 170 countries. The Sungrow US 4400 has a 10-year warranty.

Single-Axis Trackers: NEXTracker NX Horizon or equivalent

NEXTracker is the #1 solar tracker in the world in terms of shipments (Greentech Media, 2020) and has been used in over 100 GW of successful projects. Powered by NEXTracker's self-powered motor drive, each row of solar panels can be built with significantly less steel and can be optimized for wider rotation angles. As a result, yield is maximized, and operations and maintenance costs are reduced (clear path between rows). NEXTracker equipment comes with a 10-year warranty on structural components and a 5-year warranty on drive and control systems.

BESS Procurement: For BESS procurement, Longroad is in commercial negotiations with several Tier-1 energy storage system vendors. Each supplier is considered a global leader in the energy storage space, with superior engineering design focused on safety and reliability, a proven track record of successful deployments in the US and globally, and proven bankability. Longroad ensures the selected BESS provider will exceed all technical and safety requirements. Equipment used in the final design will be selected to best accommodate site challenges and to incorporate the latest technologies.

The battery enclosures will be paired with a power conversion system (PCS) from a Tier-1 supplier such as EPC Power or SMA. Like the prospective BESS vendors, Longroad has commercial engagement with PCS suppliers with state-of-the-art products, proven track records, and reliable financials.

Longroad has had successful engagements with BESS and PCS vendors as described, such as the deployment of Powin BESS and SMA PCS at the Sun Streams 3 PV + BESS project which achieved COD in 2024 and includes a 215 MW, 4-hour BESS.

The proposed BESS uses lithium-ion (Li-ion) batteries to store electrical energy as chemical potential energy in electrochemical cells. The lithium-ion batteries will utilize a lithium iron phosphate (LiFePO4 or LFP) chemistry. Due to superior chemical stability compared to other Li-ion chemistries, LFP battery systems are the safest Li-ion systems on the market. LFP technology offers a balanced optimization of cost, energy density, cycle life, safety and stability for stationary energy storage applications.

The batteries will be installed in non-entry enclosures that will be equipped with appropriate HVAC, safety systems, and controls. The battery enclosures are paired with a PCS, PCS MV transformers, and direct current (DC) protection to comprise the BESS. Longroad is in commercial negotiations with Tier-1 vendors for supply of the LFP battery enclosures. Each Tier-1 supplier is considered a global leader in the energy storage space, with superior engineering design focused on safety and reliability.

2.13 Detailed Explanation on how the Project meets each of the required Performance Standards in Subsection F

The Project Area for the proposed Agua Fria Solar and Storage Project is well suited for solar, providing excellent solar resource and proximity to existing energy infrastructure. The Project Area is largely in conformance with the required site characteristics, as well as some preferred site characteristics, as described in the Yavapai County Solar Ordinance. The Project requests minimal waivers from the Solar Facilities Ordinance, as further described in Section 3.

Regulation	Section 608 Solar Facilities Ordinance	Proposed Project Plans
F.1. Location and Dimensions	Solar Facilities are required to be located in the RCU zoning district.	The Project Area is located in the RCU zoning district.
F.1.a	The maximum Development Area shall not exceed 3,000 acres per project.	The Project Development Area would not exceed 3,000 acres. The Development Area would be approximately 1,909 acres.
F.1.b	The cumulative acreage maximum for all Solar Facility projects located within Yavapai County is 10,000 acres.	The proposed Project would be within the 10,000 acre Yavapai County cumulative acreage maximum.

F.1.c	Solar facilities must be located greater than ½ mile from any incorporated municipal limits, or no more than ¼ mile where the Board of Supervisors receives the consent of the affected municipality by way of a resolution of approval submitted by the governing body.	The proposed Project is located greater than ½ mile from any incorporated municipal limits. The Project greatly exceeds this standard as the closest incorporated municipality, the Town of Dewey-Humboldt, is located approximately 8 miles northwest of the Project Area.
F.1.d.	Preferred Sites: The following site characteristics are considered preferred. No combination of preferred characteristics will create an entitlement to a Solar Facility Use Permit, but the Board of Supervisors will consider those characteristics to determine whether a location is appropriate. The determination of whether a proposed Solar Facility's location is appropriate is a legislative decision by the Board of Supervisors. Preferred sites will be located on: (1) a previously utilized site exhibiting challenging characteristics for reuse (e.g., existing Brownfield, aggregate extraction, or mining site); (2) project sites exhibiting highly disturbed and degraded ecological features; (3) project sites having low environmental, recreational, and cultural or archaeological resource values as identified in the required preliminary site investigations; (4) project sites that may retain traditional uses and allow for multiple uses such as Agrivoltaics; (5) project sites that have minimal negative visual impact on significant landforms and scenic viewsheds of widely recognized aesthetic or recreational value, or which are more than ten (10) miles from Visual Resources such as natural landforms, vegetation, water features, and human modifications that give the landscape its visual aesthetic quality; (6) project sites located near major highway interchanges and existing or planned industrial areas; and (7) project sites that use or are near an existing or planned substation, or transmission line or other satisfactory inter-tie location.	The Project Area meets the following Preferred Site characteristics that make it well suited for a solar project: More than half of the Project Area is being left undeveloped and will retain its existing features and habitat. The Project has been in coordination with neighboring ranchers and is not proposing any fencing that will negatively affect these adjacent uses. The Project will retain natural landforms, water features and vegetation throughout, with more than half of the Project Area left undeveloped. The preservation of these natural features, in addition to the commitment to minimize grading and avoid building on slopes greater than 8% will minimize visual impacts on and around the Project Area. The Project Area is bisected by Interstate 17, therefore meets the Preferred Site characteristic of being located near major highway interchanges. The site has existing high voltage transmission lines within the Project Area and is located directly adjacent to the existing APS Dugas 500 kV Substation. Being co-located with these critical features is a Preferred Site characteristic of the Project Area. The Project is engaged with APS on studies to interconnect the Project to the Dugas Substation and the studies have deemed this site a satisfactory inter-tie location for the APS electric grid. Interconnecting at Dugas Substation requires a less than 2 mile generation tie line, minimizing potential impacts associated with connecting the Project to the regional transmission grid.
F.1.e	Restricted Locations: The following locations within the Project Area must	

	remain in an undisturbed condition unless a waiver is granted.	
F.1.e. 1)	Locations that would fragment, degrade, or irreparably harm important resources of local, County, state, or federal significance.	The proposed Project would not fragment, degrade, or irreparably harm important resources of local, County, state, or federal significance, as determined by the Preliminary Site Investigations and as further elaborated in the plans submitted as part of this Application. The Project has made design modifications, including open space areas and wildlife friendly fencing, to avoid fragmentation and harm to important resources of all types.
F.1.e. 2)	Locations that conflict with or have potential significant negative impacts on Special Status Species and their habitats, other special wildlife designations such as Critical Habitat and Important Bird Areas, identified wildlife corridors, and significant stands of unique vegetative communities.	The Project has been thoughtfully designed to avoid and minimize negative impacts on Special Status Species and their habitats. The Project conducted wildlife agency coordination and biological studies to evaluate potential impacts and has adjusted the Project Development Area to avoid Critical Habitat, Important Bird Areas and to facilitate wildlife movement and continued use of the Project Area. These design measures and other wildlife protection measures for the Project are described in Section 3.4 of the Wildlife Protection Plan.
F.1.e. 3)	Scenic sites, areas, and viewsheds of recognized aesthetic or recreational value.	The Project has been designed to avoid and minimize impacts to scenic sites, areas, and viewsheds of recognized aesthetic or recreational value. These areas were considered thoroughly in the Land Use Impacts and Mitigation Plan and the Visual Impacts Analysis included with this Application.
F.1.e. 5)	Steep Hillside slopes averaging greater than 8% over 300 feet or more of horizontal run. Development of slopes that average up to 10% over 300 feet may be permitted, provided that the affected area comprises less than 10% of the Development Area.	The Project has been designed in accordance with the Ordinance to avoid Steep Hillside slopes averaging greater than 8% over 300 feet or more of horizontal run. Impacts to areas with slope averaging up to 10% over 300 feet do not comprise more than 10% of the proposed Development Area, and thus the Project is in conformance with this criteria.
F.1.e. 6)	Conflict with or have potential negative impacts on archaeological, cultural, and historic resources or sites, heritage areas, or cultural landscapes as formally identified by a designated tribal entity or government.	The Project is located on land administered by the ASLD, which is mandated by legislation to comply with provisions of the Arizona State Historic Preservation Act (A.R.S. 41-861, et seq.) and the Arizona Antiquities Act (A.R.S. 15-1631 and 41-841, et seq.). Protected cultural resources will be identified and evaluated for significance through an ASLD approved Class III survey and report. Potential negative impacts to protected cultural resources will be avoided, minimized, or

		mitigated through an ASLD approved mitigation plan. ASLD will approve the survey, site evaluation, and mitigation plan in consultation with the SHPO, tribes, the ASM, and other consulting parties as deemed necessary. County requirements are met or exceeded by the provisions of the Arizona State Historic Preservation Act (A.R.S. 41-861, et seq.) and the Arizona Antiquities Act (A.R.S. 15-1631 and 41-841, et seq.) for the Project on ASLD land. This is further detailed in the Cultural Resources Management Plan.
F.1.e. 7)	Locations that require significant ground disturbance and grading due to their unique topographical features or environmental constraints.	The Project has been designed to minimize grading and preserve prominent landscape features. The Project adheres to the Ordinance requirement to avoid building on slopes greater than 8%, and therefore is avoiding development on rock outcroppings, steep hillsides, and other topographical features.
F.1.e. 8)	Forested or heavily vegetated sites or locations comprising 30% canopy density of woody or saguaro cactus species as averaged across the vegetated area.	The Project Area does not consist of forested or heavily vegetated sites or locations comprising 30% canopy density of woody species or saguaro cactus species as averaged across the vegetated area.
F.1.e. 9)	Floodplains, riparian areas, wetlands, or seeps as may be determined by FEMA, Yavapai County Flood Control District, or other federal, state, and local public entities charged with environmental water quality and protection.	The project is setback 500 ft. from mapped FEMA floodplains in and adjacent to the Project Area as shown on the Development Plan.
F.2. Setbacks		
F.2.a	5,280 feet (one mile) from any dwellings (existing or under permit), or subdivision or Planned Area Development having a recorded Final Plat which has been approved by the Board of Supervisors.	The nearest dwelling is approximately 0.33 miles southeast of the Development Area. There are 6 dwellings within 1 mile of the Project Development Area. The Project is not within one mile from any subdivision or planned area developments. **A waiver is requested from this setback to account for the deviation for existing dwelling proximity.**
F.2.b	500 feet from any lake, creek, perennial or intermittent stream, river, major tributaries, riparian areas, wetlands, or seeps, as measured from the top edge of the bank, or from the outer edge of any delineated Federal Emergency Management Agency (FEMA) Floodplains. Minor tributaries may warrant a reduced buffer setback to be no less than one hundred fifty (150') feet as determined by the Board of Supervisors.	The Project will adhere to the 500 ft. setback required, as depicted within the Development Plan Map. The Agua Fria River and Ash Creek, that are located in or adjacent to the Project Area meet the definition of perennial or intermittent stream, major tributary, riparian area, and ravine. The Project design includes a minimum 500' set back from the Agua Fria River, Ash Creek, as measured from the outer edge of the FEMA floodplain. These are shown in the Development Plan.

F.2.c	1,000 feet from federally protected lands (e.g., National Park, National Monument, Conservation Lands), and 500 feet from other federally managed lands, unless such adjacent lands have leased or planned uses deemed compatible by the Board of Supervisors.	The Development Area is over 1,000 feet from the Agua Fria National Monument. The Development Area is setback 500 feet from the Prescott National Forest. Therefore, the Project is in conformance with this criteria.
F.2.d	1,000 feet from County open space, parks, and other recreational resources	The Project Area is over 1,000 feet from County open space, parks, and other recreational resources, and therefore meets this criteria.
F.2.e	500 feet from forested or heavily vegetated areas comprising 45% or greater canopy density of woody and cactus species (i.e. trees, shrubs, succulents) as averaged across the vegetated area, or from transitional habitat areas.	The Project Area is over 500 feet from forested or heavily vegetated area.
F.2.f	500 feet from ravines, canyons, or other significant and well-defined drainage features, as measured from the peak of the outer edges of these features.	The Agua Fria River and Ash Creek are the two features on or adjacent to the Project Area that are considered Ravines. The Development Area will comply with the minimum 500 foot setback from these features as measured from the outer edge of the FEMA floodplain which is a greater distance than the peak of the outer edges of these features.
F.2.g	150 feet from any Hillsides with slopes of 10% or greater or with a total elevation gain of 50 feet or more. The setback will be measured from the high and low points where the average slope percentage calculation begins and ends.	The proposed Project design includes approximately 80 acres of encroachment within this setback. **A waiver is requested to accommodate the deviation that results in encroaching in this setback.**
F.2.h	500 feet from significant archeological, paleontological, or historic sites as identified in the Cultural Resources Management Plan, or sites already formally recognized by the State Historic Preservation Office (SHPO). Identified cultural ruins of documented significance may require an additional setback up to 1,000 feet as determined by the Board of Supervisors.	Significant/formally recognized sites by SHPO that warrant avoidance will be identified and protected through ASLD survey, evaluation, and mitigation process in consultation with the SHPO, tribes, and the ASM. **A waiver is requested to allow the Applicant to default to ASLD process to avoid, minimize, and mitigate potential impacts to significant cultural resources.**
F.2.i	650 feet from each parcel corner on land parcels with checkerboard ownership arrangements (i.e., public land/private land) to allow connectivity to be maintained for wildlife corridors identified in the Wildlife Protection Plan (subsection D.2.c). Parcels with adjacent corners that also provide an equivalent buffer would be able to complete a combined wildlife corridor of one 1,300 feet.	The Project Area is not located within a checkerboard ownership arrangement and is not subject to the 650 foot setbacks.

F.2.j	300 feet from the official street right-of-way line of any state or interstate highway	This Setback has been incorporated into the Project design, and the proposed Development Area is over 300 feet from the official street right-of-way line of any state or interstate highway.
F.3. Height		
F.3.a	The maximum height of the highest edge of PV panels when fully tilted shall be 20 feet as measured from the average finished grade of the row.	The proposed Project's PV panels would not exceed the maximum height of 20 feet as measured from the average finished grade of the row. The maximum height at full rotation will be approximately 12 feet.
F.3.b	The maximum height of all other structures associated with the Solar Facility shall be 35 feet as measured from the finished grade at the base of the structure to its highest point.	All other structures associated with the Solar Facility would not exceed the maximum height of 35 feet.
F.4. Wildlife Corridors	Minimum width of 1,300 feet through the entire length of the course where daily or seasonal migrations of pronghorn antelope, elk, and mule deer are known to occur. If the length of the corridor through the Project Area exceeds 2 miles, a minimum width of 2,000 feet may be required. The applicant must consult with the AZGFD in identifying wildlife corridors to provide adequate access for wildlife to safely navigate. Wildlife permeable fencing to allow for small / medium-sized animals to fit through is required. All fencing must be permeable to small animals by leaving a 6-inch gap at the bottom of the fence, exclusive of substation and BESS.	No modeled Wildlife Corridors mapped in AGFD's environmental review tool overlap with the Project Area or Development Area. Although not formally identified or managed as Wildlife Corridors, the Agua Fria River, and Ash Creek create riparian corridors that facilitate general wildlife movement through the landscape, including within portions of and in the immediate vicinity of the Project Area. The applicant has consulted with the AGFD and identified that over half of the Project Area will remain unfenced for the use and movement of wildlife. These open spaces will preserve existing habitats, and facilitate wildlife movement across the Project Area. The applicant is implementing the AGFD wildlife compatible fencing guidelines; and has worked closely with AGFD to consider additional design measures to minimize impacts on wildlife movement.
F.5. Ground Cover and Vegetation Preservation	Preliminary erosion control, site maintenance, noxious weed control and management, and native plant preservations and revegetation plans shall be submitted as part of the Landscaping Plan.	A landscaping plan will be submitted that addresses erosion control, maintenance, management and landscaping. The proposed Project would include seeding with a certified weed free native revegetation seed mix.
F.5.a	Any disturbed land must be seeded with a certified weed free native revegetation seed mix based on plants predominantly native to the site and Yavapai County, as approved by the Development Services Director. Such ground cover shall be continually maintained.	The proposed Project would include seeding with a certified weed free native revegetation seed mix. The ground cover will be maintained for the duration of the SFUP.
F.5.b	Solar Facilities shall be designed and developed to minimize grading and to protect and preserve prominent landscape features (i.e., rock	The proposed Project has been designed to minimize grading and to protect and preserve prominent landscape features. In

	outcroppings, large boulders, etc.), unique plant communities, riparian zones, steep slopes, and other natural features, prime grassland, woodland, and Sonoran Desert habitat. No more than a 10% average change from natural grade will be allowed except for roads, equipment pads, substation, BESS, and other structures that require a leveled surface to meet engineering or safety codes.	addition, no more than a 10% average change from natural grade would occur.
F.6. Screening	The required Project Boundary setbacks and buffer zone must provide adequate screening to reduce visual impacts associated with the Solar Facility. The applicant may use any combination of methods listed in this subsection, or other comparable methods deemed equivalent by the Board of Supervisors, to satisfy the screening requirements. (1) Existing vegetation, topography, buildings, open space, or other elements located on or adjacent to the site may be considered as part of the required screening if deemed adequate by the Board of Supervisors. (2) Vegetative landscaping intended for screening may include a combination of evergreen and deciduous trees, shrubs, and/or cacti or succulents where appropriate, that are native to Yavapai County and four (4') to six (6') feet in height (excluding cacti and succulents) at time of planting. (3) Berms must generally be constructed with a 3:1 horizontal-to-vertical ratio, 4 feet to 6 feet above the adjacent grade, with a top that is 3 feet in width. (4) Fencing shall be designed to minimize visual impacts and be complementary with scenic corridors and adjacent properties. Fencing shall also be designed to minimize impacts to wildlife and must not impede identified wildlife corridors. (5) The perimeter of BESS Facilities, substations, and other structures must be enclosed with security or game fencing prior to the commencement of operations of the Solar Facility as required by local,	The proposed Project setbacks and buffer zones would provide adequate screening to reduce visual impacts. The Project design incorporates significant areas of open space with natural, existing vegetation to be used as screening. Natural vegetation is an effective form of screening as it helps to blend the proposed infrastructure in with the existing environment and does not require significant water usage for irrigation and establishment. Existing vegetation will remain on over half of the site, including prominent areas such as the buffer along I-17, and landscape features with slopes greater than 8% that are visible to adjacent properties. The Project will include fencing that will be designed to minimize visual impacts. Wildlife-friendly game fencing is proposed around the solar arrays. The Project fencing has been designed in collaboration with Arizona Game and Fish Department to minimize impacts to wildlife and to not impede areas of wildlife movement. The BESS facilities are central to the Project Area for electrical design purposes and proximity to existing transmission lines. Because of this, the BESS facilities are visible to travelers along I-17. To minimize the visual impact of the BESS facilities, enhanced privacy fencing is proposed around the sides of the BESS visible from I-17. The enhanced fencing design is 8 foot corrugated metal fencing that would naturally patina over time to create a rustic, brown aesthetic and blend in with the environment. This proposed enhanced fencing is depicted via a Visual Simulation in the Visual Impact Analysis.

	state, and federal regulations and national safety codes. (6) Dwellings located 1,000 feet or less from the Project Boundary which are existing or under permit at the time of Board of Supervisors approval of the Solar Facility may require additional vegetative screening from views of the Solar Facility structures as determined appropriate by the Development Services Director. Such vegetative screening shall be located within the buffer zone in an area extending at least 75 feet from either side of the dwelling.	Fencing around the BESS, project substation and O&M Building will comply with all local, state and federal safety codes as well as any requirements of the Mayer Fire Department as the Emergency Responders. The Project Development Area is located more than 1,000 feet from all neighboring dwellings and, thus, does not propose additional vegetative screening for these dwellings. The Project design does include buffers and large areas of existing vegetation to be used as screening from these dwellings.
F.7. Outdoor Storage	Material storage areas shall be located in low-visibility areas of the project site whenever possible. The locations of any storage areas and an inventory of anticipated materials to be stored must be included in the Development Plan.	The Development Plan for the proposed Project will include any locations of material storage areas. These will be located central to the Project Area near the operations and maintenance building.
F.8. Outdoor Lighting	Any outdoor exterior lighting associated with the Solar facility or BESS Facility shall be limited to levels required for safety and security and avoid crossing into identified wildlife corridors.	All Project lighting will comply with Dark Sky International's principles for responsible outdoor lighting.
F.9. Glare Impact	All structures and PV panels associated with the Solar Facility shall be arranged to direct reflected sunlight and artificial light away from adjacent parcels, identified wildlife corridors, and public streets, and shall be installed in such a manner as to prevent glare that could interfere with any road or air traffic.	PV panels associated with the Project are designed to absorb sunlight for electricity generation, rather than reflect sunlight. Panels are coated with an anti-reflective coating to minimize glare and panels should not impact road or air traffic.
F.10. Noise	Operational noise impacts at the Project Boundary shall not exceed 50 (dBA) decibels where abutting residential or Planned Area Development use districts, identified wildlife corridors, or where abutting parcels with dwellings existing at the time of Board of Supervisors approval of the Solar Facility.	The design of the Project helps to substantially control noise levels propagating to surrounding land uses by collocating the majority of the dominant noise sources, such as at the BESS area and the project substation, near the center of the Project Area, thereby maximizing the distance between those noise sources and the project boundaries. Placing the project substation and BESS near existing noise sources, I-17 and transmission lines, helps minimize the impact of new noise because of the already elevated noise level. Overall, the results of this study indicate that the proposed Project is expected to comply with the applicable 50 dBA boundary noise limits and, in many cases, actual noise levels would be substantially lower.

F.11. Signs	Any signs associated with the Solar Facility shall be designed to comply with Section 601 Sign Code and a sign permit must be obtained for all proposed signs.	Any signs associated with the Project shall be designed to comply with Section 601 Sign Code and a sign permit will be obtained prior to the installation of any signs.
F.12. General Compliance	The Solar Facility or BESS Facility shall be designed, constructed, tested, and operated to fully comply with all applicable County, state, and federal laws, regulations, codes, and requirements.	The proposed Project will be designed, constructed, tested, and operated to fully comply with all applicable County, state, and federal laws, regulations, codes, and requirements.

2.14 Results of the Preliminary Site Investigations Required in Subsection D.1.c(2).

Preliminary Site Investigations were submitted to Yavapai County staff on Friday, March 28th. Following the pre-application submittal, the Applicant met with county staff on June 10, 2025, in a pre-application meeting. We received written comments from county staff on June 13, 2025.

Preliminary Habitat and Wildlife Study

The preliminary Habitat and Wildlife Study, and coordination with Arizona Game and Fish Department (AGFD) to date, indicates there are special-status species having a moderate to high potential to occur in the Project Area. Implementation of feasible design aspects and mitigation measures suggested by AGFD, such as wildlife-friendly fencing and large areas of open space in the proposed design, will help to avoid and minimize impacts to wildlife.

The Project will continue coordination with AGFD on Project design considerations to avoid and minimize impacts on wildlife. The Wildlife Protection Plan includes detailed information on how impacts to wildlife will be avoided through project design, mitigation strategies, and monitoring during construction.

The preliminary Habitat and Wildlife Study was conducted by ICF.

Preliminary Recreational Resources / Public Land Study

The Project Area does not overlap any designated recreational areas but there are robust recreational areas within 5 miles of the Project. It is not anticipated that the Project will affect the future siting of proposed recreational facilities. Given the presence of the existing transmission lines in the vicinity of the Project, current land use in this area is not expected to change and is not anticipated to support recreation.

Although there are federal lands managed by the USFS and BLM adjacent to the Project, the Project would not affect access to those public lands. Although the Project would not have physical impacts to federal lands as the Project does not cross federal lands, the Project would have visual impacts on the surrounding areas.

KP Environmental prepared the Preliminary Recreational Resources / Public Land Study.

Preliminary Archaeological, Cultural and Historic Sites Study

Within the project area, 12 potentially eligible archaeological sites have been previously identified; 10 sites attributed to prehistoric Native American land use in Central Arizona, one attributed to Historic Euromerican transportation infrastructure, and one unknown.

Analysis of historical GLO plats, patents and USGS quadrangles did not reveal any extensive or significant historical development of the project area. No mineral surveys or mines have been patented within the project area and one-mile study buffer. No homestead or cash sale patent entries associated with significant individuals were identified within the project area or study buffers, and no habitation or ranching structures were identified within the project area on historical plats or maps of the project area. Previous inventories and recent aerial photographs suggest that the minor historical transportation resources identified during the review have been obscured by modern disturbances from ranching, cattle grazing, infrastructure development, and erosion, and no longer exist on the landscape. Two features identified during the historical map review intersect the Study Area and have reached the 50-year threshold to be considered historic subsequent to the most recent cultural resources inventories of the project area. If either of these resources intersect the project area, they should be evaluated as potential in-use historical structures per SHPO guidelines.

This information is preliminary. Per ASLD requirement for the identification, and protection of cultural resources on ASLD land, the Applicant will sponsor a Class III survey by a qualified professional to confirm the location of potentially significant sites for the Project Development Area. A report will be drafted and submitted to the ASLD for review, who, in consultation with the SHPO, tribes, and ASM, will make determinations of site significance and potential for adverse impacts. Once ASLD determines site significance and potential adverse impacts, they will approve a plan to avoid, minimize, and mitigate any potential adverse impacts in consultation with the SHPO, tribes, and ASM. Implementation of the plan and all work associated with the plan will be approved by the ASLD prior to Project construction.

WestLand Engineering & Environmental Services conducted the cultural resources preliminary Class I study.

Preliminary Water Resources Study

No wetlands were observed or delineated within the Project Area. The mapped NWI freshwater/forested wetland was delineated as a section of Ash Creek. Wetland data forms were filled out for two potential wetland areas that were determined to not be wetlands. All non-waters points were determined to be non-wetland.

57 waterbodies were delineated based on desktop review within the Project Area. All streams showed no surface water, a lack of macroinvertebrates, minimal to no floodplain, minimal to no terrace, and no vegetation. Ash Creek is the only intermittent stream found within the Project Area. The current Project design would avoid jurisdictional aquatic features and is not expected to require permits from the Army Corps of Engineers. In addition, the Project would implement best management practices to ensure that Ash Creek would not be affected. The Applicant will be coordinating with Yavapai County to create a Stormwater Management Plan that will require approval from the Flood Control District prior to construction.

Western EcoSystems Technology, Inc. (WEST) conducted a wetland and waterbody survey to provide water resources information for the Project Area. The survey included a desktop review, field delineation surveys, and an informal jurisdictional determination for all delineated features.

Preliminary Visual Resources Study

Prescott National Forest's landscape is inherently natural for the most part and encompasses natural features. There are no designated scenic resources in Prescott National Forest within 5 miles of the Project. The Agua Fria National Monument has diverse vegetative communities and topographic features in the landscape. There are BLM designated recreation sites, trailheads, wild and scenic rivers and visual resource inventory classes in the Agua Fria National Monument within 5 miles of the Project.

11 potential Key Observation Points have been identified at representative viewpoints surrounding the Project Area to best depict the existing and proposed visual setting. These are in place to aid the County and Applicant in selecting viewpoints for the Visual Impact Analysis.

The Project Area and majority of adjacent land is zoned as RCU (Residential; Rural), however, there are few residences in the immediate Project vicinity. Solar Facilities are required to be located in the RCU zoning district per the Yavapai County Solar Facility Use Permit. There are several residences and residential subdivisions within 5 miles of the Project. The nearest residential structure is located approximately 0.33 miles southeast of the Project boundary.

3.0 Waiver Proposals

The specific deviations from the Yavapai County Section 608 Ordinance standards are set forth in **Table 2** below, with variances bolded. The justifications for the variances are discussed in section 3.1.

Table 2. Agua Fria Solar and Storage Project Waiver Requests

Regulation	Section 608 Solar Facilities Ordinance Standards	Proposed Project Plans
C.4. b. (#1)	The buffer zone shall be a minimum of 500 feet, beginning at the Development Area	The proposed Project design includes approximately 136 acres of encroachment within this setback for fence, retention basins, and other Project components.
F.2. a. (#2)	5,280 feet / one mile from any dwellings	The proposed Project design includes a buffer of 0.33 miles from the nearest dwelling to the Development Area. There are 6 dwellings within 1 mile of the Project, and the average setback from these dwellings to the Project Development Area is 0.64 miles.
F.2. g. (#3)	150 feet from any Hillsides with slopes of 10% or greater	The proposed Project design includes approximately 80 acres of encroachment within this setback.
F.2.h. (#4)	500 feet from significant archeological, paleontological, or historic sites as identified in the Cultural Resources Management Plan, or sites already formally recognized by the State Historic Preservation Office (SHPO). Identified cultural ruins of documented significance may require an additional setback up to 1,000 feet as determined by the Board of Supervisors.	In place of the setbacks set forth in Section 608, the Applicant is required to adhere to the ASLD process to avoid, minimize, and mitigate potential impacts to significant cultural resources.
M.1. g. (#5)	Financial Assurance for Decommissioning	The Applicant is required to post financial assurance per the solar lease with the ASLD. The requirements from ASLD align with the requirements of Section 608.

3.1 Justifications for Waiver Proposals

C.4.b. 500 foot Buffer Zone (Waiver #1)

The Applicant proposes a waiver from the 500 foot buffer zone requirement, described in Section C. General Provisions of the Solar Ordinance. The Development Area for the Project is largely

restricted by the setback requirements within Section 608 F.2. of the Ordinance, and panel placement has been limited through compliance with those setbacks, the transmission line corridor, and other site constraints. As such, compliance with the 500 foot buffer along the entire site perimeter has been deemed impractical for the Project's success. A solar project is comprised of array blocks with solar trackers which require contiguous tracts of land in order to be designed, constructed, and operated efficiently. Therefore, a waiver is proposed to allow development within this buffer at specific areas in the Project Area to enable construction of solar tracker units and electrical collection systems within this buffer zone where other conditions (such as topography) are supportive of development. Eliminating these proposed encroachment areas would be impractical from a design, construction, and operations standpoint because it would fragment the array layout, break electrical collection connectivity between array blocks, and reduce generating capacity (thereby reducing property tax revenue to the County and lease revenue which is remitted to Arizona public schools).

The Applicant proposes 136 acres of development within this 500 foot buffer zone. The areas of encroachment are generally described as follows: west of the transmission line corridor along Old Sycamore Road (significant encroachment), along the southwest portion of the Project Boundary generally adjacent to the Agua Fria River (moderate encroachment), along the eastern portion of the Project Boundary generally adjacent to Ash Creek (minor encroachment), and in the northeastern-most portion of the Project area located west of I-17 (extremely minor encroachment). These areas of encroachment are generally consistent with all other setback requirements of subsection F.2 that would otherwise permit development at these locations. . This waiver proposal encompasses ten discrete locations, and in numerous other locations on the project site the Development Area is inset from the edge of the Project Area by significantly more than 500 feet.

This deviation would not cause adverse impacts, nor would it conflict with planned uses within the general area. There are no sensitive receptors such as dwellings in the vicinity of the proposed waiver locations. The moderate encroachment areas along Old Sycamore Road are located adjacent to ASLD land and will be separated by this existing County maintained road. These adjacent lands are currently under grazing leases from Arizona State Lands and are managed by neighboring ranchers. The Applicant has coordinated with these neighbors and does not anticipate any impact to continued ranching on these adjacent sites and thus will not affect the land use. The Applicant sees no conflict in reducing the buffer zone where adjacent to land owned by ASLD for these reasons, where no other setback conflicts exist. A minimum 30 foot setback to the fence line will be provided in this Development Area to provide separation from the road. This encroachment area represents approximately 53.2 acres – 39% of the total "C.4.b" waiver area.

Along the western and eastern Project boundaries adjacent to the Agua Fria River and Ash Creek, there will be some moderate encroachment into the 500 foot buffer. The proposed design maintains a minimum 500 foot setback between the Development Area and the Agua Fria River and Ash Creek, which acts as a natural boundary line. These encroachments are not anticipated to impact any of the other setback requirements in subsection F.2 and the Project will fully comply with the 500 foot setback requirements along Agua Fria River itself. The Project design far exceeds the minimum requirement of 500' setback from the Agua Fria River and Ash Creek in multiple locations. Additionally, all portions of the Development Area maintain a setback of 0.33 miles (1,734 feet) or more from any existing dwelling. In addition to ASLD land across Old Sycamore Road, the Project boundary is separated from private land by additional ASLD land not included in the Applicant's lease. As such, there are specific areas of encroachment that will not increase any impact on the proximity of development to neighboring private landowners.

On the Ash Creek and Agua Fria River sides of the project, the ASLD lease boundary has been inset from the ASLD property boundary with the specific intent of carving resources out of the leased area. This was part of the thoughtful and conscientious early development work that was completed by the Project team. A 500-ft buffer along a lease boundary that itself was intentionally set back from a property boundary is redundant. Thanks to this proactive conservation decision during the ASLD leasing process, a smaller buffer zone in this areas is appropriate.

The minor encroachments into the 500 foot buffer along the southeastern boundary are also adjacent to ASLD land, and the natural buffering provided by the Ash Creek and its associated 500 foot setback requirements that are recognized within the Development Plan. The Project will maintain a minimum 200 foot buffer adjacent to private land.

F.2. a. Dwellings (Waiver #2)

The Applicant proposes a waiver from the one mile setback requirement from dwellings for the Project. The Applicant proposes that the dwelling setback be reduced to 0.33 miles from the Development Area. The Project is located in a rural area of Yavapai County, with some existing residential uses in the Project vicinity. There are a total of 6 dwellings located within one mile of the Development Area. The proposed setbacks between these dwellings and the Development Area range from 0.33 miles to 0.95 miles, with the average setback being 0.64 miles. This specific requirement is considered impractical for the Project and the Project is not expected to adversely impact the residential uses in proximity to the Project Area. Care has been taken with the site design and through the application of the other required setbacks within the Ordinance that will minimize the impact of this waiver request.

Throughout the Citizen Participation Process, the Applicant has coordinated multiple meetings with nearby entities, neighbors and stakeholders to understand and address concerns related to the Project. These entities include Orme Ranch, the Orme School (which recently closed in early 2025), and Arcosanti, all located directly adjacent to the Project. The Applicant also regularly attends the meetings of the Upper Agua Fria Watershed Partnership to provide Project updates and address questions and concerns, given the proximity of the Project to the Agua Fria River and Ash Creek and the value of these resources to the community. The Project has issued mailers with Project updates and open house invitations to all neighboring property owners. The Notification Area for landowners was extended beyond the minimum of a half mile and ranges from 0.7 to 4.5 miles of the Project boundary. Notifications were also sent to homeowners associations (HOAs), community groups, and other stakeholders outside of the standard notification range.. The Project will continue to conduct outreach to these entities throughout the development and construction of the Project. Given this previous community outreach and the rural nature of the site, the Project does not expect this waiver request to create a negative impact. No dwelling is within 1000’ of the Development Area and thus additional screening or fencing would not be effective, particularly due to the majority of adjacent land being used for cattle grazing and the effect of additional fencing on wildlife movement.

The site is otherwise a preferred location for solar due to its proximity to the existing electrical infrastructure, which will minimize the visual impacts of the solar project to adjacent landowners and reduce the need for extensive expansion of the electrical grid. This waiver proposal allows the Applicant to develop in areas well suited for solar, without encroaching on setbacks that would negatively impact public safety, wildlife, or wildlife movement.

F.2.g. 150 feet from Hillsides with slopes of 10% or greater (Waiver #3)

The Applicant proposes a waiver for areas where the Development Area encroaches into the required one hundred fifty (150) foot setback from hillsides with slopes of ten percent (10%) or greater or with a total elevation gain of fifty (50) feet or more. These areas are shown on the Development Plan and account for a small percentage of the Development Area. To allow for efficient site design, construction, and operations, strict adherence to this setback is determined to be impractical. While the site design has been planned to avoid encroachment into these setbacks as much as possible, specific areas within the Development Area will require fencing, grading, and installation of infrastructure within these areas due to the nature of the shape of these setbacks. The 150' setback creates a curved, non-uniform shape throughout the Project Area. The Project design followed this shape closely, but this variance is proposed to create a more sensible and contiguous design with straightened fence lines and efficient solar array block layouts. This is a necessity of the Project in order to achieve an electrically efficient and practical design and corresponding operations program.

For clarity, this waiver proposal is related to portions of the Development Area that are proposed to be *closer than 150' from slopes* of 10% or greater; this waiver proposal is not related to constructing Project facilities on the steep slopes offered protection under Section 608 F.1.e.(5).

This setback from slopes applies to a total of 1,815 acres of the Project Area. The Project is in compliance with the restriction for 95.5% of the restricted areas and only proposes a waiver to encroach on this setback for approximately 80 acres, which is less than 5% of the Development Area and less than 2% of the total Project acreage.

As mentioned above, the Project is otherwise in adherence with the separate requirement to avoid steep hillside slopes averaging greater than 8% over 300 feet or more of horizontal run. This is shown on Page 3 of the Development Plan on a map of the slopes within the Project Area in relation to the Project fenced area, clearly illustrating the Project's commitment to avoiding disturbance in areas with slope greater than 8%. The Applicant understands the sensitivity to grading on the Project Area and has taken best efforts to reduce grading where feasible. A grading plan indicating existing and proposed contours at no greater than two-foot contours is illustrated within the Development Plan, and re-seeding efforts for these areas are described in the Landscaping Plan.

F.2.h. Cultural Resources (Waiver #4)

The Applicant proposes a waiver from the setback for significant cultural sites described in Section F.2.h. In place of these specific setback requirements, the Project will adhere to the well-established process and guidelines from Arizona state authorities.

The Project Development Area is located on Arizona State Trust Land managed by the Arizona State Land Department (ASLD; ASLD Land), which is mandated by legislation to comply with provisions of the Arizona State Historic Preservation Act (A.R.S. 41-861, et seq.) and the Arizona Antiquities Act (A.R.S. 15-1631 and 41-841, et seq.). ASLD is responsible for managing cultural resources on ASLD land. The ASLD process complies with state laws for the protection of cultural resources and is conducted in consultation with the Arizona State Historic Preservation Office (SHPO), tribes, and the Arizona State Museum (ASM). The Applicant is required to follow the established ASLD process to identify, evaluate, and avoid, minimize or mitigate potential adverse impacts to significant sites. ASLD determines site significance, and appropriate avoidance,

minimization or mitigation measures to avoid potential adverse impacts to significant sites on ASLD land.

The Applicant has sponsored a Class III cultural resources survey to identify potentially significant sites for the Project Development Area on ASLD land, completed by a qualified archaeologist. A survey report has been drafted and submitted to the state agencies for review. As part of the review process, ASLD the SHPO, tribes, and ASM will make determinations of site significance and potential for adverse impacts. Once site significance and potential adverse impacts are determined, the agencies will approve a plan to avoid, minimize, and mitigate any potential adverse impacts. Implementation of the plan and all work associated with the plan will be approved by the applicable state authorities prior to Project construction. According to their established process, the ASLD, SHPO, and Arizona State Museum will approve the mitigation plan prior to start of construction.

The waiver would cause no adverse impacts compared to what would otherwise be permitted under the Solar Ordinance, because the Applicant would still be responsible under state law and the well-established state process to avoid, minimize or mitigate potential adverse impacts to significant sites. The state process is robust and ensures significant sites are identified and protected to ensure responsible development. This waiver proposal will replace the setback requirements in Section F.2.h entirely.

M.1.g. Decommissioning Financial Assurance (Waiver #5)

The Applicant requests a waiver to Yavapai County to accept the same financial assurance funds to be used to satisfy the requirements of both Yavapai County and the ASLD. The Applicant would list both authorities as a party to the financial assurance, which is to be posted as a Payment Surety Bond, or Letter of Credit, as these are both methods of financial assurance that are designated acceptable methods per the ASLD Solar Lease and the Yavapai County Solar Ordinance. This waiver is requested because it would be impracticable to post separate financial assurance for Yavapai County and ASLD based off of the same third-party decommissioning estimates. The waiver would cause no adverse impacts compared to what would otherwise be permitted under the Solar Ordinance, because the Applicant would still be responsible for posting the financial assurance as described in the Preliminary Decommissioning Plan. The Applicant will adhere to all other decommissioning requirements as described in the Solar Ordinance and will produce an updated Detailed Decommissioning Plan for submittal prior to construction.

3.2 Mitigations

The Project Development Plan includes many mitigations, which should be considered in conjunction with the waiver proposals presented above. The Project design has been refined over the course of the development process with great focus and consideration for resources and local stakeholders. Key mitigation features include:

- Open space areas – More than half of the site (over 2,300 acres) is left entirely undeveloped, preserving natural vegetation, wildlife movement, and scenic integrity. The configuration of the open space areas has been developed in conjunction with AGFD experts in native wildlife movement.
- Wildlife-permeable fencing – After thoughtful consultation with AFGD and neighboring parties, the Project has been designed to incorporate wildlife friendly fencing to maintain wildlife movement throughout the site. This includes the use of game fencing without barbed wire in the solar array areas and gaps in fencing to allow for small wildlife to move

throughout the site. The fencing design for the project is tailored to integrate the Project into the existing environment. Additionally, the Project has proposed enhanced fencing for screening in the BESS area that required higher security fencing and where wildlife fencing was not appropriate.

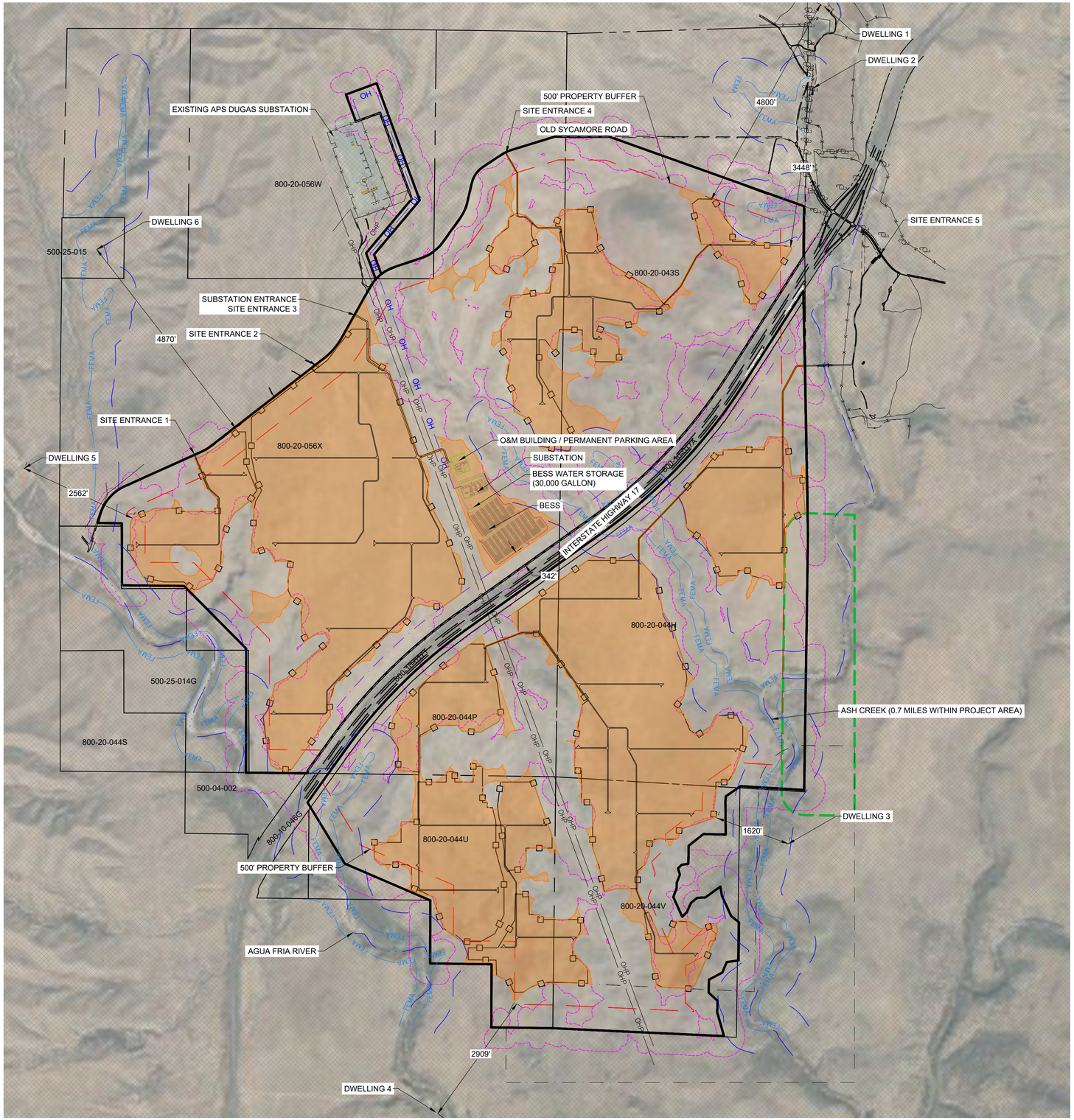
- Post-construction site monitoring – The Project has committed to a post-construction wildlife monitoring plan in collaboration with AGFD to allow for cameras on site to monitor wildlife for 2 years following construction of the Project. This valuable monitoring data will be compiled into a report that can be utilized by AGFD to understand how wildlife moves throughout a solar site and make informed recommendations for other projects in the state of Arizona.
- Waterway protections – The Applicant understands and respects the importance of Agua Fria River and Ash Creek to the regional ecosystem. As part of stakeholder engagement, the Applicant has been an active participant in the community group known as the Upper Agua Fria Watershed Partnership. The Project fully complies with the 500 foot setback from these waterways, and in most locations the Development Area is setback far more than 500 feet from these features. For example, there are several locations along the Agua Fria River where the Development Area is more than 1,000 feet from the river.
- ASLD lease boundary – During the development process, the ASLD lease boundary was intentionally set back from the ASLD property line to reduce impacts to environmental resources, particularly in areas along the Agua Fria River and Ash Creek. This equates to 126 acres of ASLD land that have been carved out of the lease boundary and effectively preserved for the life of the project because there is no other suitable use for this State Trust land.
- Cultural resource protection –To mitigate for impacts to cultural sites, sites will be studied, researched and preserved in a museum for perpetuity. This consists of artifact curation, and detailed analysis such as ceramic analysis, C-14 dating, geoarchaeological studies, obsidian hydration dating, among dozens of other techniques designed to understand and honor our shared patrimony. The detailed study and research are made available to SHPO, ASM, Tribes and others to be shared with the scientific community and general public as deemed appropriate.

4.0 References

Greentech Media, 2020. NEXTracker Tops Global Solar Tracker Rankings for 2019. Accessed 7/31/25. Available at: https://www.greentechmedia.com/articles/read/safe-harboring-inflated-us-solar-tracker-market-in-2019.

The Cosanti Foundation, 2024. About Arcosanti. Accessed 1/2/25. Available at: https://www.arcosanti.org/about/.

Yavapai County, 2024. Section 608 Solar Facilities. Accessed 1/2/25. Available at: https://www.yavapaiaz.gov/files/sharedassets/public/v/1/development-and-permits/development-services/documents/news/sec-608-solar-facilities-approved-11-6-24-in-effect-12-4-24-watermarked.pdf.



LEGEND

EXISTING FEATURES

- PROPERTY LINE
- EASEMENT LINE
- ROAD RIGHT-OF-WAY
- NON-PARTICIPATING BOUNDARIES
- DIRT ROAD
- ASPHALT ROAD
- FENCE
- OVERHEAD POWER
- OVERHEAD POWER POLE/TOWER STRUCTURE
- RIVER / CREEK / PERENNIAL OR INTERMITTENT STREAM / MAJOR TRIBUTARY / RIPARIAN AREA / RAVINE
- FEMA FLOODPLAIN

YAVAPAI COUNTY SOLAR ORDINANCE SETBACKS

- 1000' NATIONAL MONUMENT SETBACK
- 500' FEMA FLOODPLAIN SETBACK
- 300' INTERSTATE ROW SETBACK
- 150' SETBACK FROM 10% SLOPES
- 500' FEDERALLY PROTECTED LANDS NATIONAL FOREST
- 500' PROPERTY BUFFER

PROPOSED FEATURES

- BESS PRIVACY FENCE
- SECURITY CHAIN LINK FENCE
- SECURITY GAME FENCE
- OVERHEAD POWER LINE
- UNPAVED ROAD
- DEVELOPMENT AREA

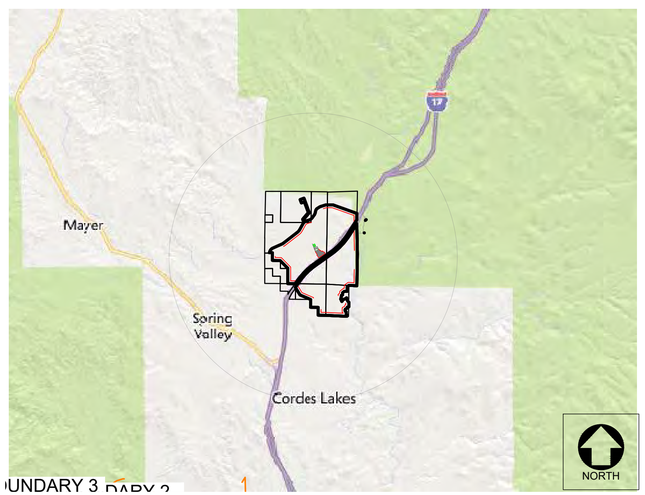
DEVELOPMENT AREA NOTES

1. SETBACKS PER YAVAPAI COUNTY ZONING ORDINANCE "SECTION 608 SOLAR FACILITIES" APPROVED NOVEMBER 6, 2024.
2. FEMA LINEWORK FROM DWG FILE "VB.ALTA IS PRELIMINARY AND SUBJECT TO CHANGE

PROPERTY NOTES

PROJECT AREA: 4,215 ACRES
FENCE AREA: 1,720 ACRES
SOLAR PHOTOVOLTAIC PANEL COVERAGE: 1,219 ACRES
BESS AREA: 32 ACRES
SUBSTATION AREA: 4 ACRES
DEVELOPMENT AREA: 1,930 ACRES





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Arizona Registration #16725-0

CLIENT

McCARTHY

PROJECT

AGUA FRIA SOLAR

LOCATION

34.384909, -112.091644
MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

SCALE

NORTH
0 1200 2400 FT
1 2 IN
DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

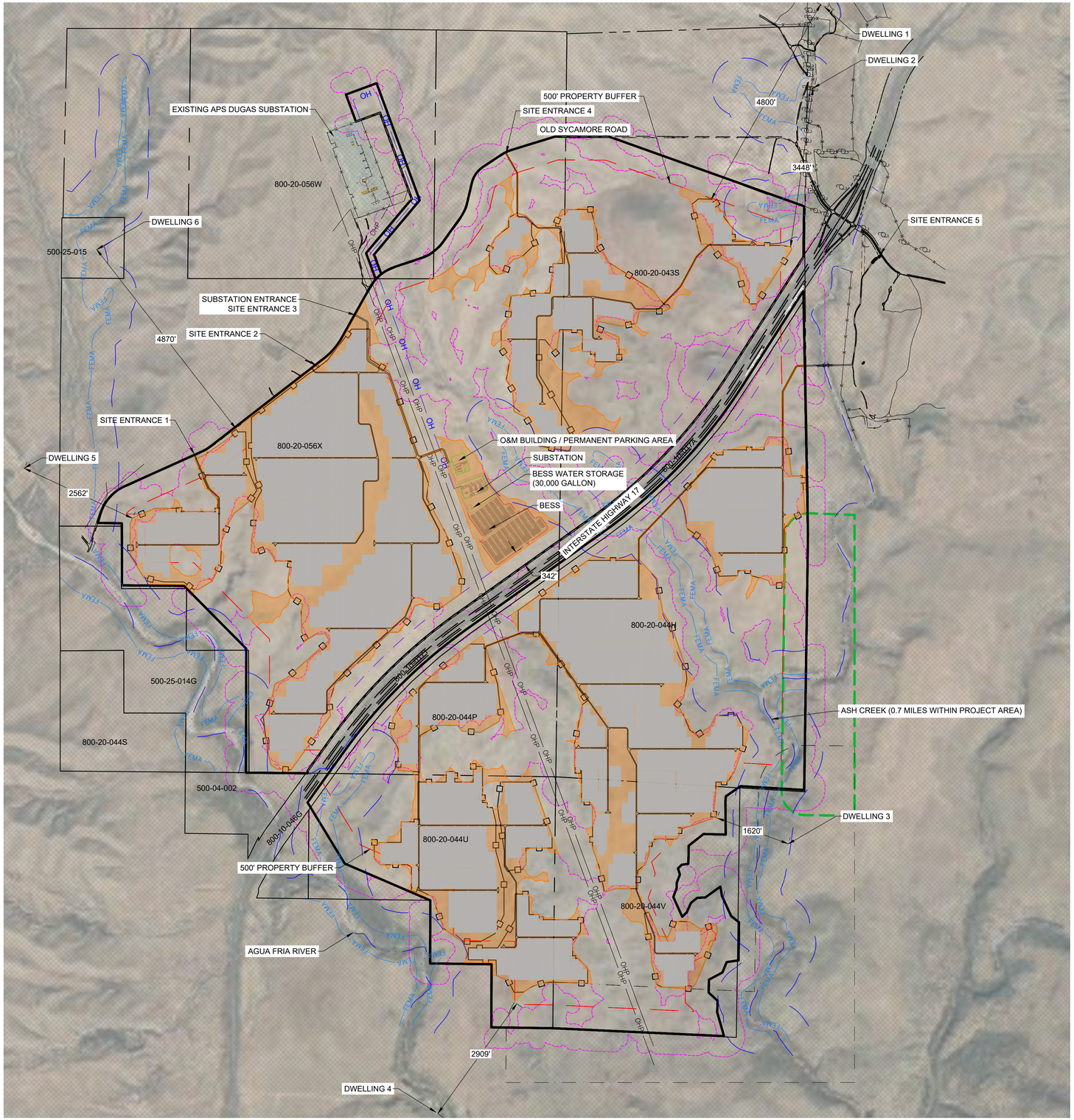
SHEET NAME

DEVELOPMENT AREA MAP

SHEET NUMBER

OVERALL EXHIBIT - 1

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LEGEND

EXISTING FEATURES

- PROPERTY LINE
- EASEMENT LINE
- ROAD RIGHT-OF-WAY
- NON-PARTICIPATING BOUNDARIES
- DIRT ROAD
- ASPHALT ROAD
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- OVERHEAD POWER POLE/TOWER STRUCTURE
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- 500' PROPERTY BUFFER

PROPOSED FEATURES

- BESS PRIVACY FENCE
- SECURITY CHAIN LINK FENCE
- SECURITY GAME FENCE
- OVERHEAD POWER LINE
- UNPAVED ROAD
- DEVELOPMENT AREA
- SOLAR ARRAY

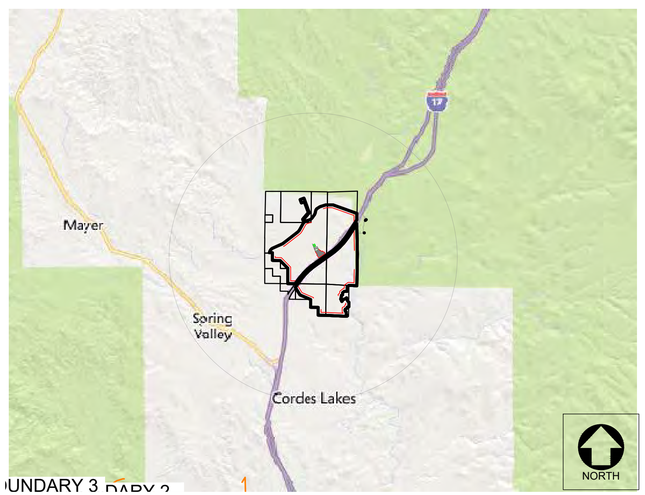
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CLIENT

McCARTHY

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH
0 1200 2400 FT
1 2 IN
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PROFESSIONAL CERTIFICATION

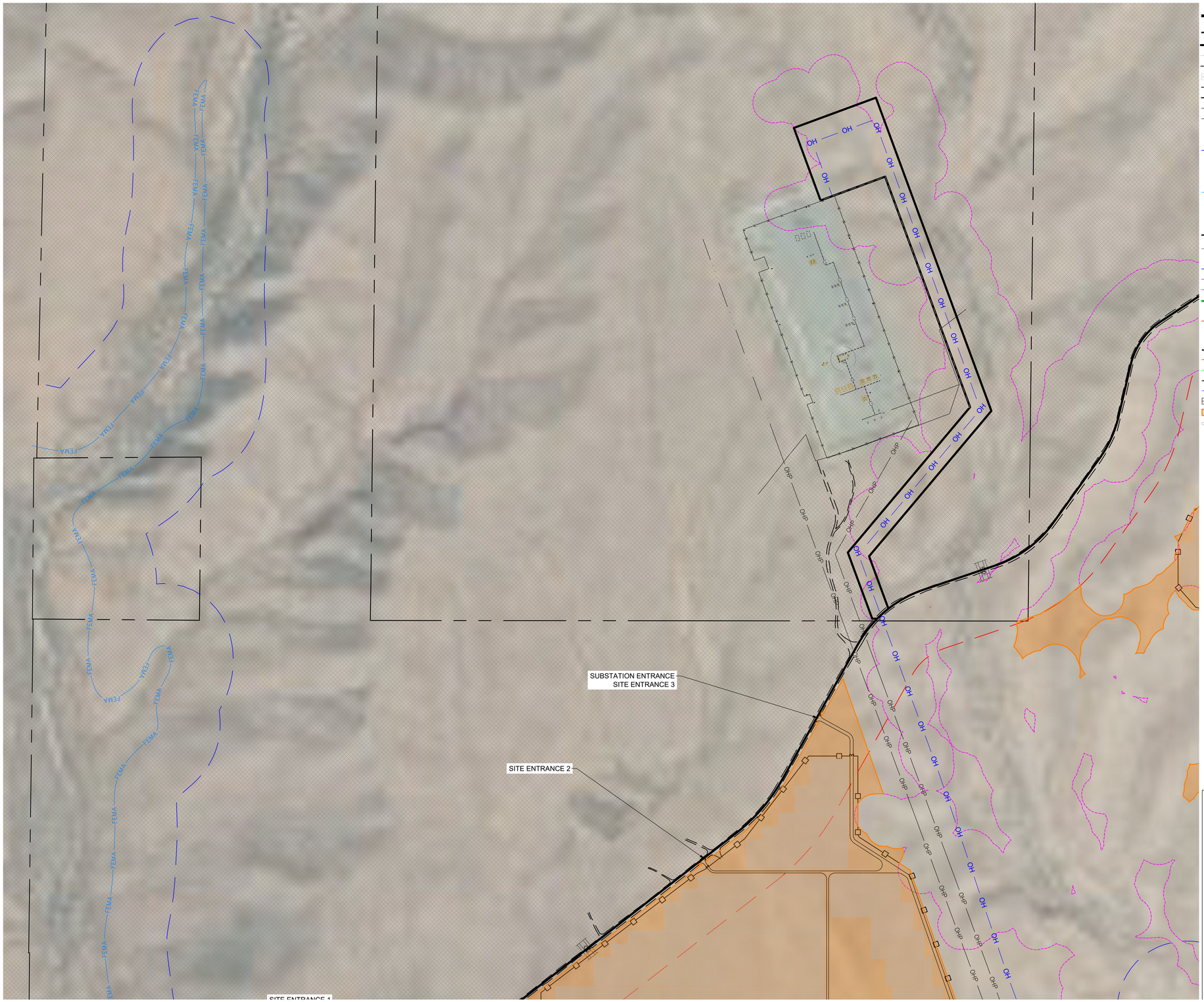
PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

SHEET NAME
DEVELOPMENT AREA MAP - PANEL LAYOUT

SHEET NUMBER
OVERALL EXHIBIT - 2

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LEGEND

EXISTING FEATURES

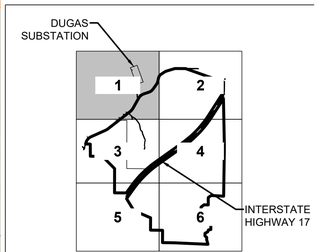
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PROPOSED FEATURES

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- SECURITY CHAIN LINK FENCE
- SECURITY GAME FENCE
- OVERHEAD POWER LINE
- UNPAVED ROAD
- DEVELOPMENT AREA
- SOLAR ARRAY



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CLIENT

McCARTHY

PROJECT

AGUA FRIA SOLAR

LOCATION

34.384909, -112.091644
MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

SCALE

NORTH

0 400 800 FT

1 2 IN

DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
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PROFESSIONAL CERTIFICATION

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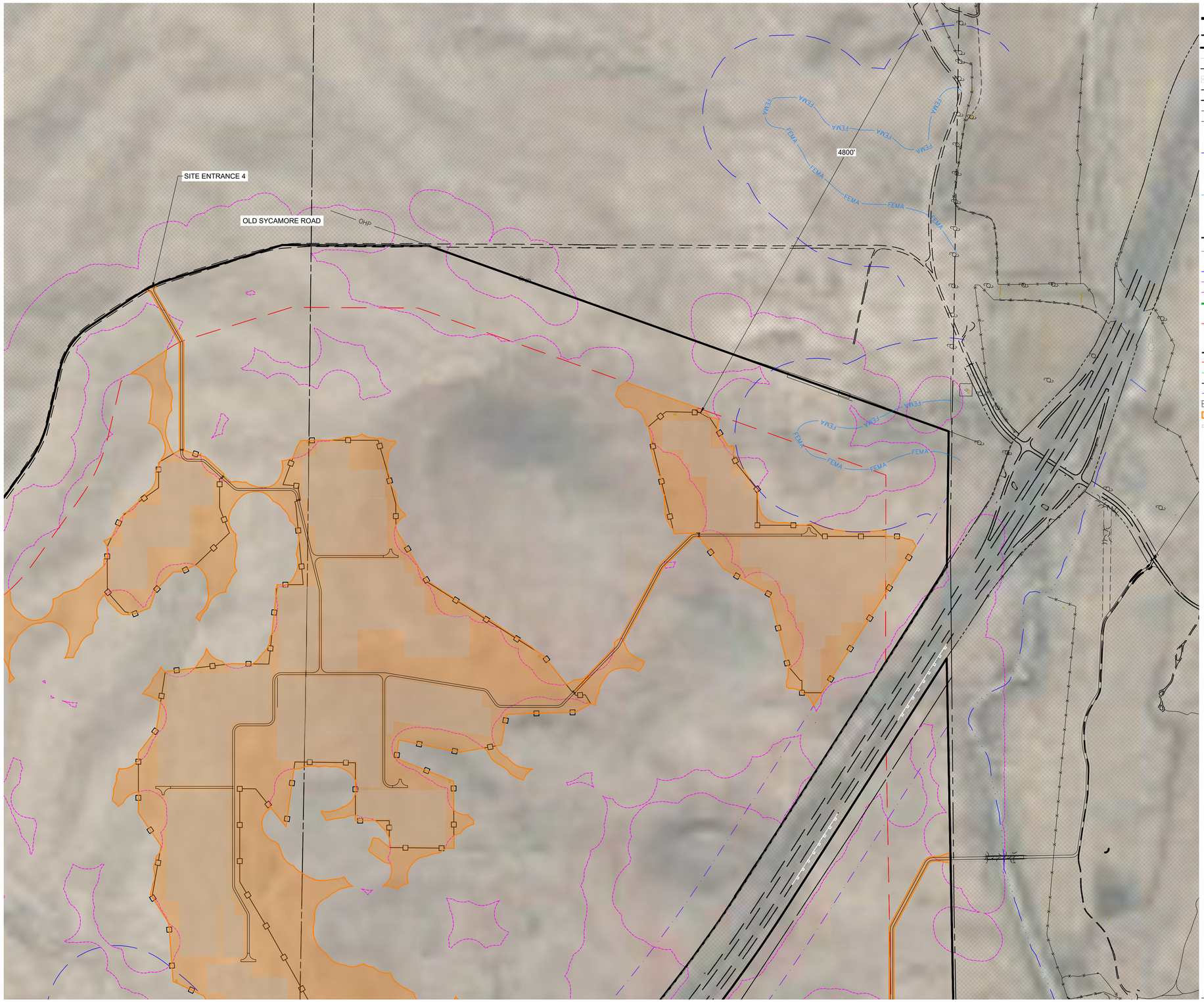
SHEET NAME

DEVELOPMENT AREA MAP - PANEL LAYOUT

SHEET NUMBER

EXHIBIT - 1

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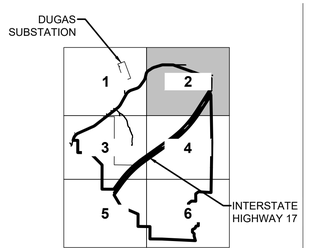
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- OVERHEAD POWER LINE
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McCARTHY

PROJECT

AGUA FRIA SOLAR

LOCATION

34.384909, -112.091644
MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

SCALE

NORTH

0 400 800 FT

1 2 IN

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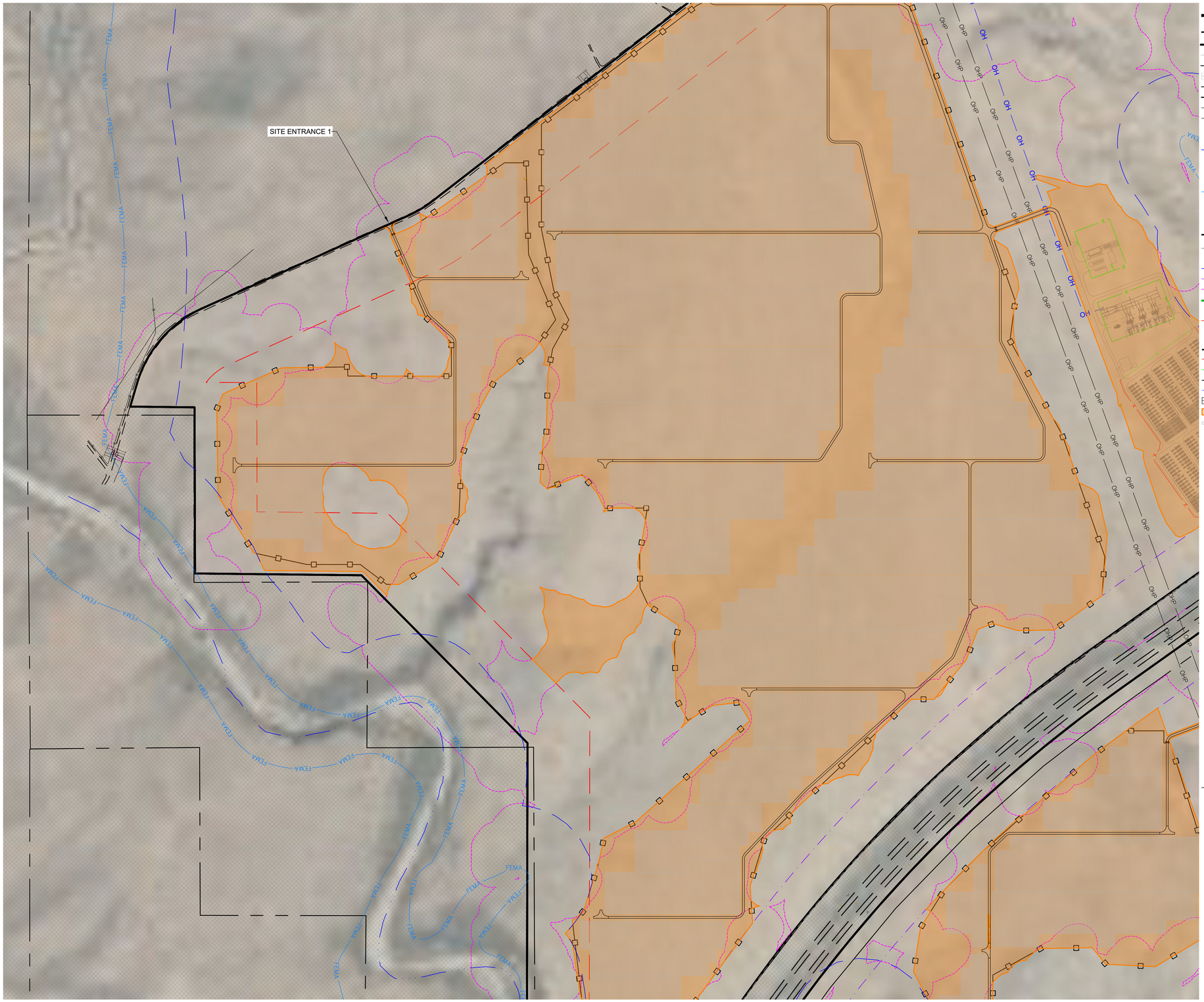
SHEET NAME

DEVELOPMENT AREA MAP - PANEL LAYOUT

SHEET NUMBER

EXHIBIT - 2

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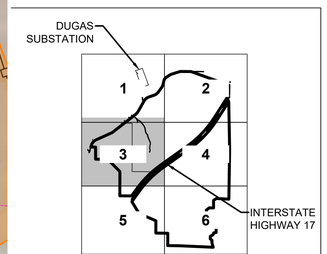
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PROPOSED FEATURES

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- SECURITY GAME FENCE
- OVERHEAD POWER LINE
- UNPAVED ROAD
- DEVELOPMENT AREA
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McCARTHY

PROJECT

AGUA FRIA SOLAR

LOCATION

34.384909, -112.091644
MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

SCALE

NORTH

0 400 800 FT

1 2 IN

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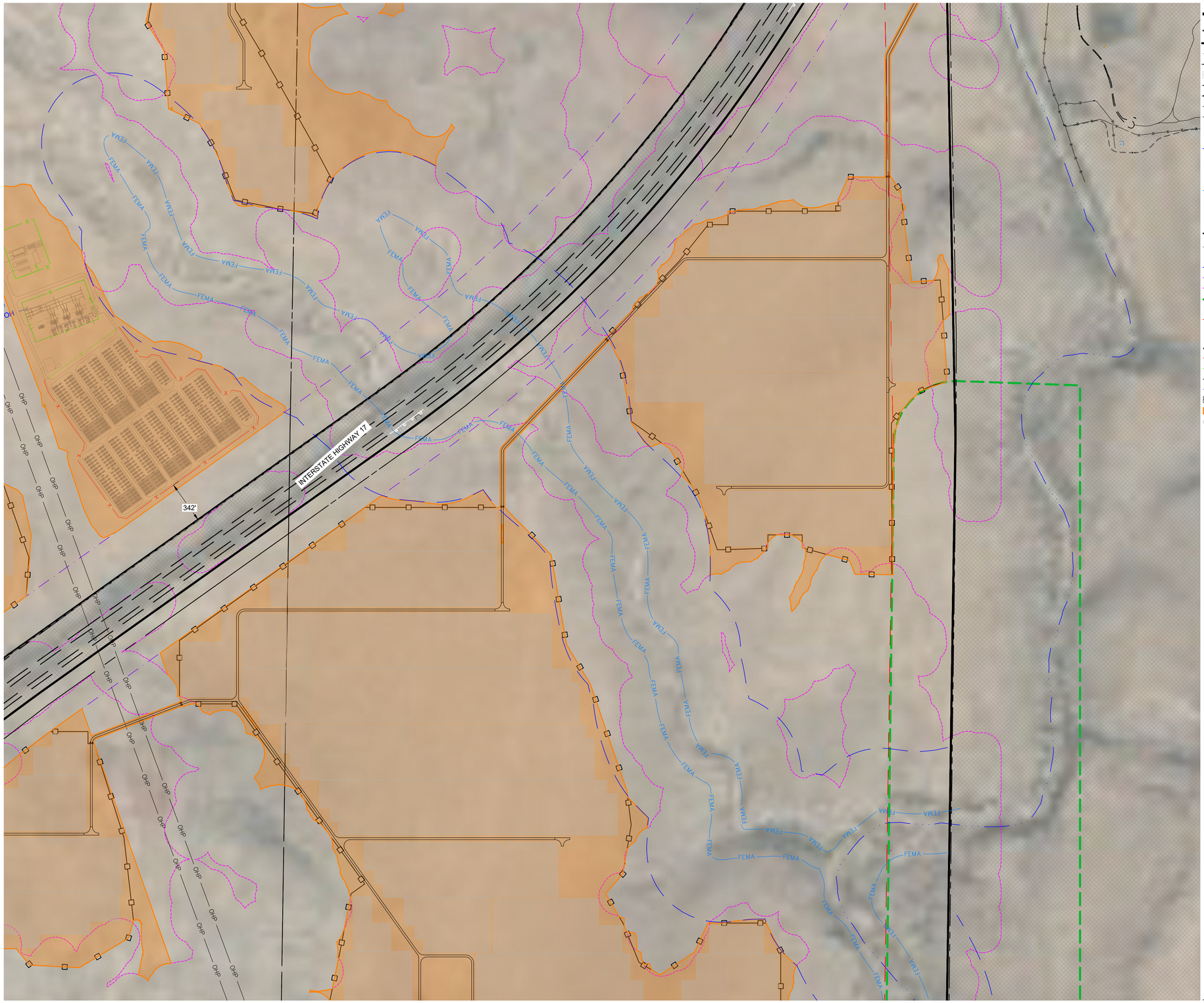
SHEET NAME

DEVELOPMENT AREA MAP - PANEL LAYOUT

SHEET NUMBER

EXHIBIT - 3

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LEGEND

EXISTING FEATURES

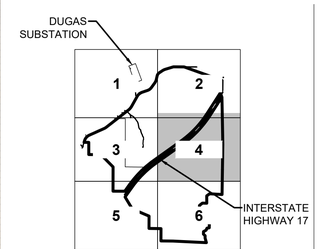
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PROPOSED FEATURES

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- UNPAVED ROAD
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34.384909, -112.091644
MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

SCALE

NORTH

0 400 800 FT

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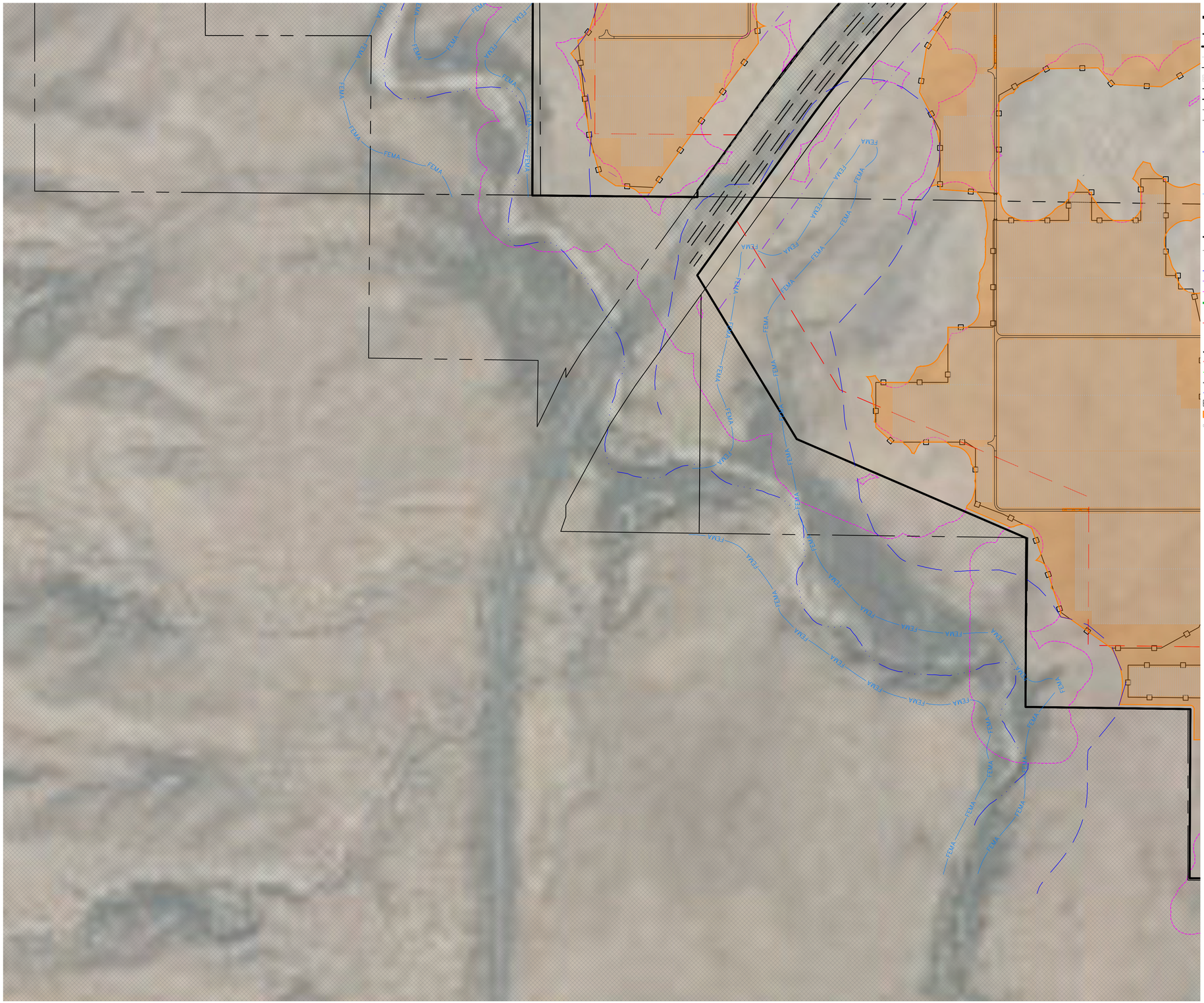
SHEET NAME

DEVELOPMENT AREA MAP - PANEL LAYOUT

SHEET NUMBER

EXHIBIT - 4

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LEGEND

EXISTING FEATURES

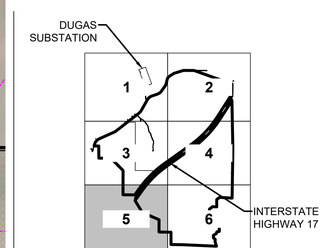
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- x — BESS PRIVACY FENCE
- x — SECURITY CHAIN LINK FENCE
- SECURITY GAME FENCE
- OH — OH — OVERHEAD POWER LINE
- UNPAVED ROAD
- DEVELOPMENT AREA
- SOLAR ARRAY



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MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

SCALE

NORTH

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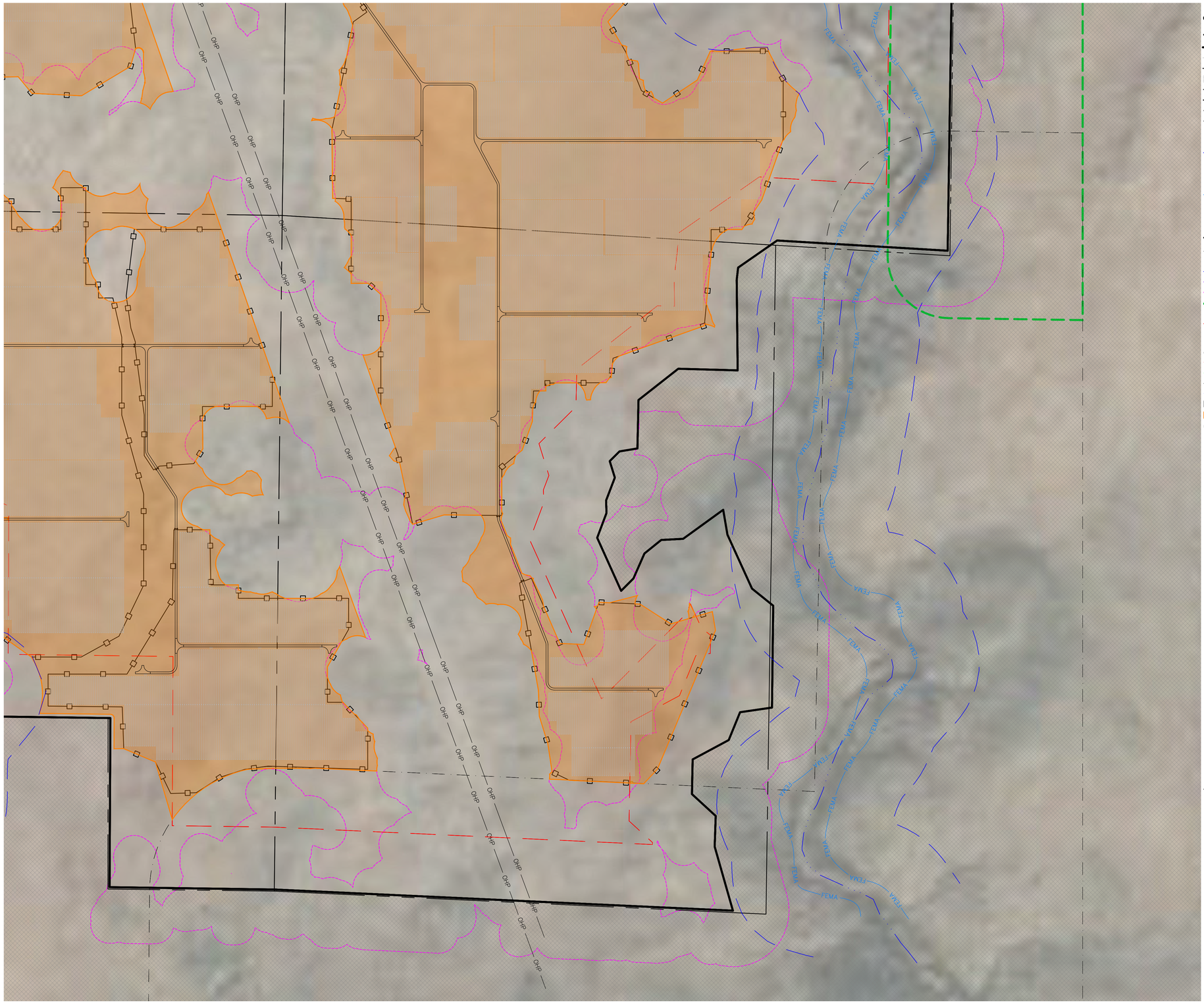
SHEET NAME

DEVELOPMENT AREA MAP - PANEL LAYOUT

SHEET NUMBER

EXHIBIT - 2

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LEGEND

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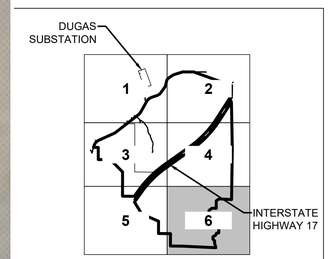
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MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

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NORTH

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SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

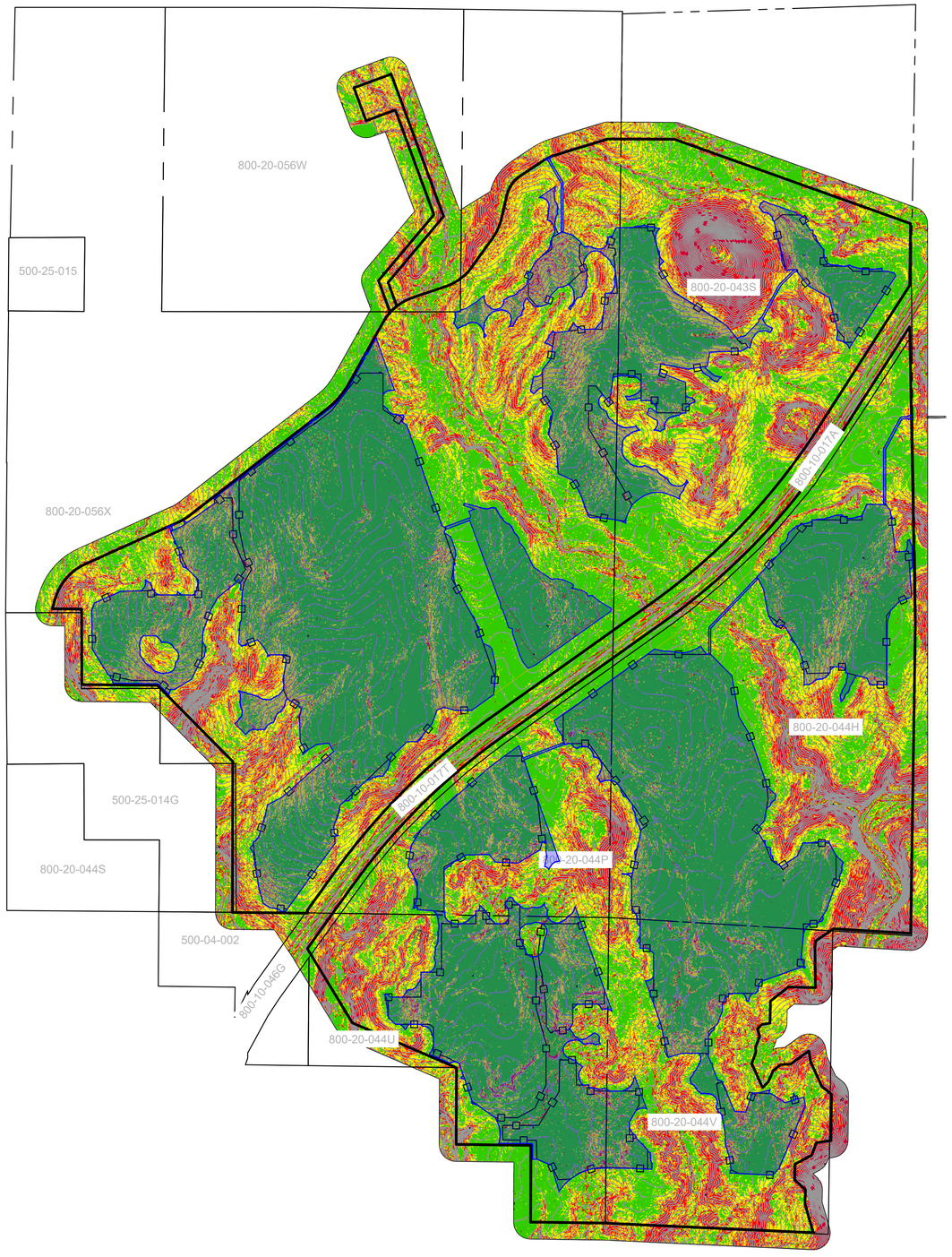
SHEET NAME

DEVELOPMENT AREA MAP - PANEL LAYOUT

SHEET NUMBER

EXHIBIT - 6

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LEGEND

- 0% - 5% SLOPE
- 5% - 8% SLOPE
- 8% - 10% SLOPE
- 10% - 15% SLOPE
- > 15% SLOPE
- GAME FENCE
- BESS PRIVACY FENCE
- CHAIN LINK FENCE
- PROPERTY LINE
- PARCEL LINE
- DEVELOPMENT AREA

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Eden Prairie, Minnesota 55344
Phone: 952.646.0236
www.evs-eng.com
Arizona Registration #16725-0

CLIENT

McCARTHY

PROJECT

AGUA FRIA SOLAR

LOCATION

34.384909, -112.091644
MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

SCALE

NORTH

0 1200 2400 FT
1 2 IN

DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

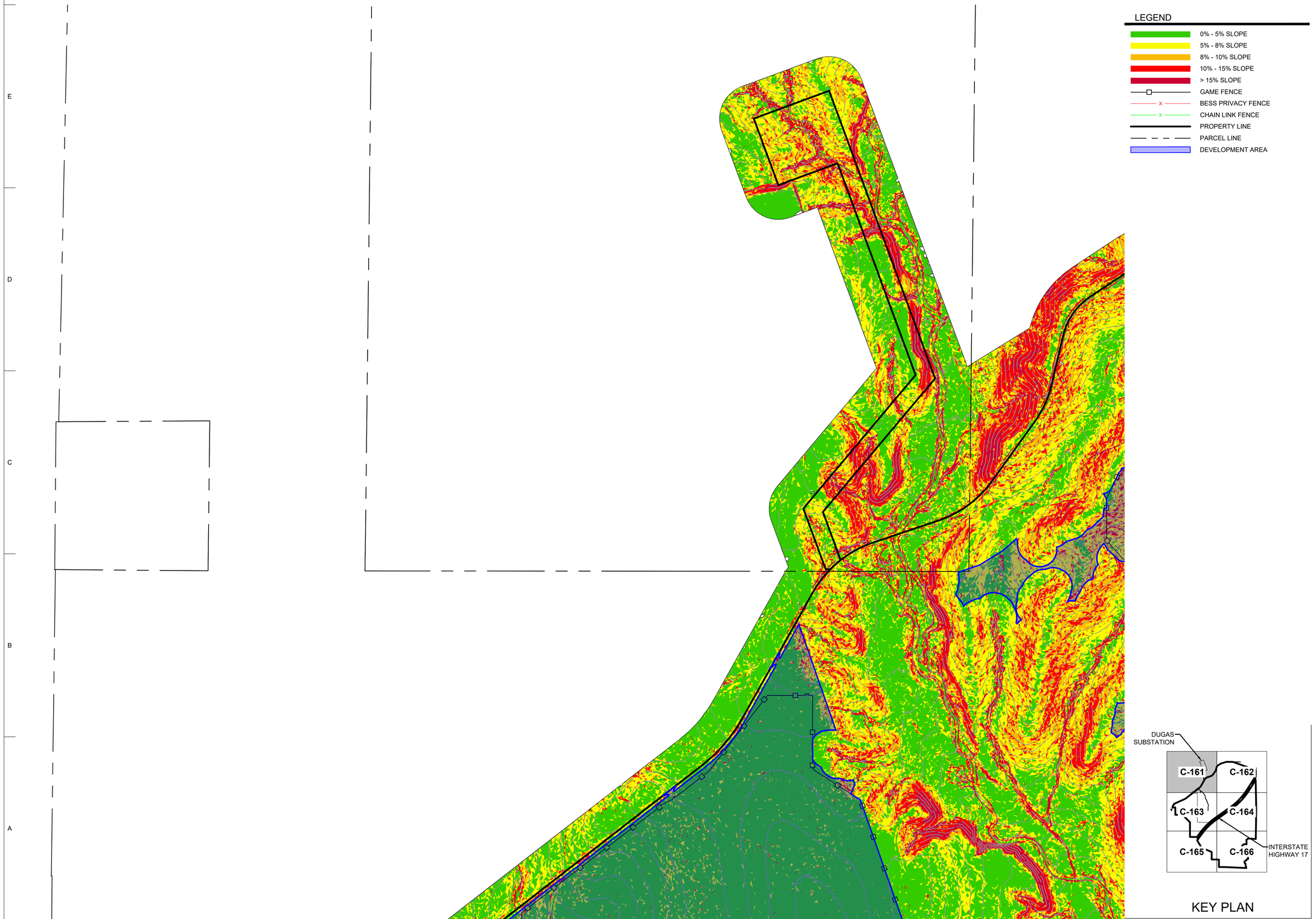
SHEET NAME

EXISTING GRADE SLOPE DETAIL

SHEET NUMBER

C-160

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KEY PLAN

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CLIENT

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH

0 400 800 FT

1 2 IN

DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

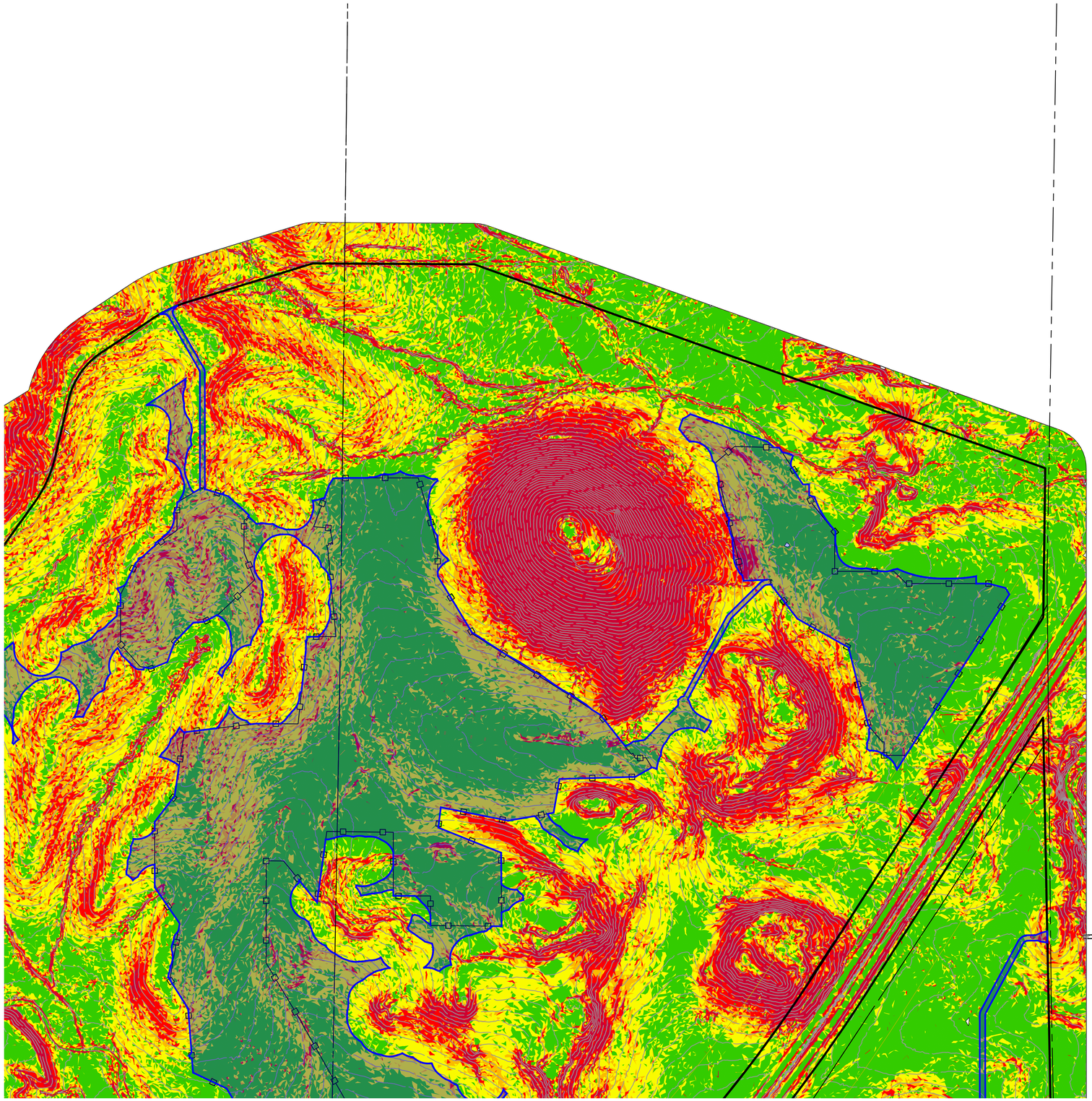
PROFESSIONAL CERTIFICATION

PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

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SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

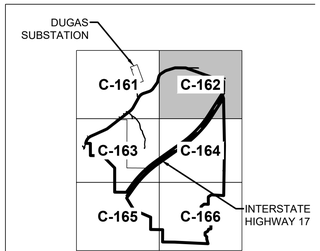
SHEET NAME
EXISTING GRADE SLOPE DETAIL

SHEET NUMBER
C-161



LEGEND

- 0% - 5% SLOPE
- 5% - 8% SLOPE
- 8% - 10% SLOPE
- 10% - 15% SLOPE
- > 15% SLOPE
- GAME FENCE
- BESS PRIVACY FENCE
- CHAIN LINK FENCE
- PROPERTY LINE
- PARCEL LINE
- DEVELOPMENT AREA



KEY PLAN

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CLIENT

McCARTHY

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH

0 400 800 FT
1 2 IN

DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

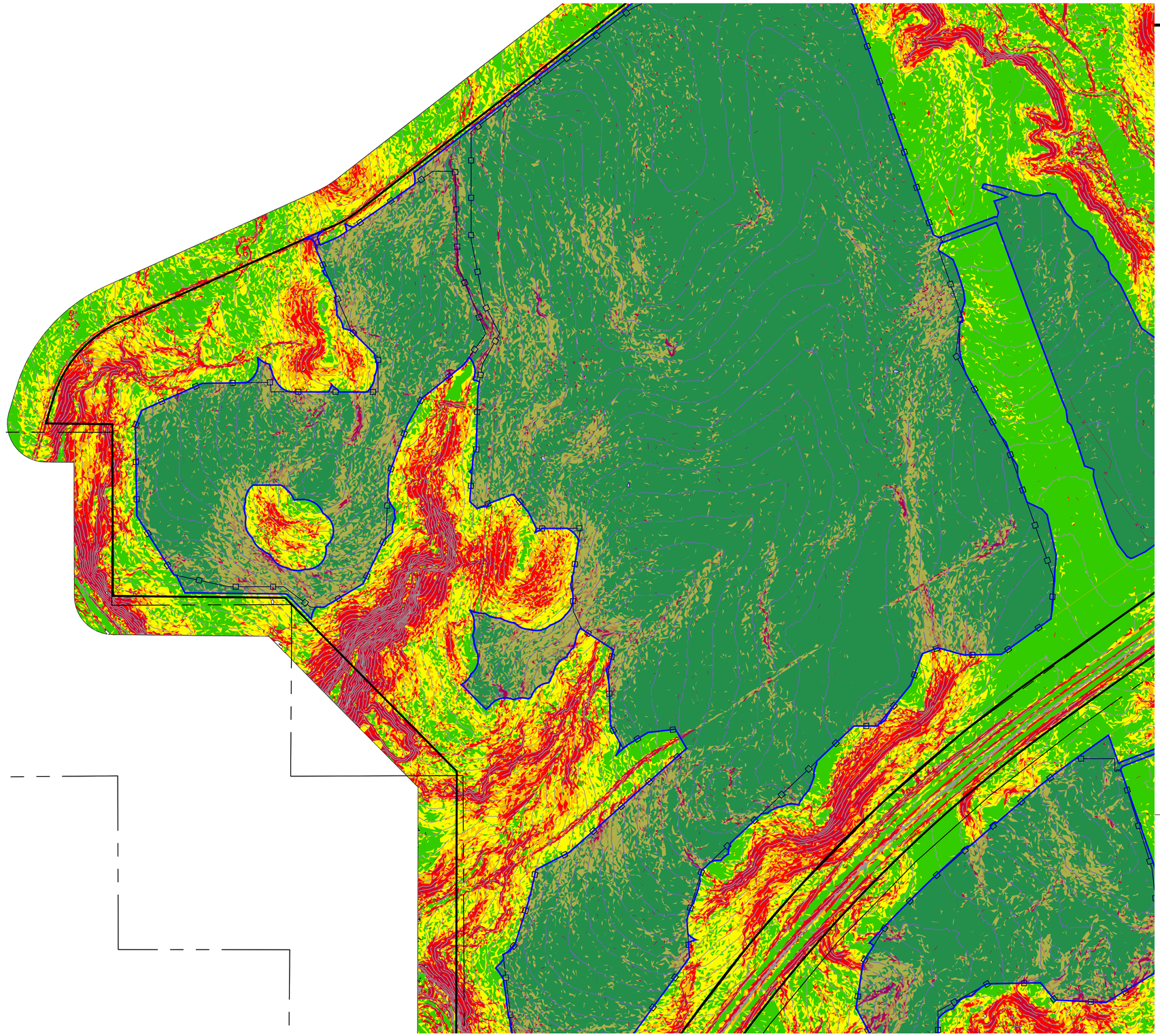
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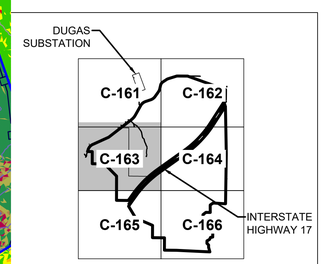
DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

SHEET NAME
EXISTING GRADE SLOPE DETAIL

SHEET NUMBER
C-162

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Arizona Registration #16725-0

CLIENT

McCARTHY

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH

0 400 800 FT
1 2 IN
DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

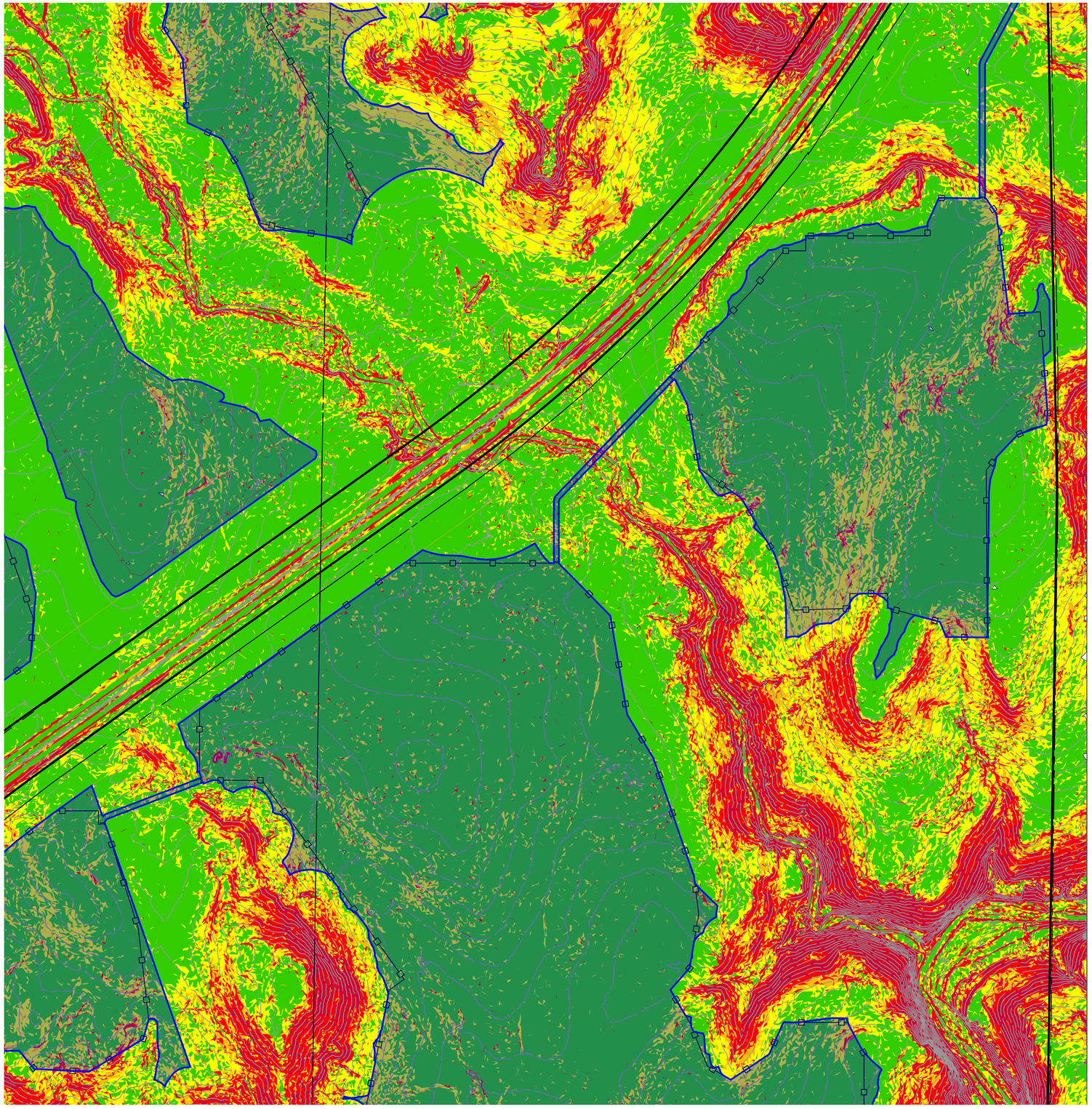
PROFESSIONAL CERTIFICATION

PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
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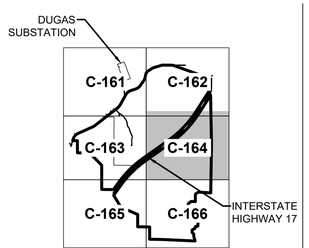
SHEET NAME
EXISTING GRADE SLOPE DETAIL

SHEET NUMBER
C-163



LEGEND

- 0% - 5% SLOPE
- 5% - 8% SLOPE
- 8% - 10% SLOPE
- 10% - 15% SLOPE
- > 15% SLOPE
- GAME FENCE
- BESS PRIVACY FENCE
- CHAIN LINK FENCE
- PROPERTY LINE
- PARCEL LINE
- DEVELOPMENT AREA



KEY PLAN

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PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH

0 400 800 FT
1 2 IN
DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

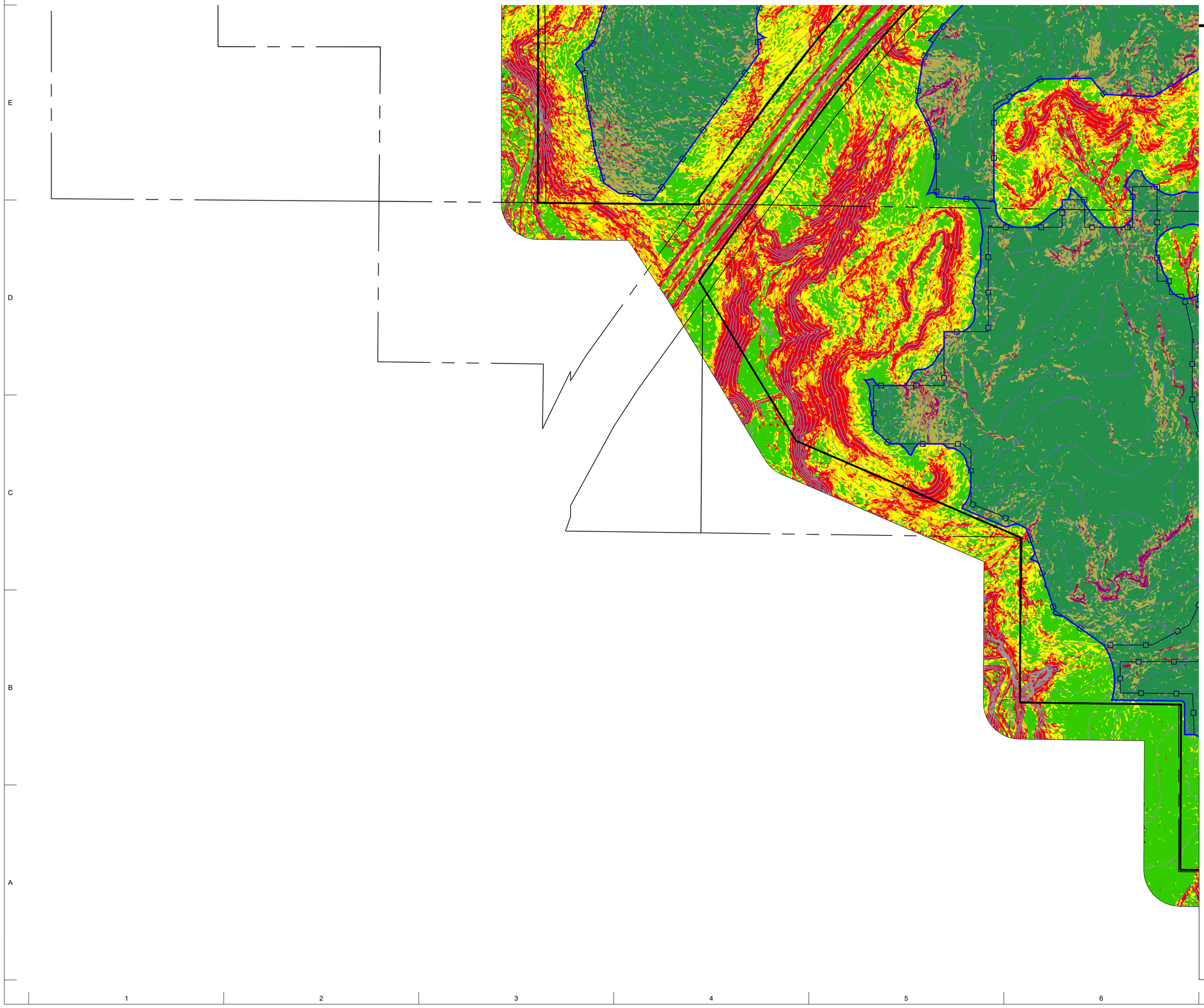
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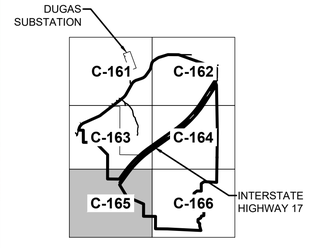
DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

SHEET NAME
EXISTING GRADE SLOPE DETAIL

SHEET NUMBER
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McCARTHY

PROJECT

AGUA FRIA SOLAR

LOCATION

34.384909, -112.091644
MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

SCALE

NORTH

0 400 800 FT

1 2 IN

DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

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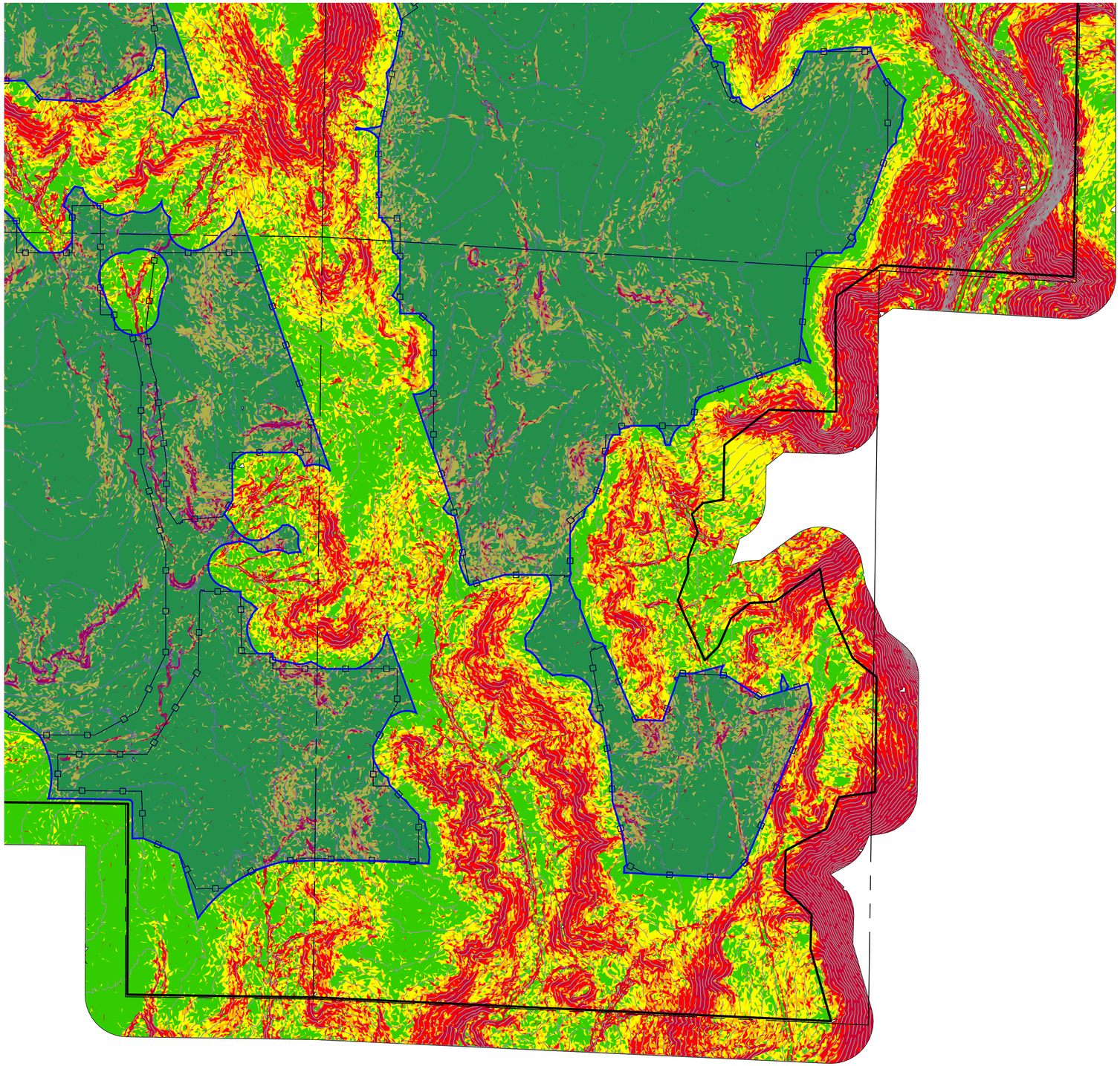
SHEET NAME

EXISTING GRADE SLOPE DETAIL

SHEET NUMBER

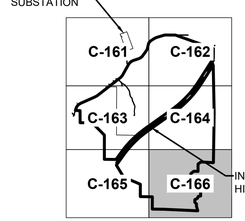
C-165

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LEGEND

- 0% - 5% SLOPE
- 5% - 8% SLOPE
- 8% - 10% SLOPE
- 10% - 15% SLOPE
- > 15% SLOPE
- GAME FENCE
- BESS PRIVACY FENCE
- CHAIN LINK FENCE
- PROPERTY LINE
- PARCEL LINE
- DEVELOPMENT AREA



KEY PLAN

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Arizona Registration #16725-0

CLIENT

McCARTHY

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH

0 400 800 FT
1 2 IN
DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

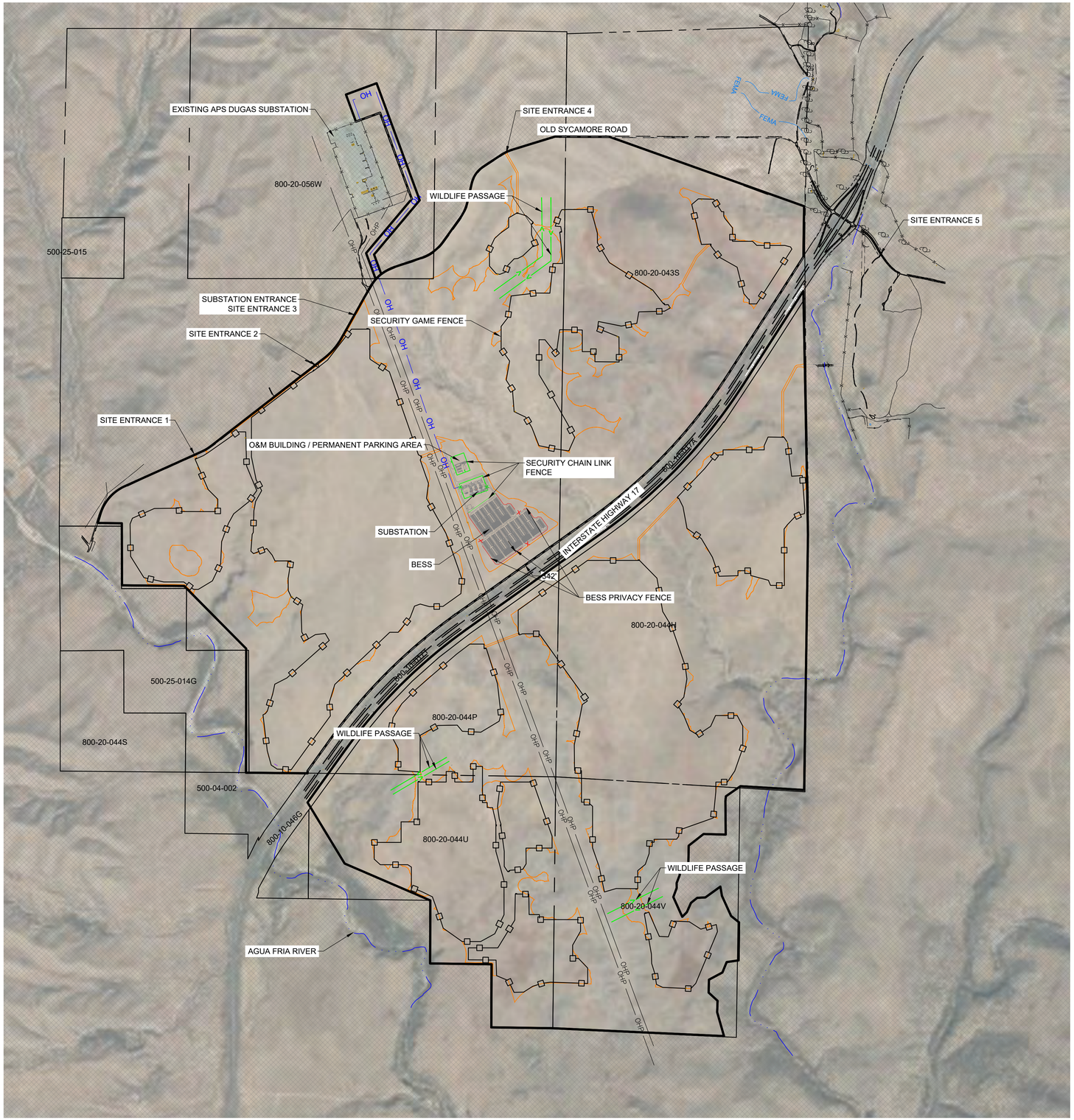
PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY	CHECKED BY
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DATE	**PROJECT #**
2025.12.03	2024-167

SHEET NAME
EXISTING GRADE SLOPE DETAIL

SHEET NUMBER
C-166

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LEGEND

EXISTING FEATURES

- PROPERTY LINE
- EASEMENT LINE
- ROAD RIGHT-OF-WAY
- NON-PARTICIPATING BOUNDARIES
- DIRT ROAD
- ASPHALT ROAD
- FENCE
- OVERHEAD POWER
- OVERHEAD POWER POLE/TOWER STRUCTURE
- RIVER / CREEK / PERENNIAL OR INTERMITTENT STREAM / MAJOR TRIBUTARY / RIPARIAN AREA / RAVINE
- FEMA FLOODPLAIN

PROPOSED FEATURES

- BESS PRIVACY FENCE
- SECURITY CHAIN LINK FENCE
- SECURITY GAME FENCE
- OVERHEAD POWER LINE
- DEVELOPMENT AREA
- EXAMPLES OF ADDITIONAL WILDLIFE PASSAGE

NORTH

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CLIENT

McCARTHY

PROJECT

AGUA FRIA SOLAR

LOCATION

34.384909, -112.091644
MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

SCALE

NORTH

0 1200 2400 FT

1 2 IN

DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

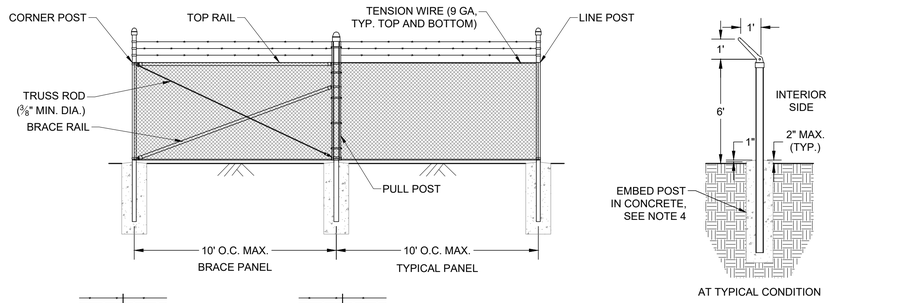
DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

SHEET NAME

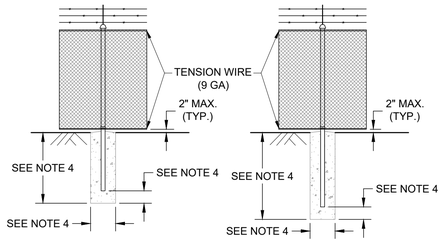
FENCE PLAN

SHEET NUMBER

C-170



AT TYPICAL CONDITION



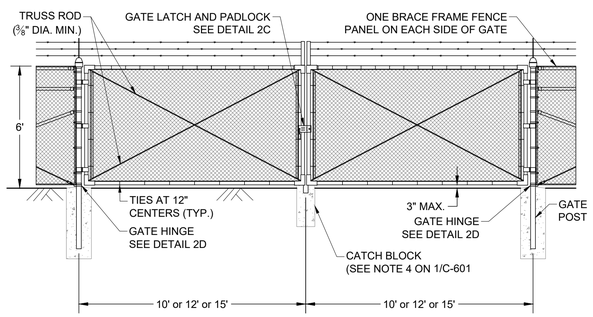
TYPICAL LINE POST

TYPICAL TERMINAL POST (CORNER OR END)

FENCE NOTES:

1. FENCE FABRIC SHALL BE NO MORE THAN 2" ABOVE FINISHED GRADE.
2. FABRIC - 9 GAUGE, 2" MESH; GALVANIZED ASTM A392, CLASS 1; TWISTED SELVAGE ON TOP, KNUCKLED SELVAGE ON BOTTOM.
3. ALL RAIL, WIRE AND GATES SHALL BE GALVANIZED.
4. REFER TO STRUCTURAL DESIGN/FENCING MANUFACTURER SPECIFICATIONS FOR POST SIZING, FOUNDATIONS, EMBEDMENT DEPTHS/FREQUENCY, AND MATERIALS.
5. BRACE PANEL MINIMUM SPACING AND LOCATION SHALL BE PER STRUCTURAL DESIGN/FENCING MANUFACTURER SPECIFICATIONS.
6. BARBED WIRE TOPPING SHALL CONSIST OF THREE STRANDS OF 12.5 MINIMUM GAUGE WIRE HAVING 4-POINT BARBS OF 14 GAUGE WIRE AT 5 INCHES MAXIMUM SPACING IN COMPLIANCE WITH ASTM A121. BARBED WIRE SHALL BE INSTALLED WITH 45-DEGREE EXTENSION ARMS FACING OUTWARD, AWAY FROM THE SECURED AREA.

1 / C-171 SUBSTATION, BESS, AND O&M BUILDING SECURITY CHAIN LINK FENCE WITH BARBED WIRE AND POSTS
NOT TO SCALE



2 / C-171 SWINGING ACCESS GATE
NOT TO SCALE

COMPLIANCE WITH RELEVANT SECTION 608 YAVAPAI COUNTY PLANNING AND ZONING ORDINANCE

F.6.4.A: FENCING IS DESIGNED TO AVOID DEAD-ENDS WHERE WILDLIFE COULD BECOME TRAPPED

F.6.4.F: FENCING WAS DESIGNED AROUND GROUPS OR CLUSTERS OF EQUIPMENT, AS OPPOSED TO FENCING THE ENTIRE SITE

F.6.4.G: NEW FENCING DOES NOT IMPEDE EXISTING EASEMENTS TO PRIVATE OR PUBLIC LANDS.

F.6.5: THE PERIMETER OF BESS FACILITIES, SUBSTATIONS, AND OTHER STRUCTURES WILL BE ENCLOSED WITH SECURITY OR GAME FENCING PRIOR TO THE COMMENCEMENT OF OPERATIONS OF THE SOLAR FACILITY AS REQUIRED BY LOCAL, STATE, AND FEDERAL REGULATIONS AND NATIONAL SAFETY CODES

F.4: FENCING WILL BE PERMEABLE TO SMALL ANIMALS BY LEAVING GAPS BETWEEN THE BOTTOM OF THE FENCE AND THE GROUND, EXCLUSIVE OF SUBSTATION AND BESS FACILITIES

F.6.4.B: FENCING INTENDED FOR SCREENING IS AT LEAST SEVENTY FIVE (75%) PERCENT VISUALLY SOLID AS VIEWED ON ANY LINE PERPENDICULAR TO THE FENCE FROM ADJACENT PROPERTY OR A PUBLIC STREET (SEE CORRUGATED BESS PRIVACY FENCE DETAIL).

F.6.4.E: FENCING MATERIAL USED FOR SCREENING DOES NOT INCLUDE CHAIN LINK FENCING WITH SLATS(SEE CORRUGATED BESS PRIVACY FENCE DETAIL)

PERIMETER FENCING AROUND PV ARRAYS IS COMPOSED OF LOW-VISIBILITY GAME FENCING (SEE SECURITY GAME FENCE DETAIL).

F.6.5: RELEVANT ARIZONA GAME AND FISH GUIDELINES AND RECOMMENDATIONS FOR WILDLIFE COMPATIBLE FENCING WERE INCORPORATED INTO FENCE DESIGN INCLUDING:

- APPROXIMATELY 2,284 ACRES OF THE PROJECT AREA WILL REMAIN UNFENCED FOR THE USE AND MOVEMENTS OF ANIMALS
- FENCING IS DESIGNED TO AVOID DEAD-ENDS WHERE WILDLIFE COULD BECOME TRAPPED
- FENCING WILL BE PERMEABLE TO SMALL ANIMALS BY LEAVING GAPS BETWEEN THE BOTTOM OF THE FENCE AND THE GROUND, EXCLUSIVE OF SUBSTATION AND BESS FACILITIES
-PERIMETER FENCING AROUND PV ARRAYS IS COMPOSED OF GAME FENCING SMALL MESH WOVEN WIRE WITH NO BARBED WIRE SO WILDLIFE WILL NOT GET ENTANGLED
- GUIDELINES RECOMMEND EXCLUSION FENCE BE SET BACK A MINIMUM OF 300 FEET FROM BUSY ROADWAYS. THE PROJECT FENCE IS SET BACK 375 - 2,200 FEET FROM HWY 17

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Arizona Registration #16725-0

CLIENT

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH
0 1200 2400 FT
1 2 IN
DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

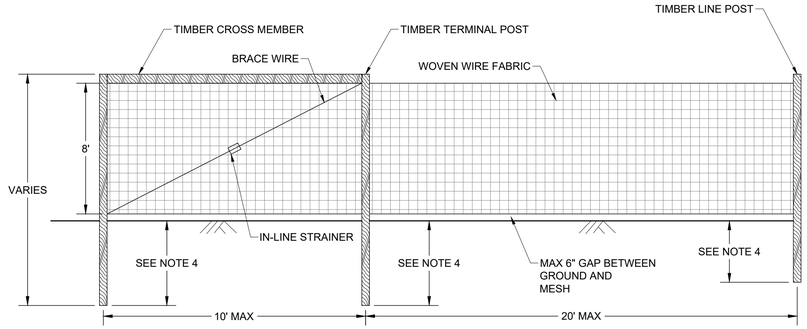
PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	PROJECT #
2025.12.03	2024-167

SHEET NAME
SECURITY CHAIN LINK FENCE DETAIL

SHEET NUMBER
C-171

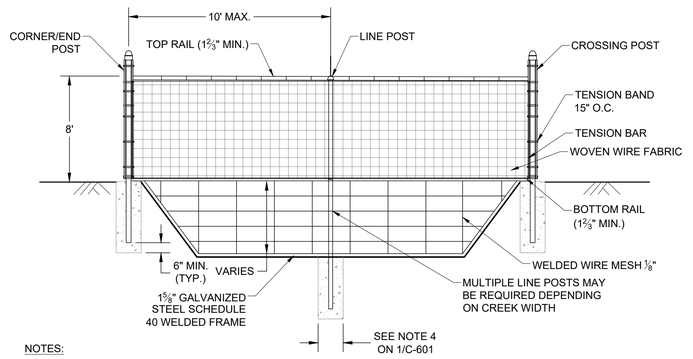
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FENCE NOTES:

1. FENCE DETAILS DEPICTED IN THIS PLAN SET ARE FOR REFERENCE ONLY; SPECIFICATIONS PROVIDED WITHIN THE FENCING MANUFACTURER SPECIFICATIONS SHALL TAKE PRECEDENCE OVER ALL FENCE DETAILS SHOWN IN THIS PLAN SET.
2. WOVEN WIRE FABRIC SHALL BE 6" MESH GRADUATED FENCE FABRIC.
3. ALL METAL FENCING COMPONENTS AND FASTENERS SHALL BE HOT DIPPED GALVANIZED.
4. REFER TO FENCING MANUFACTURER SPECIFICATIONS FOR POST SIZING, FOUNDATIONS, EMBEDMENT DEPTHS/FREQUENCY, AND MATERIALS.
5. END, CORNER, OR GATE POSTS SHALL BE SET AT THE BEGINNING AND END OF EACH CONTINUOUS LENGTH OF FENCE AND AT ABRUPT CHANGES IN VERTICAL OR HORIZONTAL ALIGNMENT.
8. A PULL POST SHALL BE USED IN ALL STRAIGHT SPANS OF FENCE LONGER THAN 1320 FEET. MAXIMUM SPACING BETWEEN END POSTS SHALL BE 1320 FEET WITHOUT ADDITIONAL INLINE BRACES OR PER MANUFACTURER RECOMMENDATION.
9. ALL POSTS SHALL BE INSTALLED VERTICALLY. WHERE POSTS ARE INSTALLED ON INCLINED SURFACES, THE ANGLE OF THE POST SHALL BE ADJUSTED SUCH THAT THE POST WILL BE VERTICAL.
10. MANUFACTURER DRAWINGS SHALL SUPERSEDE DETAIL IF CONFLICTS ARE PRESENT. ANY DEVIATIONS SHALL BE SUBMITTED TO THE OWNER FOR REVIEW.
11. PERIMETER FENCE IS NOT DESIGNED FOR SCOUR.

1 / C-172 — PV ARRAY WOVEN WIRE SECURITY GAME FENCE
NOT TO SCALE



NOTES:

1. FENCE TO BE USED IN AREAS CROSSING WATERWAYS. POSTS SHALL BE PLACED OUTSIDE OF THE WATERWAY.
2. REGULAR MAINTENANCE FOR CROSSING SHALL BE PERFORMED TO ENSURE FLOW IS NOT DISTURBED.

2 / C-172 — FENCE CREEK CROSSING
NOT TO SCALE

COMPLIANCE WITH RELEVANT SECTION 608 YAVAPAI COUNTY PLANNING AND ZONING ORDINANCE

F.6.4.A: FENCING IS DESIGNED TO AVOID DEAD-ENDS WHERE WILDLIFE COULD BECOME TRAPPED

F.6.4.F: FENCING WAS DESIGNED AROUND GROUPS OR CLUSTERS OF EQUIPMENT, AS OPPOSED TO FENCING THE ENTIRE SITE

F.6.4.G: NEW FENCING DOES NOT IMPEDE EXISTING EASEMENTS TO PRIVATE OR PUBLIC LANDS.

F.6.5: THE PERIMETER OF BESS FACILITIES, SUBSTATIONS, AND OTHER STRUCTURES WILL BE ENCLOSED WITH SECURITY OR GAME FENCING PRIOR TO THE COMMENCEMENT OF OPERATIONS OF THE SOLAR FACILITY AS REQUIRED BY LOCAL, STATE, AND FEDERAL REGULATIONS AND NATIONAL SAFETY CODES

F.4: FENCING WILL BE PERMEABLE TO SMALL ANIMALS BY LEAVING GAPS BETWEEN THE BOTTOM OF THE FENCE AND THE GROUND, EXCLUSIVE OF SUBSTATION AND BESS FACILITIES

F.6.4.B: FENCING INTENDED FOR SCREENING IS AT LEAST SEVENTY FIVE (75%) PERCENT VISUALLY SOLID AS VIEWED ON ANY LINE PERPENDICULAR TO THE FENCE FROM ADJACENT PROPERTY OR A PUBLIC STREET (SEE CORRUGATED BESS PRIVACY FENCE DETAIL).

F.6.4.E: FENCING MATERIAL USED FOR SCREENING DOES NOT INCLUDE CHAIN LINK FENCING WITH SLATS(SEE CORRUGATED BESS PRIVACY FENCE DETAIL)

PERIMETER FENCING AROUND PV ARRAYS IS COMPOSED OF LOW-VISIBILITY GAME FENCING (SEE SECURITY GAME FENCE DETAIL).

F.6.5: RELEVANT ARIZONA GAME AND FISH GUIDELINES AND RECOMMENDATIONS FOR WILDLIFE COMPATIBLE FENCING WERE INCORPORATED INTO FENCE DESIGN INCLUDING:

- APPROXIMATELY 2,284 ACRES OF THE PROJECT AREA WILL REMAIN UNFENCED FOR THE USE AND MOVEMENTS OF ANIMALS
- FENCING IS DESIGNED TO AVOID DEAD-ENDS WHERE WILDLIFE COULD BECOME TRAPPED
- FENCING WILL BE PERMEABLE TO SMALL ANIMALS BY LEAVING GAPS BETWEEN THE BOTTOM OF THE FENCE AND THE GROUND, EXCLUSIVE OF SUBSTATION AND BESS FACILITIES
-PERIMETER FENCING AROUND PV ARRAYS IS COMPOSED OF GAME FENCING SMALL MESH WOVEN WIRE WITH NO BARBED WIRE SO WILDLIFE WILL NOT GET ENTANGLED
- GUIDELINES RECOMMEND EXCLUSION FENCE BE SET BACK A MINIMUM OF 300 FEET FROM BUSY ROADWAYS. THE PROJECT FENCE IS SET BACK 375 - 2,200 FEET FROM HWY 17

EVS ENGINEERING
EVS, Inc.
10025 Valley View Road, Suite 140
Eden Prairie, Minnesota 55344
Phone: 952.646.0236
www.evs-eng.com
Arizona Registration #16725-0

CLIENT

McCARTHY

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH
0 1200 2400 FT
1 2 IN
DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

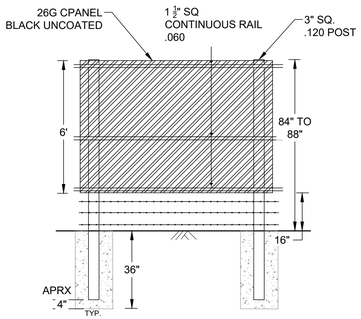
PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

SHEET NAME
SECURITY GAME FENCE DETAIL

SHEET NUMBER
C-172

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4 / C-173 CORRUGATED PANEL BESS PRIVACY FENCE
NOT TO SCALE

COMPLIANCE WITH RELEVANT SECTION 608 YAVAPAI COUNTY PLANNING AND ZONING ORDINANCE

F.6.4.A: FENCING IS DESIGNED TO AVOID DEAD-ENDS WHERE WILDLIFE COULD BECOME TRAPPED

F.6.4.F: FENCING WAS DESIGNED AROUND GROUPS OR CLUSTERS OF EQUIPMENT, AS OPPOSED TO FENCING THE ENTIRE SITE

F.6.4.G: NEW FENCING DOES NOT IMPEDE EXISTING EASEMENTS TO PRIVATE OR PUBLIC LANDS.

F.6.5: THE PERIMETER OF BESS FACILITIES, SUBSTATIONS, AND OTHER STRUCTURES WILL BE ENCLOSED WITH SECURITY OR GAME FENCING PRIOR TO THE COMMENCEMENT OF OPERATIONS OF THE SOLAR FACILITY AS REQUIRED BY LOCAL, STATE, AND FEDERAL REGULATIONS AND NATIONAL SAFETY CODES

F.4: FENCING WILL BE PERMEABLE TO SMALL ANIMALS BY LEAVING GAPS BETWEEN THE BOTTOM OF THE FENCE AND THE GROUND, EXCLUSIVE OF SUBSTATION AND BESS FACILITIES

F.6.4.B: FENCING INTENDED FOR SCREENING IS AT LEAST SEVENTY FIVE (75%) PERCENT VISUALLY SOLID AS VIEWED ON ANY LINE PERPENDICULAR TO THE FENCE FROM ADJACENT PROPERTY OR A PUBLIC STREET (SEE CORRUGATED BESS PRIVACY FENCE DETAIL).

F.6.4.E: FENCING MATERIAL USED FOR SCREENING DOES NOT INCLUDE CHAIN LINK FENCING WITH SLATS(SEE CORRUGATED BESS PRIVACY FENCE DETAIL)

PERIMETER FENCING AROUND PV ARRAYS IS COMPOSED OF LOW-VISIBILITY GAME FENCING (SEE SECURITY GAME FENCE DETAIL).

F.6.5: RELEVANT ARIZONA GAME AND FISH GUIDELINES AND RECOMMENDATIONS FOR WILDLIFE COMPATIBLE FENCING WERE INCORPORATED INTO FENCE DESIGN INCLUDING:

- APPROXIMATELY 2,284 ACRES OF THE PROJECT AREA WILL REMAIN UNFENCED FOR THE USE AND MOVEMENTS OF ANIMALS
- FENCING IS DESIGNED TO AVOID DEAD-ENDS WHERE WILDLIFE COULD BECOME TRAPPED
- FENCING WILL BE PERMEABLE TO SMALL ANIMALS BY LEAVING GAPS BETWEEN THE BOTTOM OF THE FENCE AND THE GROUND, EXCLUSIVE OF SUBSTATION AND BESS FACILITIES

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CLIENT

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AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH
0 1200 2400 FT
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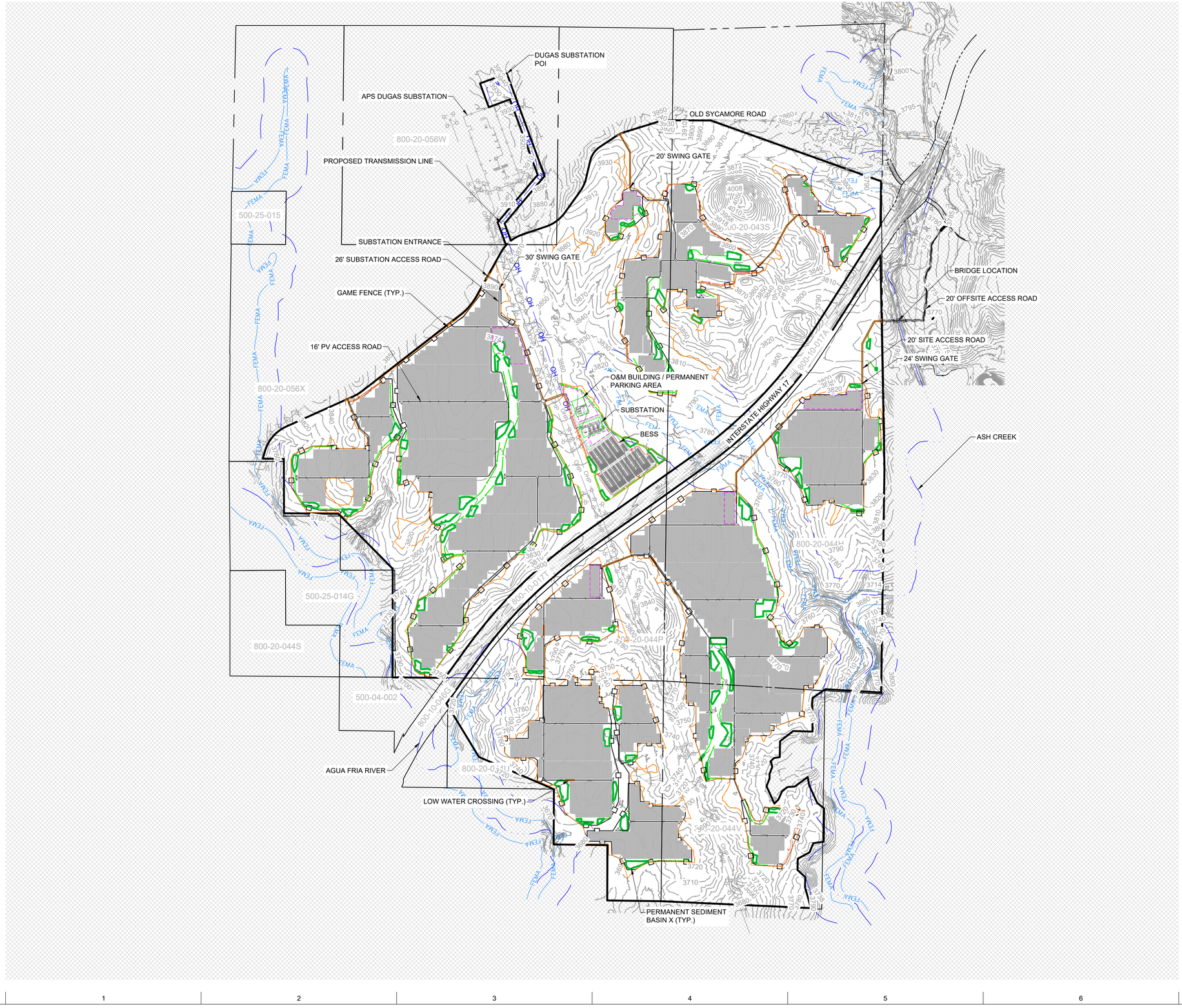
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DATE	**PROJECT #**
2025.12.03	2024-167

SHEET NAME
BESS PRIVACY FENCE DETAIL

SHEET NUMBER
C-173

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LEGEND

EXISTING FEATURES

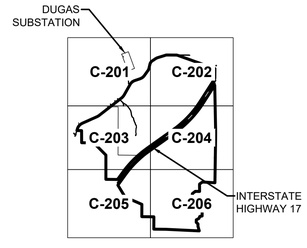
- PROPERTY LINE
- EASEMENT LINE
- ROAD RIGHT-OF-WAY
- NON-PARTICIPATING BOUNDARIES
- PARCEL LINE
- DIRT ROAD
- ASPHALT ROAD
- FENCE
- OHP — OVERHEAD POWER
- OVERHEAD POWER POLE/TOWER STRUCTURE
- RIVER / CREEK / PERENNIAL OR INTERMITTENT STREAM / MAJOR TRIBUTARY / RIPARIAN AREA / RAVINE
- FEMA — FEMA FLOODPLAIN
- MAJOR CONTOUR
- MINOR CONTOUR

PROPOSED FEATURES

- AGGREGATE ROAD
- TEMPORARY AGGREGATE SURFACE
- POWER BLOCK BOUNDARY
- MV — MV FEEDER
- SECURITY CHAIN LINK FENCE
- BESS PRIVACY FENCE
- CHAIN LINK FENCE (BY OTHERS)
- WETLAND BUFFER
- EASEMENT
- CULVERT
- STORMWATER BASIN OUTLINE
- STORMWATER DITCH
- RIPRAP
- GRADING EDGE
- MAJOR CONTOUR
- MINOR CONTOUR
- LOW WATER CROSSING
- FORD CROSSING
- OH — TRANSMISSION LINE
- TEMPORARY LAYDOWN / PARKING AREA
- DEVELOPMENT AREA

NOTES

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CLIENT

McCARTHY

PROJECT

AGUA FRIA SOLAR

LOCATION

34.384909, -112.091644
MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

SCALE

NORTH

0 1200 2400 FT

1 2 IN

DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
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PROFESSIONAL CERTIFICATION

PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

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DATE	**PROJECT #**
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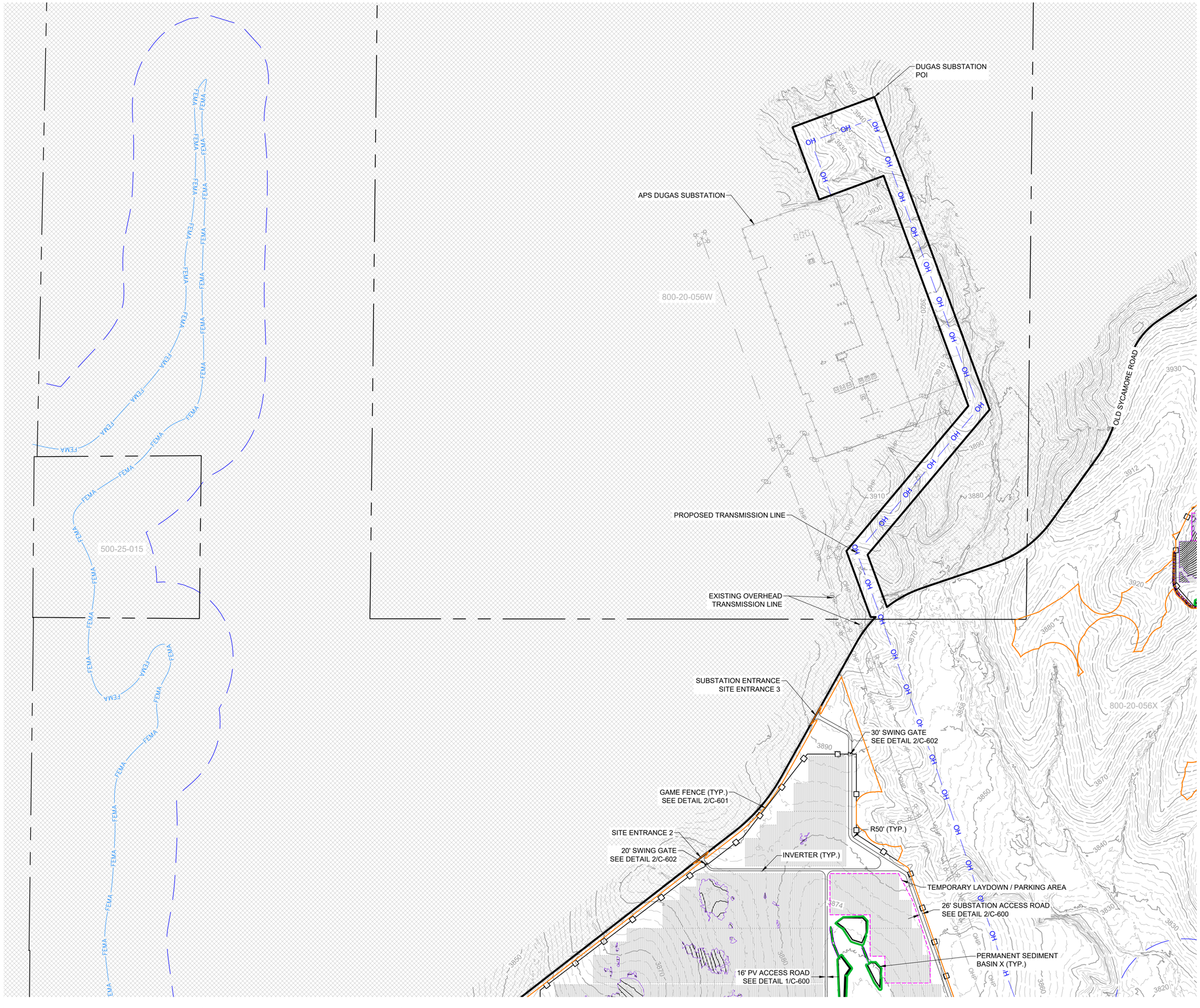
SHEET NAME

OVERALL SITE AND GRADING

SHEET NUMBER

C-200

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LEGEND

EXISTING FEATURES

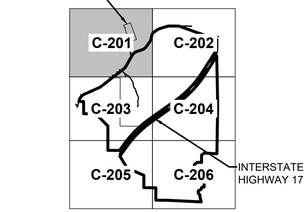
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- FEMA FLOODPLAIN
- MAJOR CONTOUR
- MINOR CONTOUR

PROPOSED FEATURES

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- TEMPORARY AGGREGATE SURFACE
- POWER BLOCK BOUNDARY
- MV FEEDER
- SECURITY CHAIN LINK FENCE
- BESS PRIVACY FENCE
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NOTES

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Arizona Registration #16725-0

CLIENT

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH

0 400 800 FT

1 2 IN

DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

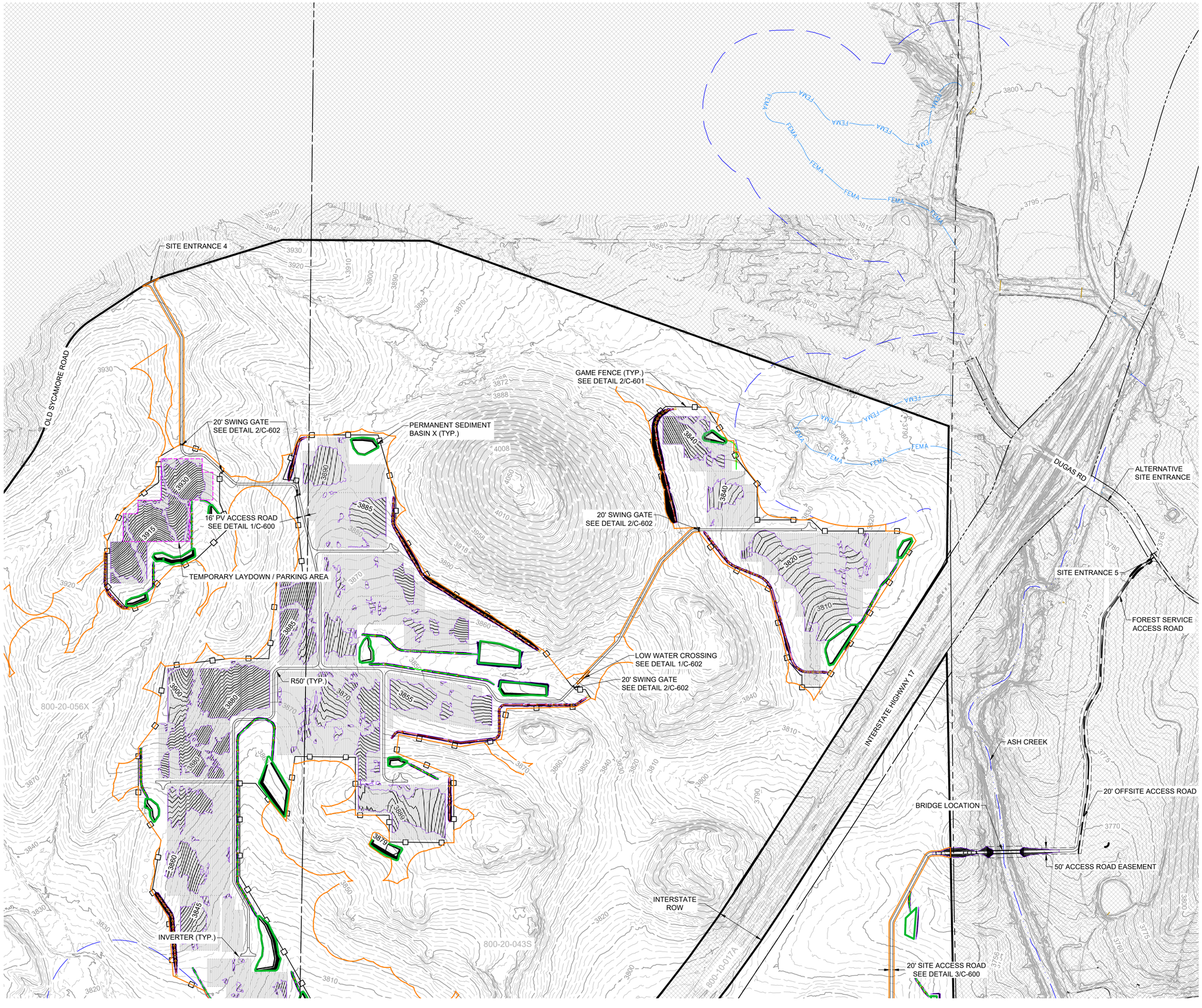
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DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

SHEET NAME
SITE AND GRADING

SHEET NUMBER
C-201

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LEGEND

EXISTING FEATURES

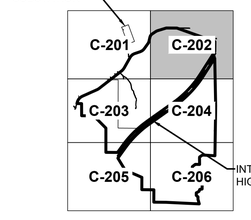
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- MINOR CONTOUR

PROPOSED FEATURES

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- FORD CROSSING
- TRANSMISSION LINE
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- DEVELOPMENT AREA

NOTES

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Arizona Registration #16725-0

CLIENT

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH
0 400 800 FT
1 2 IN
DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

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2025.12.03	2024-167

SHEET NAME
SITE AND GRADING

SHEET NUMBER
C-202

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TEMPORARY LAYDOWN / PARKING AREA
26' SUBSTATION ACCESS ROAD SEE DETAIL 2/C-600
PERMANENT SEDIMENT BASIN X (TYP.)
16' PV ACCESS ROAD SEE DETAIL 1/C-600
CHAIN LINK SECURITY FENCE (TYP.) SEE DETAIL 1/C-601
O&M BUILDING / PERMANENT PARKING AREA
SUBSTATION
SITE ENTRANCE 1
20' SWING GATE SEE DETAIL 2/C-602
OLD SYCAMORE ROAD
30' SWING GATE SEE DETAIL 2/C-602
R50' (TYP.)
BESS
GAME FENCE (TYP.) SEE DETAIL 2/C-601
AGUA FRIA RIVER
20' SWING GATE SEE DETAIL 2/C-602
INTERSTATE ROW
INVERTER (TYP.)
INTERSTATE HIGHWAY 17
LOW WATER CROSSING SEE DETAIL 1/C-602
800-20-044S
500-25-014G
800-20-056X
800-10-017T

LEGEND

EXISTING FEATURES

- PROPERTY LINE
- EASEMENT LINE
- ROAD RIGHT-OF-WAY
- NON-PARTICIPATING BOUNDARIES
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DUGAS SUBSTATION

C-201 C-202 C-203 C-204 C-205 C-206

INTERSTATE HIGHWAY 17

KEY PLAN

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CLIENT

McCARTHY

PROJECT
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LOCATION
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MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH
0 400 800 FT
1 2 IN
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PROFESSIONAL CERTIFICATION

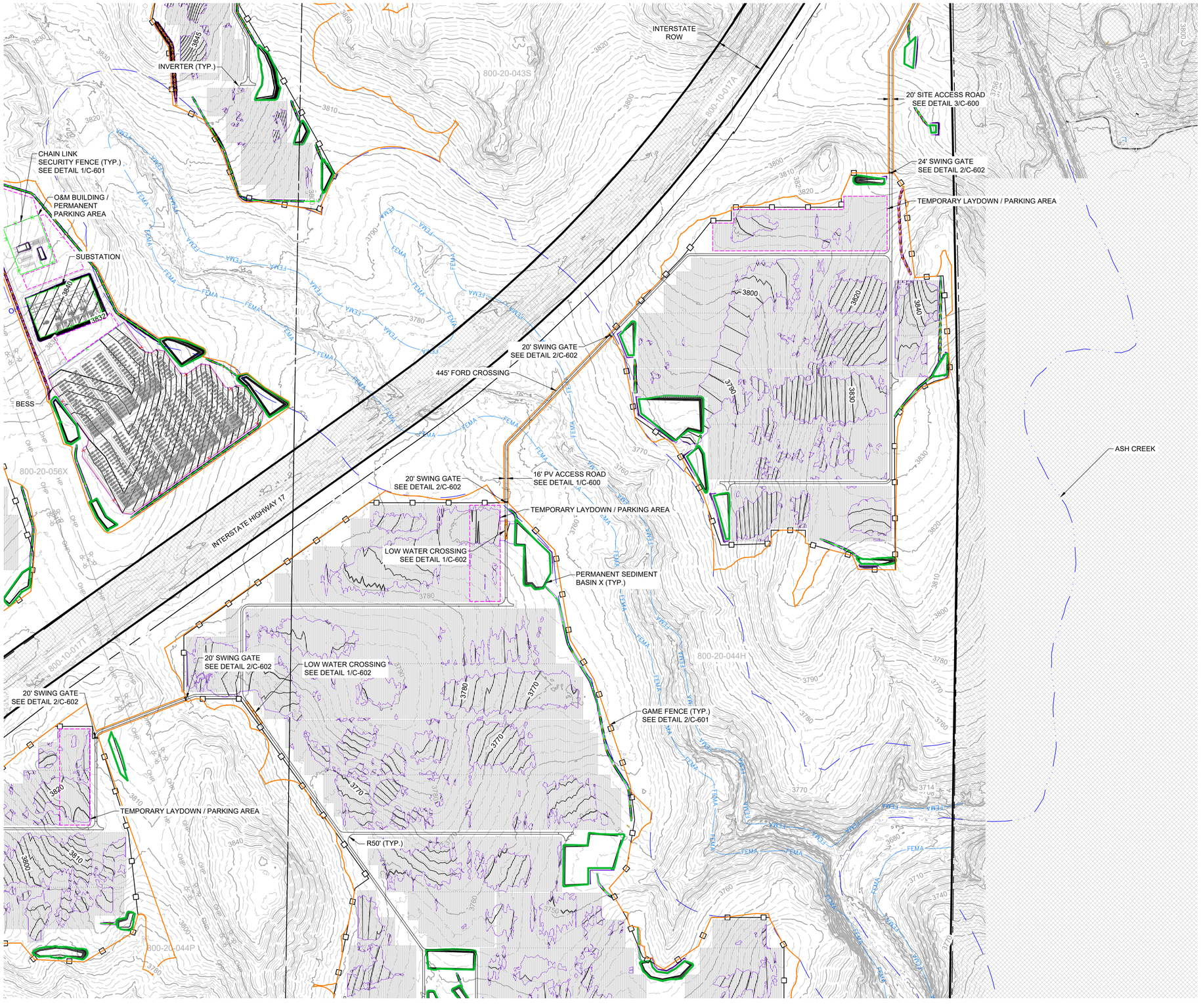
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SHEET NAME
SITE AND GRADING

SHEET NUMBER
C-203

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LEGEND

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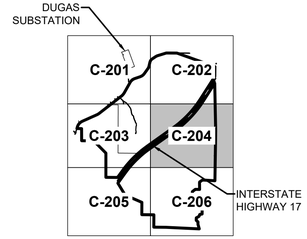
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CLIENT

McCARTHY

PROJECT

AGUA FRIA SOLAR

LOCATION

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MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

SCALE

NORTH
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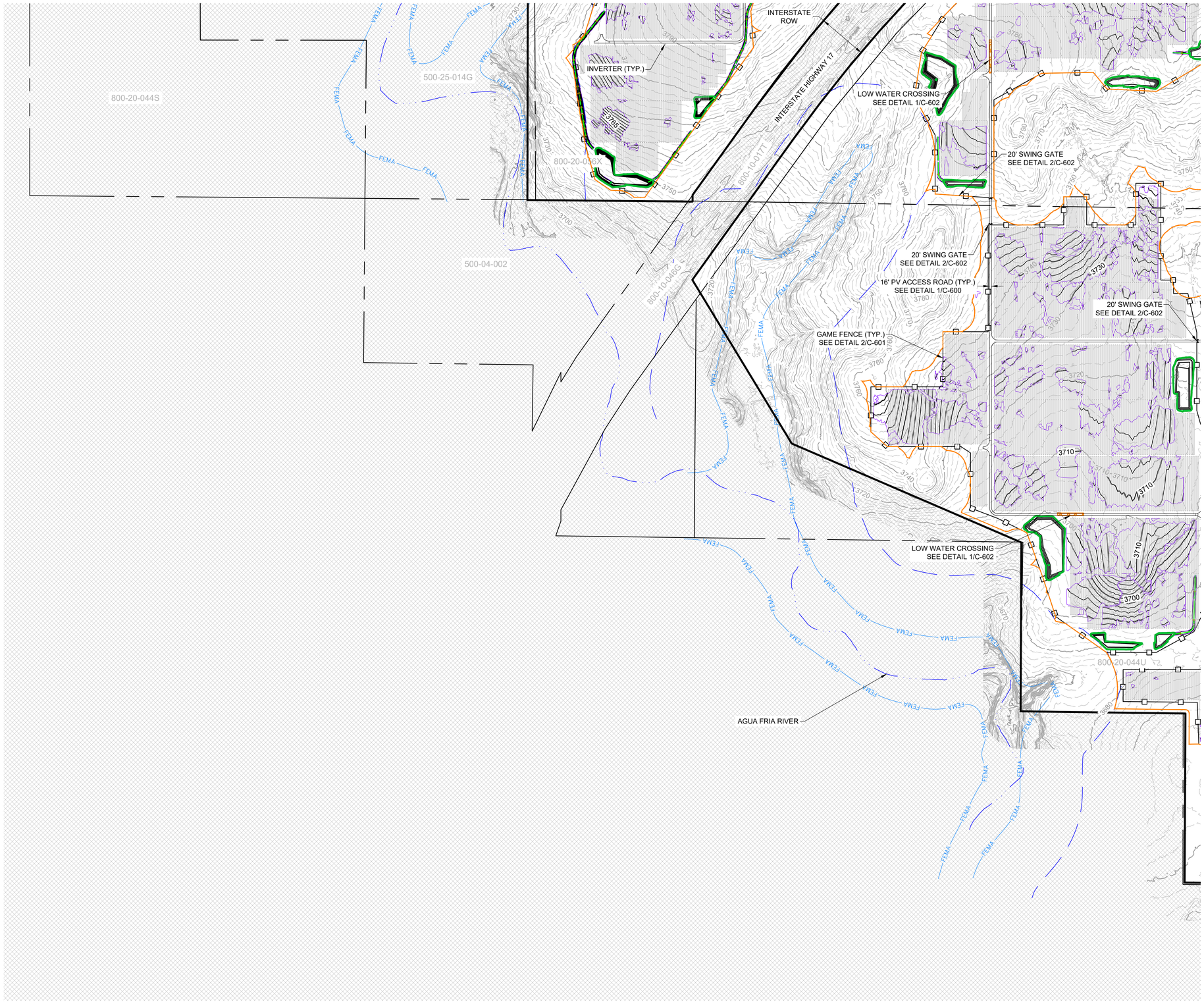
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DATE	**PROJECT #**
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SHEET NAME
SITE AND GRADING

SHEET NUMBER
C-204

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LEGEND

EXISTING FEATURES

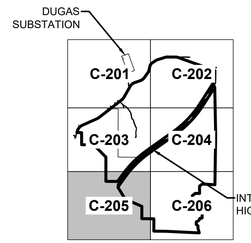
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PROPOSED FEATURES

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CLIENT

McCARTHY

PROJECT

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LOCATION

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SUBMITTAL

COUNTY SUBMITTAL

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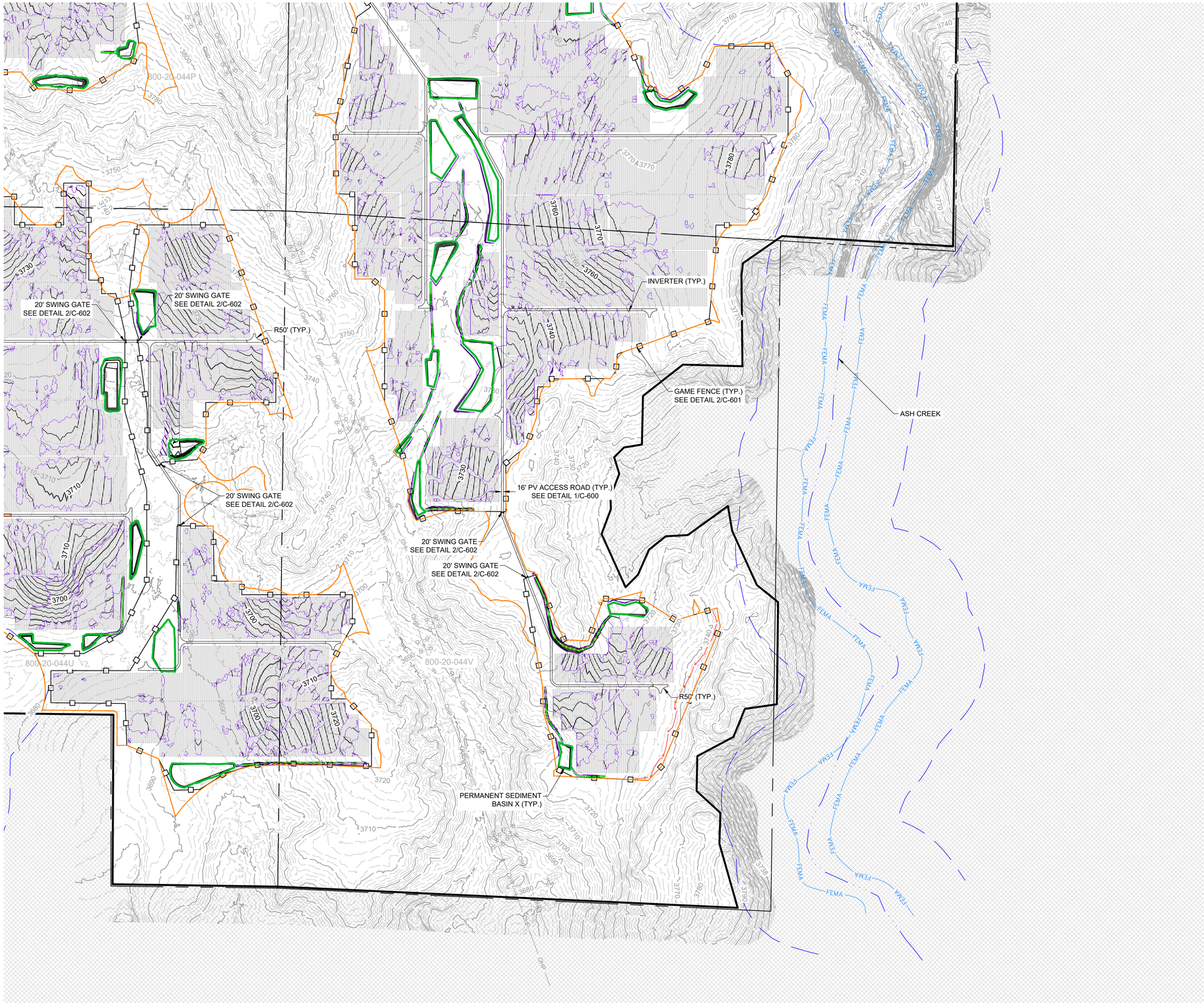
SHEET NAME

SITE AND GRADING

SHEET NUMBER

C-205

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LEGEND

EXISTING FEATURES

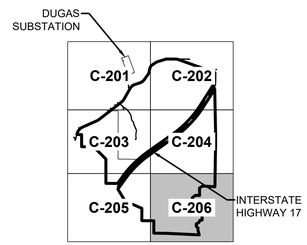
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- RIVER / CREEK / PERENNIAL OR INTERMITTENT STREAM / MAJOR TRIBUTARY / RIPARIAN AREA / RAVINE
- FEMA — FEMA FLOODPLAIN
- MAJOR CONTOUR
- MINOR CONTOUR

PROPOSED FEATURES

- AGGREGATE ROAD
- TEMPORARY AGGREGATE SURFACE
- POWER BLOCK BOUNDARY
- MV — MV FEEDER
- SECURITY CHAIN LINK FENCE
- BESS PRIVACY FENCE
- CHAIN LINK FENCE (BY OTHERS)
- WETLAND BUFFER
- EASEMENT
- CULVERT
- STORMWATER BASIN OUTLINE
- STORMWATER DITCH
- RIPRAP
- GRADING EDGE
- MAJOR CONTOUR
- MINOR CONTOUR
- LOW WATER CROSSING
- FORD CROSSING
- OH — TRANSMISSION LINE
- TEMPORARY LAYDOWN / PARKING AREA
- DEVELOPMENT AREA

NOTES

1. IF TEMPORARY LAYDOWN AREAS ARE WITHIN SOLAR ARRAY AREA, THE SOLAR ARRAY WILL BE THE LAST BUILT IN THAT AREA. TEMPORARY LAYDOWN AREAS ARE PRELIMINARY AND ARE SUBJECT TO CHANGE



KEY PLAN

EVS, Inc.
10025 Valley View Road, Suite 140
Eden Prairie, Minnesota 55344
Phone: 952.646.0236
www.evs-eng.com
Arizona Registration #16725-0

CLIENT

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH
0 400 800 FT
1 2 IN
DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

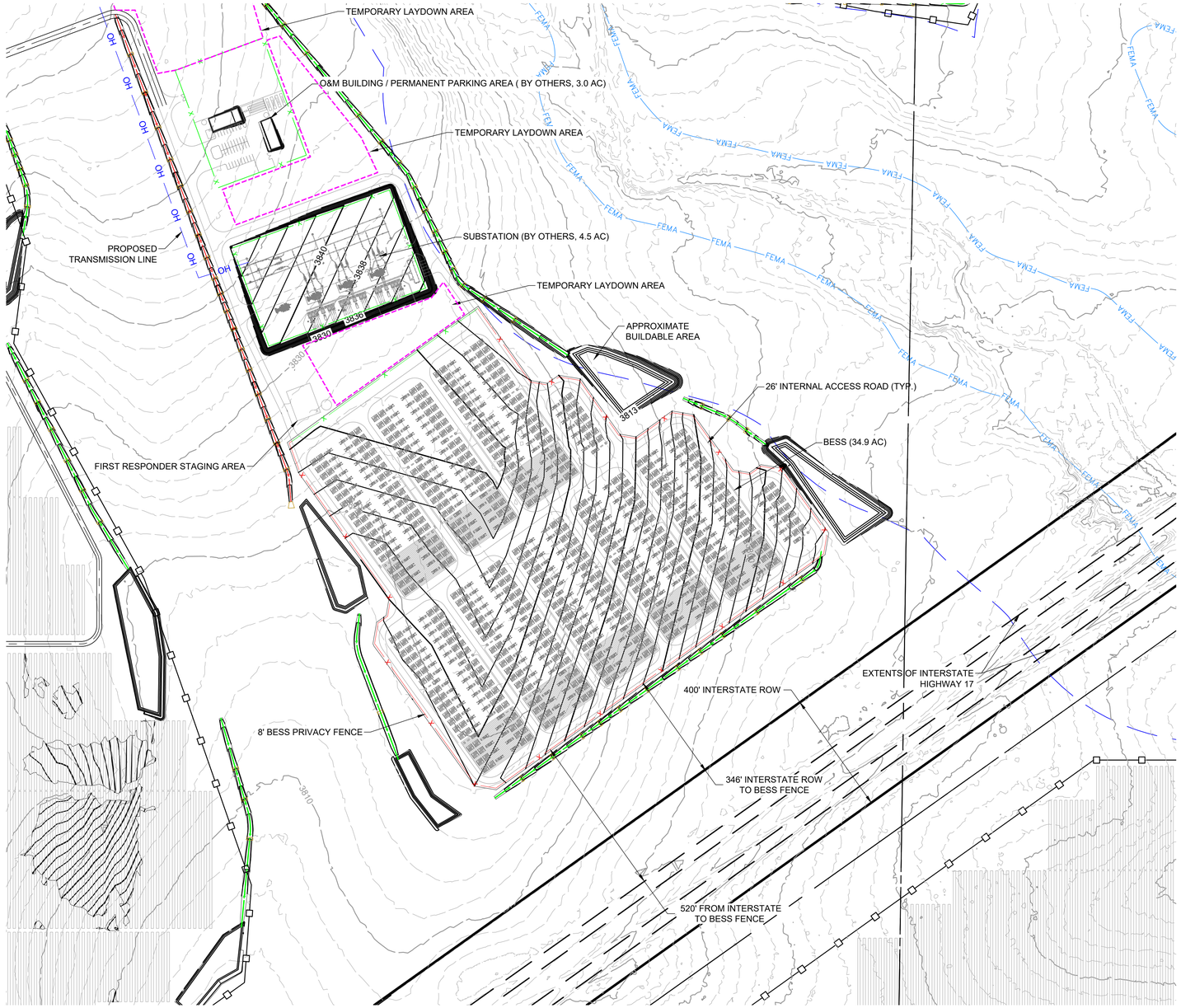
PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

SHEET NAME
SITE AND GRADING

SHEET NUMBER
C-206

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1 / C-260 PROPOSED SUBSTATION PLAN
1" = 200'

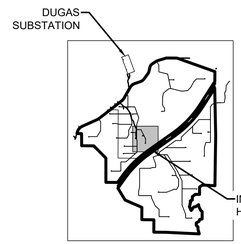
LEGEND

EXISTING FEATURES

- PROPERTY LINE
- EASEMENT LINE
- ROAD RIGHT-OF-WAY
- NON-PARTICIPATING BOUNDARIES
- PARCEL LINE
- DIRT ROAD
- ASPHALT ROAD
- FENCE
- OHP — OVERHEAD POWER
- OVERHEAD POWER POLE/TOWER STRUCTURE
- RIVER / CREEK / PERENNIAL OR INTERMITTENT STREAM / MAJOR TRIBUTARY / RIPARIAN AREA / RAVINE
- FEMA — FEMA FLOODPLAIN
- MAJOR CONTOUR
- MINOR CONTOUR

PROPOSED FEATURES

- AGGREGATE ROAD
- GAME FENCE
- X — BESS PRIVACY FENCE
- X — CHAIN LINK FENCE
- EASEMENT
- STORMWATER BASIN OUTLINE
- RIPRAP
- OH — TRANSMISSION LINE
- GRADING EDGE
- MAJOR CONTOUR
- MINOR CONTOUR
- LOW WATER CROSSING
- FORD CROSSING
- STORMWATER CONVEYANCE DITCH
- OFFSITE FLOW STORMWATER CONVEYANCE DITCH
- TEMPORARY LAYDOWN / PARKING AREA



KEY PLAN

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Arizona Registration #16725-0

CLIENT

McCARTHY

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH
0 200 400 FT
1 2 IN
DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

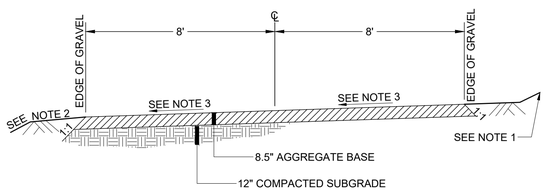
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SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

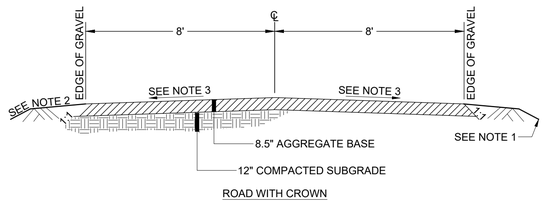
SHEET NAME
SUBSTATION

SHEET NUMBER
C-260

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ROAD WITH SUPERELEVATION

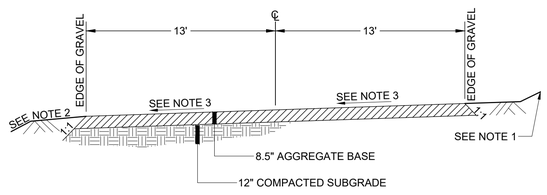


ROAD WITH CROWN

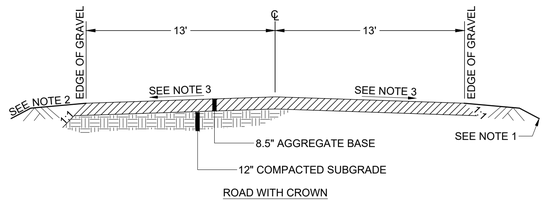
NOTES:

1. MATCH EXISTING GRADE OR FINAL PROPOSED GRADE AS INDICATED ON THE PLANS.
2. CONSTRUCT A 2-FOOT TURF SHOULDER ON EITHER SIDE OF EDGE OF GRAVEL WITH A 5% MAX SLOPE. TIE-IN SLOPES AT EDGE OF SHOULDER SHALL BE 3:1 MAX (6:1 WHERE FEASIBLE) UNTIL GRADE MEETS EXISTING OR PROPOSED GRADE.
3. PROVIDE A 2% CROSS SLOPE WHERE FEASIBLE. CROSS SLOPE MAY BE ADJUSTED TO MATCH EXISTING GROUND SLOPE IN ORDER TO PROMOTE CONTINUED SHEET DRAINAGE ACROSS ROADS. CROSS SLOPE SHALL NOT EXCEED 4%. LONGITUDINAL SLOPE SHALL NOT EXCEED 8% WHERE FEASIBLE (10% WHEN APPROVED BY CLIENT).
4. CARE SHALL BE TAKEN TO ENSURE GRADES PROMOTE A SMOOTH TRANSITION OF WATER ONTO AND OFF OF ROADS WITHOUT CONCENTRATION OF WATER ALONG ROAD EDGES OR ACROSS ROADS. FIELD ADJUSTMENTS MAY BE REQUIRED TO FACILITATE DRAINAGE ACROSS ROADS AND MINIMIZE EROSION POTENTIAL.
5. CONSTRUCT DITCHES ONLY IF INDICATED BY CONTOURS ON THE GRADING PLAN.
6. ROAD SECTION DESIGN PENDING RECEIPT OF GEOTECH REPORT.
7. SEE MATERIAL SPECIFICATIONS TABLE ON C-003 FOR APPROVED AGGREGATE BASE AND GEOTEXTILE / GEOGRID MATERIALS.

1 / C-600 TYPICAL SOLAR ACCESS ROAD
NOT TO SCALE



ROAD WITH SUPERELEVATION

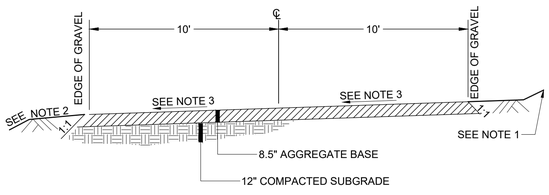


ROAD WITH CROWN

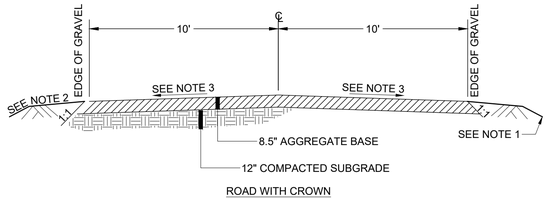
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7. SEE MATERIAL SPECIFICATIONS TABLE ON C-003 FOR APPROVED AGGREGATE BASE AND GEOTEXTILE / GEOGRID MATERIALS.

2 / C-600 TYPICAL SUBSTATION ACCESS ROAD
NOT TO SCALE



ROAD WITH SUPERELEVATION



ROAD WITH CROWN

NOTES:

1. MATCH EXISTING GRADE OR FINAL PROPOSED GRADE AS INDICATED ON THE PLANS.
2. CONSTRUCT A 2-FOOT TURF SHOULDER ON EITHER SIDE OF EDGE OF GRAVEL WITH A 5% MAX SLOPE. TIE-IN SLOPES AT EDGE OF SHOULDER SHALL BE 3:1 MAX (6:1 WHERE FEASIBLE) UNTIL GRADE MEETS EXISTING OR PROPOSED GRADE.
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6. ROAD SECTION DESIGN PENDING RECEIPT OF GEOTECH REPORT.
7. SEE MATERIAL SPECIFICATIONS TABLE ON C-003 FOR APPROVED AGGREGATE BASE AND GEOTEXTILE / GEOGRID MATERIALS.

3 / C-600 TYPICAL SITE ACCESS ROAD
NOT TO SCALE

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Arizona Registration #16725-0

CLIENT

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

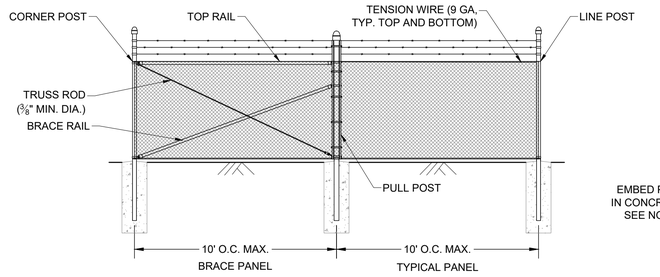
PROFESSIONAL CERTIFICATION

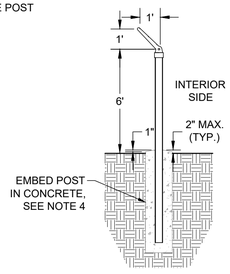
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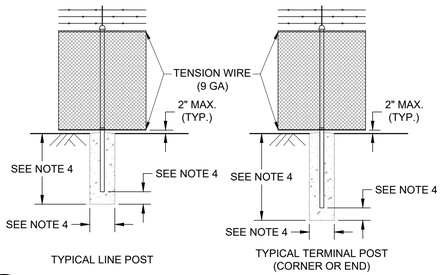
DRAWN BY **SH/AM**
CHECKED BY **BJ**
DATE **2025.12.03**
PROJECT # **2024-167**

SHEET NAME
SITE DETAILS

SHEET NUMBER
C-600



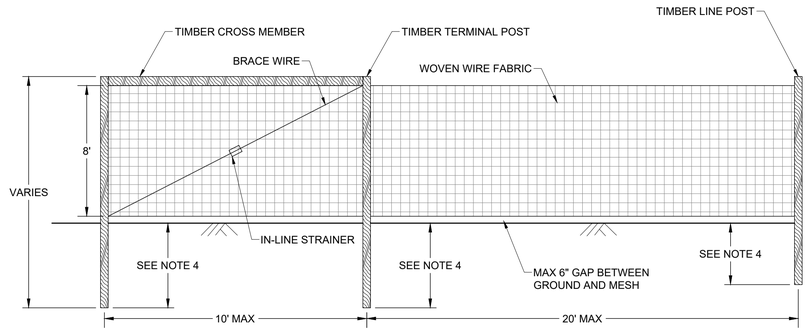




FENCE NOTES:

1. FENCE FABRIC SHALL BE NO MORE THAN 2" ABOVE FINISHED GRADE.
2. FABRIC - 9 GAUGE, 2" MESH; GALVANIZED ASTM A392, CLASS 1; TWISTED SELVAGE ON TOP, KNUCKLED SELVAGE ON BOTTOM.
3. ALL RAIL, WIRE AND GATES SHALL BE GALVANIZED.
4. REFER TO STRUCTURAL DESIGN/FENCING MANUFACTURER SPECIFICATIONS FOR POST SIZING, FOUNDATIONS, EMBEDMENT DEPTHS/FREQUENCY, AND MATERIALS.
5. BRACE PANEL MINIMUM SPACING AND LOCATION SHALL BE PER STRUCTURAL DESIGN/FENCING MANUFACTURER SPECIFICATIONS.
6. BARBED WIRE TOPPING SHALL CONSIST OF THREE STRANDS OF 12.5 MINIMUM GAUGE WIRE HAVING 4-POINT BARBS OF 14 GAUGE WIRE AT 5 INCHES MAXIMUM SPACING IN COMPLIANCE WITH ASTM A121. BARBED WIRE SHALL BE INSTALLED WITH 45-DEGREE EXTENSION ARMS FACING OUTWARD, AWAY FROM THE SECURED AREA.

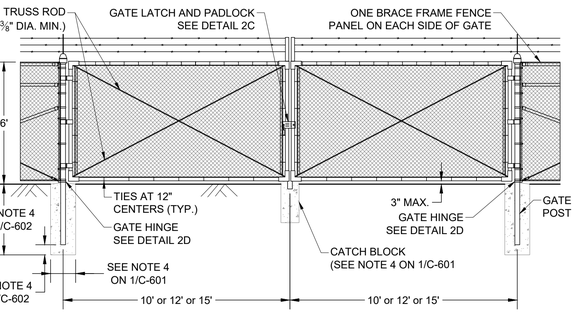
1 / C-601 SUBSTATION, BESS, AND O&M BUILDING CHAIN LINK SECURITY FENCE WITH BARBED WIRE AND POSTS
NOT TO SCALE



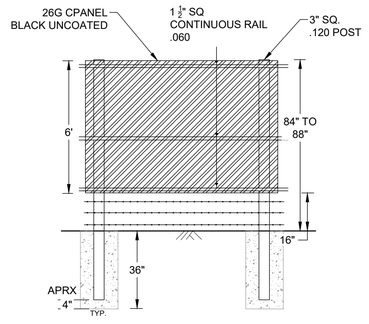
FENCE NOTES:

1. FENCE DETAILS DEPICTED IN THIS PLAN SET ARE FOR REFERENCE ONLY; SPECIFICATIONS PROVIDED WITHIN THE FENCING MANUFACTURER SPECIFICATIONS SHALL TAKE PRECEDENCE OVER ALL FENCE DETAILS SHOWN IN THIS PLAN SET.
2. WOVEN WIRE FABRIC SHALL BE 6" MESH GRADUATED FENCE FABRIC.
3. ALL METAL FENCING COMPONENTS AND FASTENERS SHALL BE HOT DIPPED GALVANIZED.
4. REFER TO FENCING MANUFACTURER SPECIFICATIONS FOR POST SIZING, FOUNDATIONS, EMBEDMENT DEPTHS/FREQUENCY, AND MATERIALS.
5. END, CORNER, OR GATE POSTS SHALL BE SET AT THE BEGINNING AND END OF EACH CONTINUOUS LENGTH OF FENCE AND AT ABRUPT CHANGES IN VERTICAL OR HORIZONTAL ALIGNMENT.
8. A PULL POST SHALL BE USED IN ALL STRAIGHT SPANS OF FENCE LONGER THAN 1320 FEET. MAXIMUM SPACING BETWEEN END POSTS SHALL BE 1320 FEET WITHOUT ADDITIONAL INLINE BRACES OR PER MANUFACTURER RECOMMENDATION.
9. ALL POSTS SHALL BE INSTALLED VERTICALLY. WHERE POSTS ARE INSTALLED ON INCLINED SURFACES, THE ANGLE OF THE POST SHALL BE ADJUSTED SUCH THAT THE POST WILL BE VERTICAL.
10. MANUFACTURER DRAWINGS SHALL SUPERSEDE DETAIL IF CONFLICTS ARE PRESENT. ANY DEVIATIONS SHALL BE SUBMITTED TO THE OWNER FOR REVIEW.
11. PERIMETER FENCE IS NOT DESIGNED FOR SCOUR.

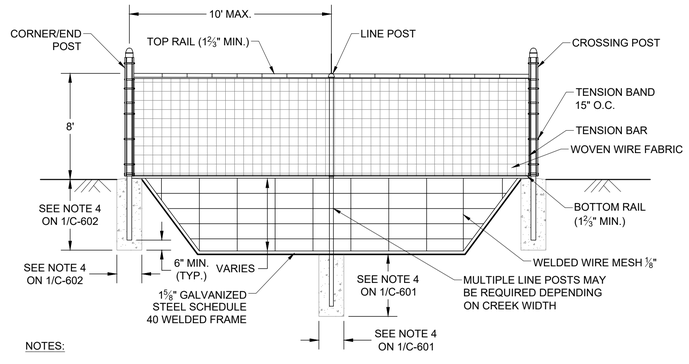
2 / C-601 PV ARRAY WOVEN WIRE GAME FENCE
NOT TO SCALE



3 / C-601 SWINGING ACCESS GATE
NOT TO SCALE



4 / C-601 CORRUGATED PANEL BESS PRIVACY FENCE
NOT TO SCALE



NOTES:

1. FENCE TO BE USED IN AREAS CROSSING WATERWAYS. POSTS SHALL BE PLACED OUTSIDE OF THE WATERWAY.
2. REGULAR MAINTENANCE FOR CROSSING SHALL BE PERFORMED TO ENSURE FLOW IS NOT DISTURBED.

5 / C-601 FENCE CREEK CROSSING
NOT TO SCALE

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CLIENT

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AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

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A	2025.11.19	COUNTY SUBMITTAL

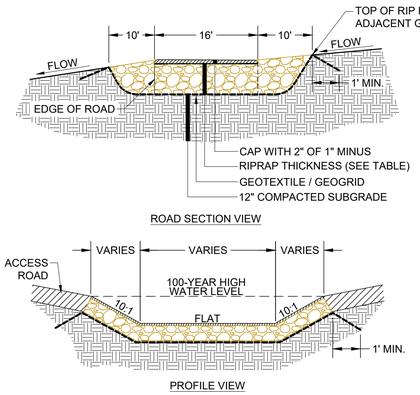
PROFESSIONAL CERTIFICATION

PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

SHEET NAME
SITE DETAILS

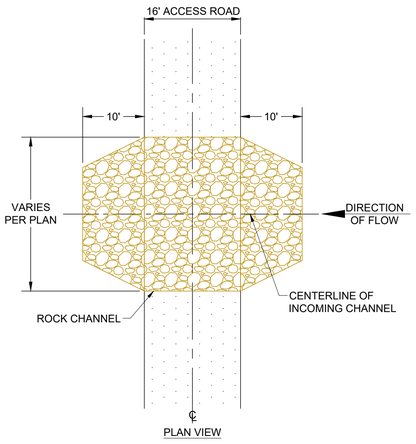
SHEET NUMBER
C-601



ROAD SECTION VIEW

PROFILE VIEW

DESIGN VELOCITY (FT/SEC)	RIPRAP D_{50} (IN)	RIPRAP THICKNESS (IN)
5.0 OR LESS	3	6

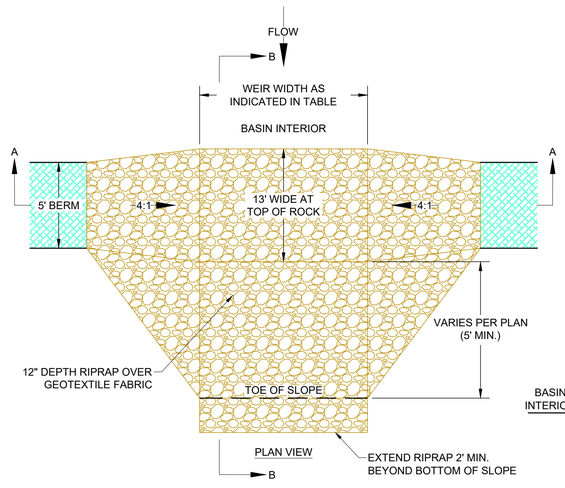


PLAN VIEW

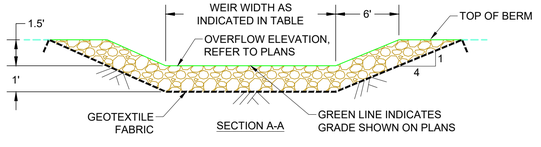
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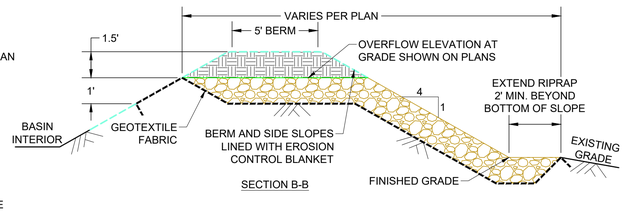
1. REFER TO CIVIL SITE, GRADING, AND DRAINAGE PLANS FOR CROSSING DIMENSIONS AT EACH LOCATION.
2. BASED ON FIELD CONDITIONS, THE CONTRACTOR MAY NEED TO MODIFY THE PROPOSED LOW WATER CROSSINGS. THE DIMENSIONS SHOWN ON PLANS REPRESENT THE MINIMUM REQUIRED.
3. CHANNEL SLOPES TO BE TEMPORARILY MODIFIED AS NEEDED DURING CONSTRUCTION TO ALLOW FOR ADEQUATE COMPONENT DELIVERY. RESTORE TO FINAL CONDITIONS UPON RESTORATION.
4. FLOW LINE OF INCOMING CHANNEL SHALL BE CENTERED ON RIPRAP SECTION. CONTACT ENGINEER IF FIELD FIT IS NECESSARY.
5. TOP OF THE RIPRAP SECTION SHALL MATCH ADJACENT GRADE AND CONFORM TO THE EXISTING CHANNEL CROSS SECTIONAL SLOPES.
6. MATERIAL THICKNESS MAY BE FIELD ADJUSTED TO ACHIEVE SUFFICIENT BEARING CAPACITIES AS ARE NECESSARY FOR ANTICIPATED ROAD USE.
7. SEE MATERIAL SPECIFICATIONS TABLE ON C-003 FOR APPROVED RIPRAP AND GEOTEXTILE FABRIC MATERIALS AT LOW WATER CROSSINGS.

1 / C-602 LOW WATER CROSSING AT ACCESS ROAD
NOT TO SCALE



PLAN VIEW





NOTES:

1. SEE MATERIAL SPECIFICATIONS TABLE ON C-003 FOR APPROVED RIPRAP AND GEOTEXTILE MATERIALS AT EMERGENCY OVERFLOWS.

2 / C-602 EMERGENCY OVERFLOW
NOT TO SCALE

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LOCATION
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MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

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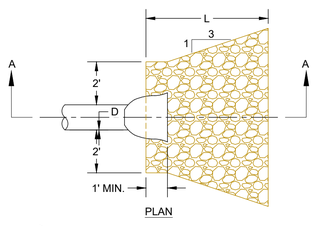
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SITE DETAILS

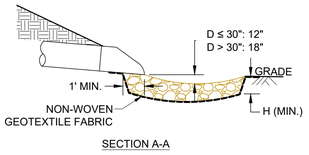
SHEET NUMBER
C-602

APRON AT CULVERT OUTLET (WITH END SECTION)



PLAN

DIAMETER 'D' (IN)	APRON LENGTH 'L' (FT, MIN.)	APRON DEPTH 'H' (FT, MIN.)	RIPRAP D_{50} (IN)
12	5.0	1.5	6"
15	6.0	1.5	6"
18	7.0	1.5	6"
24	9.0	1.5	6"
30	13.5	2.0	9"
36	17.0	2.0	9"
42	22.0	2.5	12"
48	25.0	2.5	12"
54	28.0	2.5	12"
60	33.0	3.0	12"

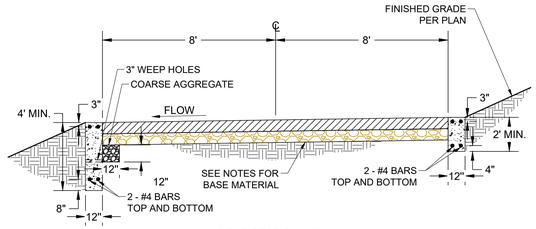


SECTION A-A

NOTES:

1. GRADE OUTFALL AREA SO THAT WATER WILL FLOW DOWN THE CENTER OF THE CHANNEL AND BE CONTAINED TO THE CHANNEL. PROVIDE A FIRM UNYIELDING FOUNDATION FOR THE RIPRAP WITH NO SHARP OR ABRUPT BREAKS IN THE GRADE.
2. RIPRAP OUT FROM THE APRON SHALL NOT BE HIGHER THAN THE APRON INVERT.
3. RIPRAP SHALL BE INSTALLED AT ALL OUTLETS UNLESS OTHERWISE INDICATED ON THE PLANS.
4. SEE MATERIAL SPECIFICATIONS TABLE ON C-003 FOR APPROVED RIPRAP AND GEOTEXTILE FABRIC MATERIALS AT CULVERT APRONS.

1 / C-603 RIPRAP AT CULVERTS
NOT TO SCALE



ROAD SECTION VIEW

NOTES:

1. SURFACE MATERIAL AND DEPTH PER LOCAL JURISDICTION.
2. BASE MATERIAL AND DEPTH: PER LOCAL JURISDICTION.
3. REINFORCING BARS SHALL BE SET 3" CLEAR FROM SIDES OF CUT OFF WALLS.
4. COURSE AGGREGATE AT WEEP HOLES SHALL BE ASTM C33 SIZE 57, ENCLOSED IN FILTER FABRIC, AND EXTENDED LATERALLY A MINIMUM OF 6" ON EACH SIDE OF THE WEEP HOLE.

2 / C-603 CONCRETE/BITUMINOUS SURFACE FORD CROSSING AT ACCESS ROAD
NOT TO SCALE

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EVS, Inc.
10025 Valley View Road, Suite 140
Eden Prairie, Minnesota 55344
Phone: 952.646.0236
www.evs-eng.com
Arizona Registration #16725-0

CLIENT

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

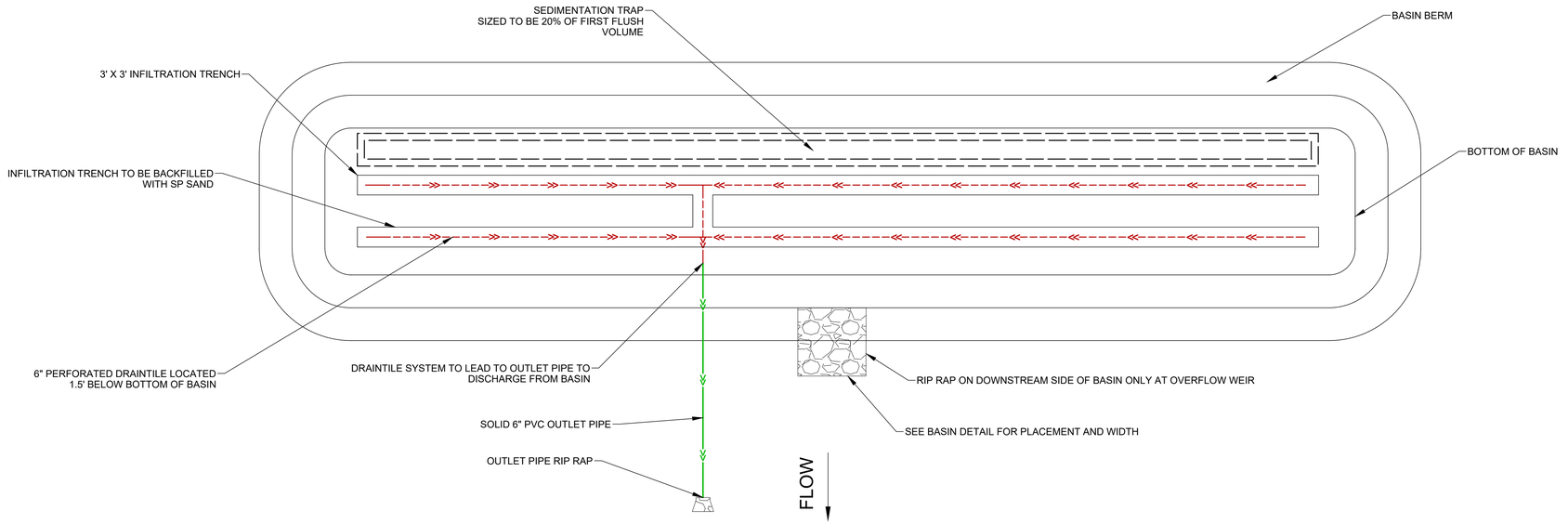
PROFESSIONAL CERTIFICATION

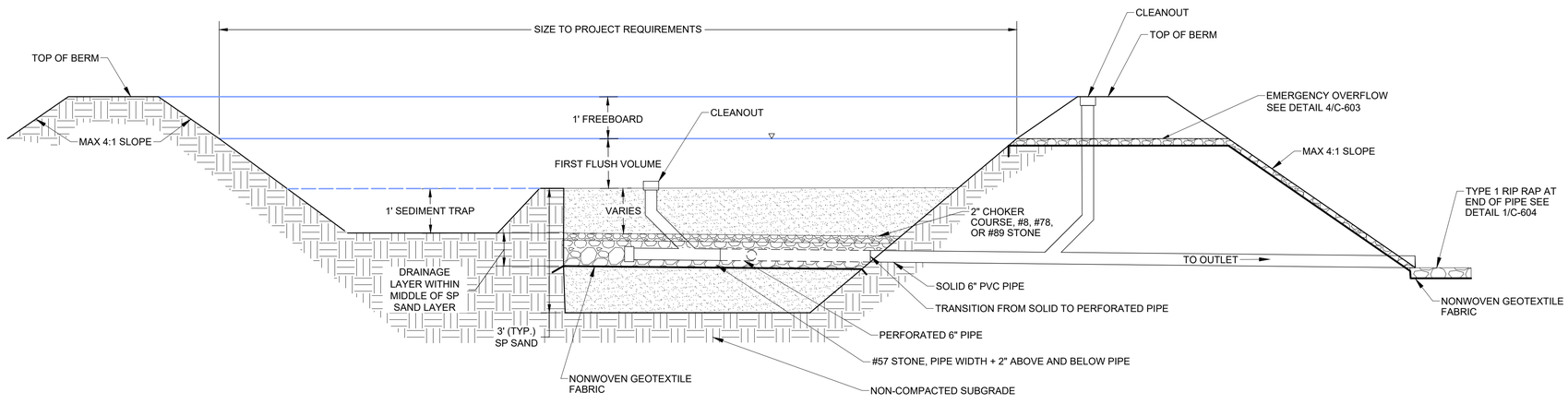
PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY: SH/AM
CHECKED BY: BJ
DATE: 2025.12.03
PROJECT #: 2024-167

SHEET NAME
SITE DETAILS

SHEET NUMBER
C-603





NOTES:

1. INFILTRATION TRENCH DESIGN (LENGTH AND NUMBER OF TRENCHES) WILL VARY DEPENDING ON THE BASIN SIZE AND SHAPE.
2. SAND FILTER DEPTH MAY VARY DEPENDING ON SHALLOW BEDROCK DEPTH.

1 / C-604 RETENTION BASIN
NOT TO SCALE

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CLIENT

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

#	DATE	DESCRIPTION
A	2025.11.19	COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
2025.12.03	2024-167

SHEET NAME
SITE DETAILS

SHEET NUMBER
C-604

GENERAL STRUCTURAL NOTES

PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH ADOT BRIDGE DESIGN GUIDELINES, ASNI / AASHTO / AWS / D1.5-2020 BRIDGE WELDING CODE 2020.

DESIGN SPECIFICATIONS:

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 2020.

LIVE LOAD DISTRIBUTION TO GIRDERS IS BASED UPON DM-4 DISTRIBUTION FACTOR METHOD.

DESIGN IS IN ACCORDANCE WITH THE LRFD METHOD.

DESIGN LIVE LOADS:

HL-93 LIVE LOADING IS USED.

FATIGUE DESIGN IS BASED ON THE FOLLOWING:
STEEL STRUCTURES: ADTT 71 (2036) - ONE-DIRECTIONAL

DEAD LOADS:

INCLUDES A LOAD OF 25 PSF FOR FUTURE WEARING SURFACE ON THE DECK SLAB.

INCLUDES A LOAD OF 10 PSF FOR PERMANENT METAL DECK FORMS WHICH TAKES INTO ACCOUNT THE WEIGHT OF THE FORM, PLUS THE WEIGHT OF THE CONCRETE IN THE VALLEYS OF THE FORMS.

GENERAL:

STATIONS AND ELEVATIONS ARE GIVEN IN FEET UNLESS OTHERWISE NOTED. ALL STATIONS AND ELEVATIONS SHALL BE VERIFIED WITH CIVIL ENGINEER BEFORE STARTING WORK. CONTACT ENGINEER IMMEDIATELY IF DISCREPANCIES OCCUR.

PROVIDE 2" CONCRETE COVER ON REINFORCEMENT BARS, EXCEPT AS NOTED.

USE HIGH PERFORMANCE CONCRETE (HPC) IN:
- DECK SLAB
- APPROACH SLABS
- END DIAPHRAGMS
- HEADER SLAB

USE CLASS AA CEMENT CONCRETE IN:
- BARRIERS
- ABUTMENT BACKWALLS
- CHEEK WALLS
- SLEEPER SLAB

USE CLASS A CEMENT CONCRETE IN:
- ABUTMENTS BELOW BEAM SEAT
- WINGWALLS
- FOOTINGS

USE CLASS C CEMENT CONCRETE BELOW THE BOTTOM OF FOOTINGS WHEN SPECIFIED.

A HIGHER CLASS CONCRETE MAY BE SUBSTITUTED FOR A LOWER CLASS CONCRETE AT NO ADDITIONAL COST TO THE DEPARTMENT.

USE EPOXY-COATED REINFORCMENT BARS IN:
- DECK SLAB
- APPROACH SLABS
- BARRIERS
- END DIAPHRAGMS
- ABUTMENT BACKWALLS
- U-WINGS ABOVE THE CONSTRUCTION JOINT
- SUBSTRUCTURE REINFORCEMENT BARS AS INDICATED

WELDING OF REINFORCEMENT BARS DURING FABRICATION OR CONSTRUCTION IS NOT PERMITTED UNLESS SPECIFIED.

GALVANIZED REINFORCMENT BARS MAY BE SUBSTITUTED FOR EPOXY-COATED REINFORCMENT BARS AT CONTRACTOR'S OPTION.

RAKE-FINISH ALL HORIZONTAL CONSTRUCTION JOINTS, EXCEPT AS INDICATED.

PREPARE BEARING AREAS AS SPECIFIED IN ADOT STANDARDS.

SEISMIC FORCES WERE CONSIDERED FOR AN ACCELERATION COEFFICIENT OF 0.15, AND A SITE COEFFICIENT OF 1.20.

USE RETARDER ADMIXTURE CONFORMING TO ADOT STANDARDS IN THE CONCRETE DECK SLAB.

PLACE CHEEKWALL AND BACKWALL CONCRETE AFTER GIRDERS ARE SET IN POSITION.

ABUTMENT BACKWALLS MAY BE PLACED UP TO A CONSTRUCTION JOINT BELOW THE LEVEL OF THE BOTTOM OF DECK SLAB PRIOR TO CONSTRUCTION OF THE DECK.

CHAMFER EXPOSED CONCRETE EDGES 1" BY 1", EXCEPT AS NOTED.

ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.

USE EITHER PERMANENT METAL FORMS OR REMOVABLE FORMS TO CONSTRUCT THE DECK SLAB.

DECK SLAB THICKNESS INCLUDES A 0.5" INTEGRAL WEARING SURFACE.

SUPERSTRUCTURE DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68 DEGREES F.

PROVIDE STRUCTURAL STEEL CONFORMING TO AASHTO M 270/M 270M GRADE 50 (ASTM A 709/A 709M GRADE 50) DESIGNATION, EXCEPT WHEN NOTED OTHERWISE.

SET ANCHOR BOLTS TO TEMPLATE OR IN PREFORMED HOLES. DO NOT DRILL UNLESS SPECIFICALLY INDICATED ON PLANS. FILL THE PREFORMED HOLES WITH NON-SHRINK GROUT. FILL THE CLEARANCE BETWEEN ANCHOR BOLTS AND HOLES IN MASONRY PLATES WITH APPROVED NON HARDENING CAULKING COMPOUND.

UTILITY NOTES:

COORDINATE, LOCATE, AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH ADOT STANDARDS.

WELDED PLATE GIRDERS:

IF GIRDERS CANNOT BE SHIPPED IN THE LENGTHS SHOWN ON THE PLANS, FIELD SPLICES WILL BE PERMITTED AT THE REQUEST OF THE CONTRACTOR.

IF GIRDERS CAN BE FABRICATED IN LENGTHS LONGER THAN THE SECTIONS SHOWN ON THE PLANS BY ELIMINATING FIELD SPLICES, FIELD SPLICE(S) MAY BE OMITTED AT THE REQUEST OF THE CONTRACTOR. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR SECURING A HAULING PERMIT.

DO NOT USE FORM SUPPORT SYSTEMS THAT WILL CAUSE UNACCEPTABLE OVERSTRESS OR DEFORMATION TO PERMANENT BRIDGE MEMBERS.

SUPPORT DECK SLAB OVERHANG FORMS FROM THE BOTTOM FLANGE OF THE FASCIA GIRDER, UNLESS THE GIRDER WEB IS ADEQUATELY SUPPORTED TO PREVENT BUCKLING DUE TO LOADS FROM WEB-BEARING FORM SUPPORTS.

ALL FASTENERS ARE 7/8" DIAMETER HS (ASTM A 325) BOLTS, EXCEPT AS NOTED.

REAM SUBDRILLED OR SUBPUNCHED HOLES FOR FIELD SPLICES IN THE FABRICATION SHOP.

DO NOT MAKE WELDS BY MANUAL SHIELDED METAL ARC PROCESS FOR PRIMARY GIRDER WELDS, SUCH AS FLANGE-TO-WEB WELDS OR FOR SHOP SPLICES OF WEBS AND FLANGES.

PROVIDE WELDED STUD SHEAR CONNECTORS MANUFACTURED FROM STEEL CONFORMING TO ASTM A 108.

METALLIZE STRUCTURAL STEEL IN ACCORDANCE WITH THE SPECIAL PROVISIONS - SHOP METALLIZING AND PAINTING OF NEW STRUCTURAL STEEL. THE FLANGE, BEARING STIFFENERS, AND SPLICE PLATES INDICATED ARE OVERSIZED IN WIDTH TO ACCOMODATE THE REDUCTION DUE TO EDGE GRINDING.

PAINT STRUCTURAL STEEL IN ACCORDANCE WITH ADOT STANDARDS.

STABILITY OF PARTIAL GIRDERS AND COMPLETE GIRDERS IS TO BE MAINTAINED BY THE CONTRACTOR DURING ERECTION. UNTIL ALL GIRDERS AND DIAPHRAGMS ARE IN-PLACE AND ALL BOLTS ARE PROPERLY INSTALLED. ERECTION LOADS INCLUDING SELF-WEIGHT OF THE STEEL MEMBERS, WIND LOADING, AND CONSTRUCTION LIVE LOAD EFFECTS ARE TO BE EVALUATED BY THE CONTRACTOR FOR STABILITY, STRESSES, AND DEFLECTIONS ON THE STEEL MEMBERS DURING ANY STAGE OF ERECTION.

BRACE STEEL FRAMEWORK IN LONGITUDINAL AND LATERAL DIRECTIONS UNTIL MEMBERS ARE IN STABLE (FINAL BRACED) CONDITION.

PROVIDE ADDITIONAL TEMPORARY BRACING BETWEEN THE FASCIA AND THE FIRST INTERIOR GIRDER IF THE FASCIA GIRDER COULD ROTATE, IN THE OPINION OF THE ENGINEER, WHEN PLACING DECK CONCRETE.

PERFORM CHARPY V-NOTCH TESTS ON ALL DIAPHRAGMS, CROSS-FRAMES, BRACING, AND CONNECTING PLATES PER ADOT STANDARDS.

GEOTECHNICAL & FOUNDATIONS

FOUNDATION DESIGN IS BASED ON GEOTECHNICAL INVESTIGATION PERFORMED BY NINYO & MOORE, PROJECT NO. 608580001, DATED MAY 14, 2025. BASED ON THE GEOTECHNICAL REPORT, THE FOLLOWING HAS BEEN ASSUMED:

FROST DEPTH	1'-0"
ALLOWABLE NET SOIL BEARING PRESSURE	10,000 PSF (SUSTAINED DL+LL) 13,333 PSF (SHORT-TERM WIND/SEISMIC)
EQUIVALENT ACTIVE (UNRESTRAINED) FLUID PRESSURE	90 PCF
EQUIVALENT AT-REST (RESTRAINED) FLUID PRESSURE	100 PCF
EQUIVALENT PASSIVE FLUID PRESSURE	280 PCF
COEFFICIENT OF FRICTION	0.35

SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND PROJECT SPECIFICATIONS.

IF DISCREPANCIES EXIST BETWEEN THE CONTRACT DOCUMENTS AND THE GEOTECHNICAL REPORT, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN, UNLESS DETERMINED OTHERWISE BY THE ENGINEER IN WRITING.

ALL FOUNDATION EXCAVATIONS AND BEARING SURFACES SHALL BE OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER / TESTING AGENCY PRIOR TO PLACING FOUNDATION CONCRETE.

DEPTHS/ELEVATIONS SHOWN ON PLANS AND DETAILS ARE MINIMUM. NOTIFY ENGINEER OF ANY NECESSARY DEVIATIONS FROM THE FOOTING ELEVATIONS SHOWN ON THE DRAWINGS PRIOR TO CONSTRUCTING THE FOOTINGS.

BACKFILL FOUNDATION WALLS WITH FREE DRAINING FILL AND PROVIDE A SUBSURFACE DRAINAGE SYSTEM BASED ON THE GEOTECHNICAL REPORT RECOMMENDATIONS.

ALL FOUNDATION WALLS WHERE GRADE IS NOT PRESENT ON BOTH SIDES ARE DESIGNED TO BE RESTRAINED IN THE COMPLETED STRUCTURE. CONNECTING CONSTRUCTION SHALL BE INSTALLED, INCLUDING INSTALLATION OF FLOOR/ ROOF DIAPHRAGM AND THEIR ATTACHMENTS, PRIOR TO BACKFILLING WALL. CONCRETE DIAPHRAGMS SHALL REACH 100% OF REQUIRED 28 DAY COMPRESSIVE STRENGTH PRIOR TO BACKFILLING. ALTERNATIVELY, THE CONTRACTOR SHALL PROVIDE DESIGN AND CONSTRUCTION OF TEMPORARY BRACING THAT PROTECTS THE WALL AGAINST OVERSTRESS OR MOVEMENT UNTIL ALL SUPPORTING CONSTRUCTION IS COMPLETE AND CURED. THE CONTRACTOR'S ENGINEER IS RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING.

BACKFILLING AGAINST FOUNDATION WALLS WHERE GRADE IS PRESENT ON BOTH SIDES SHALL BE PERFORMED SO DIFFERENCE IN SOIL HEIGHT ON EACH SIDE OF THE WALL DOES NOT EXCEED 2-FT.

NEW FOOTINGS LOCATED IMMEDIATELY ADJACENT TO EXISTING FOOTINGS SHALL BE FOUNDED AT THE SAME ELEVATION AS THE EXISTING FOUNDATIONS, UNO. THE EXISTING FOOTINGS SHALL NOT BE UNDERMINED BY NEW CONSTRUCTION, UNO.

DETERMINE THE LOCATION OF ALL NEW/EXISTING UNDERGROUND UTILITIES IN AND ADJACENT TO THE AREA OF WORK PRIOR TO COMMENCING EXCAVATION. COORDINATE UTILITY LOCATIONS WITH FOUNDATIONS AS REQUIRED.

CONTRACTOR SHALL CONFIRM THE AS-BUILT LOCATION OF ANY POTENTIAL NEW OR EXISTING STRUCTURES OR OBJECTS WITHIN THE ZONE OF EXCAVATION INCLUDING WORK PERFORMED AS A PORTION OF THIS PROJECT BEFORE EXCAVATING OR INSTALLING FOUNDATION ELEMENTS. NOTIFY THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH ANY EXCAVATIONS OR OTHER SITE WORK, IF THE EXCAVATION WILL CUT BELOW AN ADJACENT STRUCTURE'S BOTTOM OF FOOTING ELEVATION OR IF AN ADJACENT STRUCTURE IS UP SLOPE FROM THE PLANNED SITE WORK.

CONTRACTOR SHALL PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER OR SEEPAGE.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, UNDERPINNING AND PROTECTION OF EXISTING CONSTRUCTION. COMPLY WITH ALL APPLICABLE OSHA REGULATIONS.

DRILLED CONCRETE PIERS AND SHAFTS

DRILLED PIERS SHALL EXTEND INTO SUITABLE MATERIAL CAPABLE OF MEETING GEOTECHNICAL REQUIREMENTS AND AS NOTED ON THE DRAWINGS. HEAVY DUTY DRILL BITS MAY BE NEEDED TO INSTALL PIERS TO FINAL BEARING ELEVATION AND SHOULD BE ANTICIPATED IN THE CONTRACT PRICE. SEE GEOTECHNICAL REPORT FOR BORINGS.

HOLES SHOULD BE FILLED WITH CONCRETE WITHIN 12 HOURS OF BEING DRILLED. HOLES WILL NEED TO BE CLEANED, REBAR CAGE INSTALLED, AND INSPECTED PRIOR TO PLACING CONCRETE.

REFER TO ACI 336.1 "SPECIFICATION FOR THE CONSTRUCTION OF DRILLED PIERS" FOR TOLERANCE REQUIREMENTS.

DRILLED PIERS SHALL BEAR ON MACHINE CLEANED, INSPECTED SOIL STRATA. BOTTOM OF DRILLED PIER ELEVATIONS NOTED ON THE DRAWINGS ARE APPROXIMATE AND ARE INCLUDED FOR BIDDING PURPOSES ONLY. FINAL BEARING ELEVATIONS SHALL BE ADJUSTED SUCH THAT EACH DRILLED PIER BEARS LEVEL AT BOTTOM OF SOCKET.

THE GEOTECHNICAL ENGINEER/TESTING LABORATORY SHALL VERIFY SHAFT DIAMETER, DEPTH, BEARING STRATA, AND PROPER CLEANING OF INSTALLATION.

REBAR CAGE POSITION IN CENTER OF SHAFT SHALL BE HELD IN PLACE BY MEANS OF "WAGON WHEEL" REBAR POSITIONERS OR EQUIVALENT.

CONTRACTOR TO DETERMINE THE NEED FOR REMOVABLE STEEL CASINGS TO MAINTAIN DRILLED PIER SHAPE IN UNSTABLE SOIL STRATA AND INCLUDE COST IN THE CONTRACT PRICE.

CONCRETE REINFORCEMENT

REINFORCING STEEL SHALL BE ASTM A615, GRADE 60, UNO.

REINFORCING BAR SPLICES SHALL BE AS INDICATED ON THE DRAWINGS AND IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318 AND THE REINFORCING SPLICE LENGTH SCHEDULE.

ALL HORIZONTAL WALL AND BEAM REINFORCING SHALL BEND AROUND ALL CORNERS, LAP WITH INTERSECTING REINFORCEMENT, AND LAP SHALL CONFORM TO LAP SPLICE AND ANCHORAGE SCHEDULE PROVIDED, UNO.

ALL REINFORCEMENT SHALL BE HELD SECURELY IN POSITION WITH STANDARD ACCESSORIES IN CONFORMANCE WITH CRSI MANUAL OF STANDARD PRACTICE AND ACI 315 DURING CONCRETE PLACEMENT. NO WET SETTING OF REINFORCEMENT OR ACCESSORIES.

PROVIDE CORROSION RESISTANT ACCESSORIES SUCH AS PLASTIC COATED (NOT PLASTIC TIPPED) OR STAINLESS-STEEL CHAIRS IN ALL EXPOSED CONCRETE CONSTRUCTION. PRECAST CONCRETE CHAIRS OR SAND PLATE CHAIRS SHALL BE USED FOR THE SUPPORT OF REINFORCING ON GRADE. CONCRETE BLOCK OR CLAY MASONRY BRICK ARE NOT PERMITTED.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY DETAILED AS SUCH OR APPROVED BY THE ENGINEER IN WRITING.

MECHANICAL COUPLERS SHALL BE TYPE 2 COUPLERS CAPABLE OF SUSTAINING 125% Fy.

WELDING OF REINFORCEMENT SHALL CONFORM TO THE 2017 EDITION OF AWS D1.4 "STRUCTURAL WELDING CODE - REINFORCING STEEL". WELDED CONNECTIONS NOT SPECIFIED ON THE PLANS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE ENGINEER.

DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE AND SPACING AS THE VERTICAL REINFORCING, RESPECTIVELY, UNO.

ABBREVIATIONS

ABBREVIATIONS ARE AS SHOWN IN THE CONTRACT DOCUMENTS WITH THE FOLLOWING EXCEPTIONS:

#	REINFORCING BAR SIZE,
@	AT (SPACING)
Ø	DIAMETER
	BORING LOCATION
	DIRECTION OF TRAFFIC
APPROX.	APPROXIMATE
ABUT.	ABUTMENT
BFE	BOTTOM OF FOOTING ELEVATION
BRG	BEARING
CONSTR.	CONSTRUCTION
EL.	ELEVATION
EXP.	EXPANSION
FIX	FIXED
PGL	PROFILE GRADE
RD	ROAD
RDWY	ROADWAY
SHLDR	SHOULDER
SPA.	SPACES
STA.	STATION
TYP.	TYPICAL

VERTICAL CURVE DATA:

EL	=
VC	=
MO	=
SSD	=

HORIZONTAL CURVE DATA:

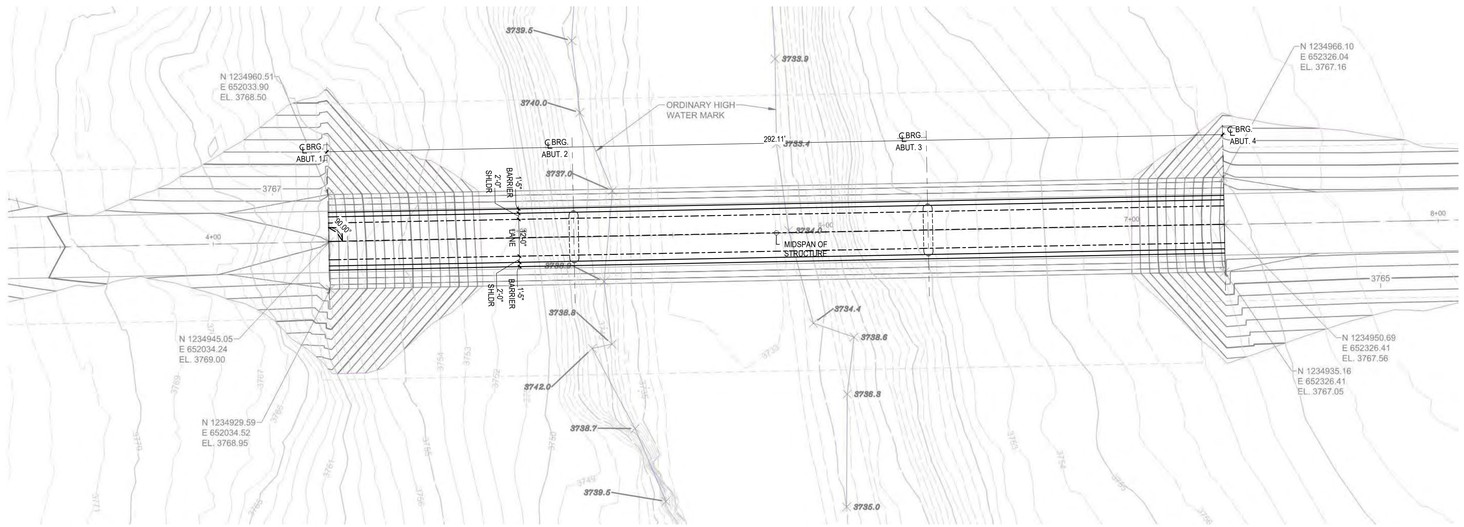
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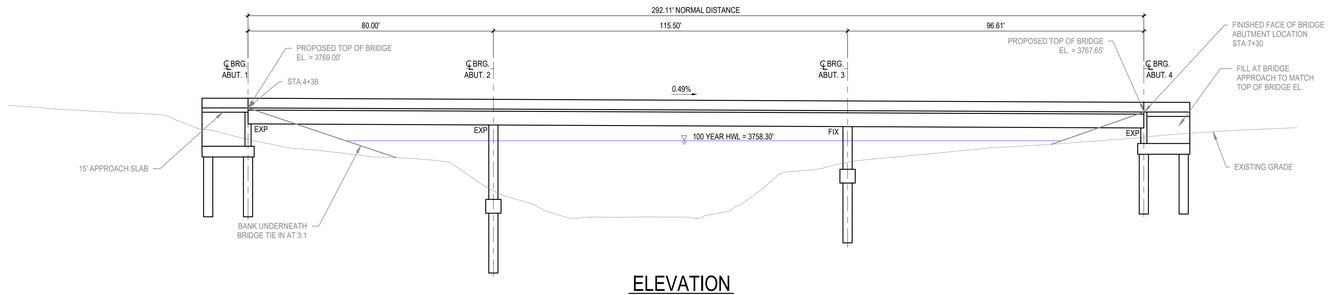
HYDRAULIC DATA:

DRAINAGE AREA	=	XX MI²
DESIGN FLOOD		
MAGNITUDE	=	XXXX CFS
FREQUENCY	=	XX YEARS
ELEVATION	=	XX FT
VELOCITY	=	XX FPS
100 YEAR FLOOD		
MAGNITUDE	=	XXXX CFS
ELEVATION	=	XX FT
VELOCITY	=	XX FPS

Structural Sheet List

1	GENERAL NOTES, PLAN, AND ELEVATION
2	STAKE-OUT PLAN
3	TYPICAL DECK SECTION & ELEVATION
4	ABUTMENTS - FOUNDATION PLAN & SECTIONS
5	INTERMEDIATE SUPPORTS - FOUNDATION PLAN & SECTIONS
6	ABUTMENT - TYPICAL SECTIONS
7	FRAMING PLAN
8	STEEL GIRDER DETAILS
9	FIELD SPLICE AND CAMBER DETAIL
10	BEARING DETAILS
11	CROSS FRAME DETAILS
12	END DIAPHRAGM - TYPICAL SECTIONS
13	SLAB PLAN & SECTIONS
14	APPROACH SLAB & DETAILS
TOTAL SHEETS: 14	





DLR GROUP
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- NOT FOR CONSTRUCTION -
McCARTHY

AGUA FRIA SOLAR
BRIDGE DESIGN
MARIANNA, ARKANSAS

30% DESIGN
01/09/2025
REVISIONS

30-25110-00

GENERAL NOTES, PLAN, AND ELEVATION

1

Autodesk Docs://30-25110-00 Agua Fria Solar/30-25110-00 Agua Fria Solar_ST_2024.rvt
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SG4400UD-MV-US

Turnkey Station for 1500 Vdc System MV Transformer Integrated



HIGH YIELD

- Advanced three-level technology, max. inverter efficiency 98.9 %
- Full power operation at 40 ℃ (104 ℉)
- Effective cooling, wide operation temperature

EASY O&M

- Integrated current, voltage and MV parameters monitoring function for online analysis and trouble shooting
- Modular design, easy for maintenance

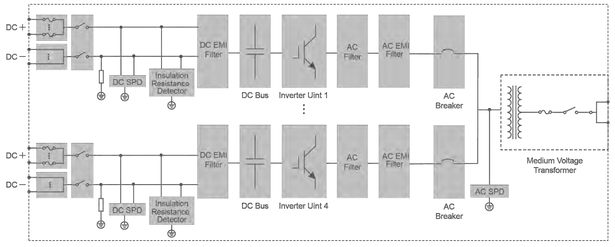
SAVED INVESTMENT

- Low transportation and installation cost due to 20-foot container size design
- DC 1500V system, low system cost
- Integrated MV transformer and LV auxiliary power supply
- Q at night optional

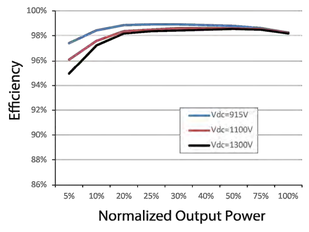
GRID SUPPORT

- Compliance with standards:UL 1741,UL 1741 SA/SB, IEEE 1547, Rule 21 and NEC code
- Low / High voltage ride through (L/HVRT), L/HFRT, soft start / stop
- Active & reactive power control and power ramp rate control

CIRCUIT DIAGRAM

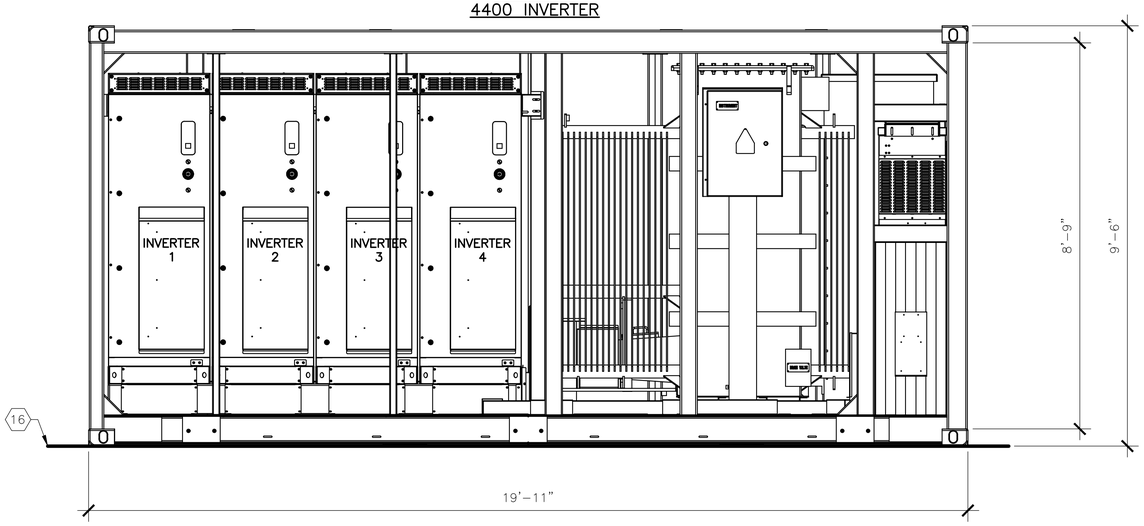


EFFICIENCY CURVE

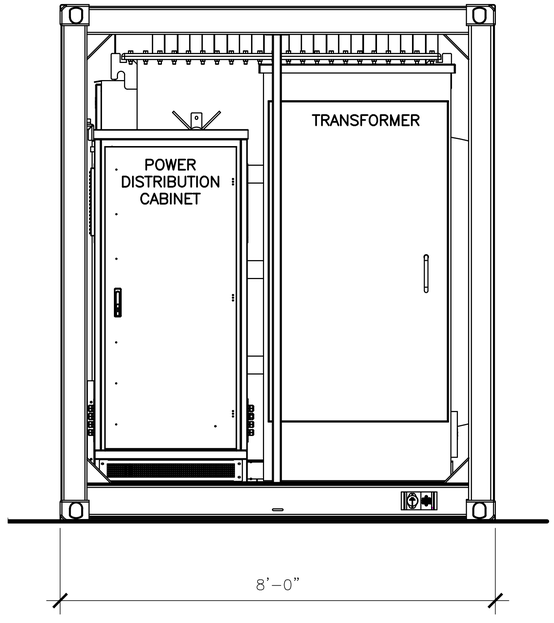


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SUNGROW
4400 INVERTER



EQUIPMENT PAD ELEVATION #2 (K.2 / –)
SCALE: NTS



EQUIPMENT PAD ELEVATION #3 (K.3 / –)
SCALE: NTS

1. System Overview

The Fluence Gridstack Battery Energy Storage Systems (BESS) are customized to user site requirements using standardized modular components, designed for the most demanding market applications.

Each Fluence BESS consists of power, control, and communication components integrated into easily configured self-contained Cores. Multiple Cores may be connected to a common AC power bus to form an Array.



1. Battery Enclosure
2. Power Conversion System (PCS)
3. Core Transformer
4. Core Support Enclosure (CSE)
5. Core Auxiliary Power Panel

Figure 1 - 1: Gridstack Pro 2000 Core Equipment, Typical



1. Battery Enclosure
2. Power Conversion System (PCS)
3. Core Transformer
4. Core Support Enclosure (CSE)
5. Core Auxiliary Power Panel

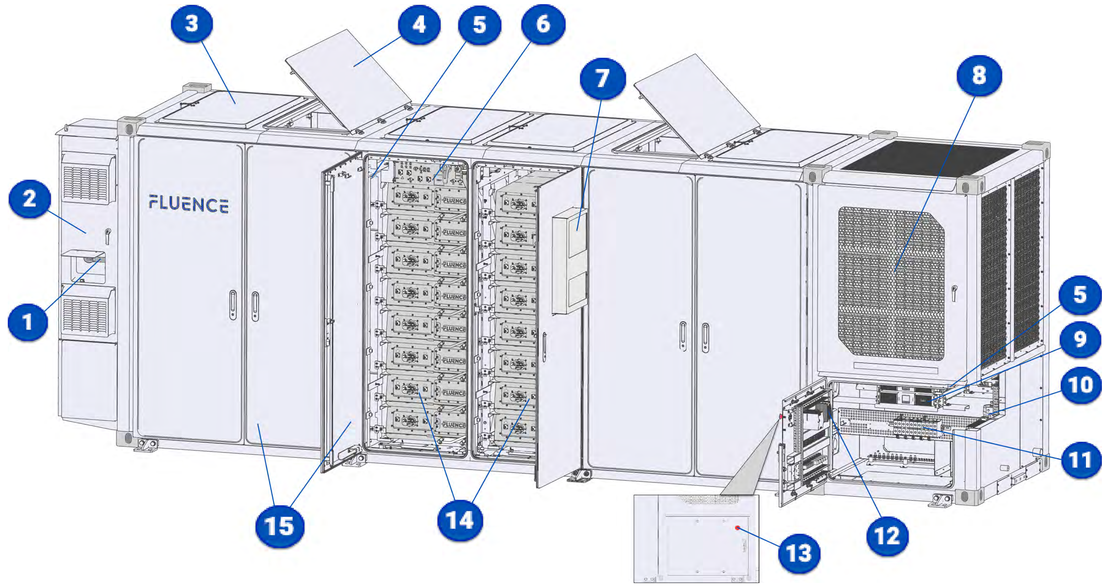
Figure 1 - 2: Gridstack Pro 5000 Core Equipment, Typical

Gridstack Pro Core and Array Installation

Apart from the core equipment shown in above, BESS also includes the following equipment at Array level:

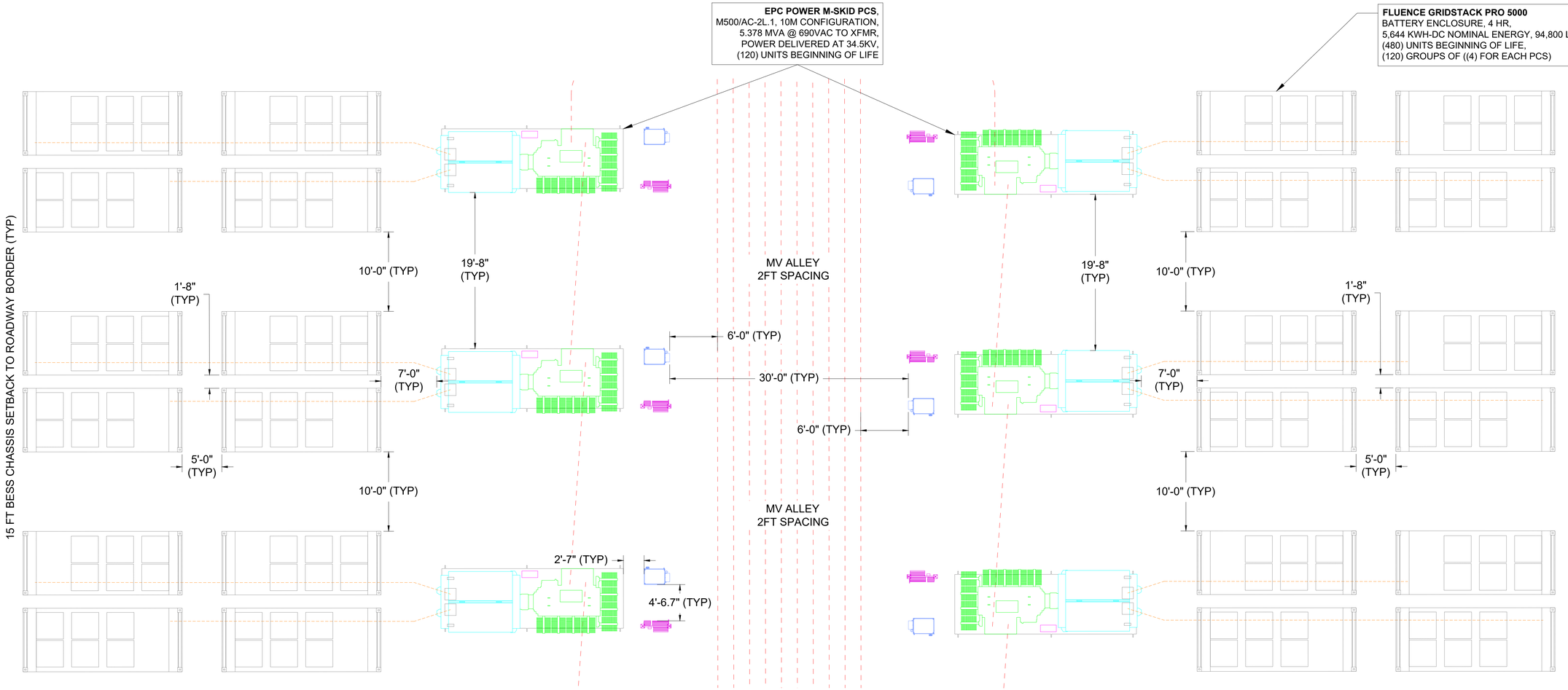
- Array Telco Rack
- Master Fire Alarm Control Unit (MFACU)

1.1 Major Battery Enclosure Components

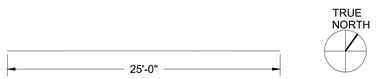


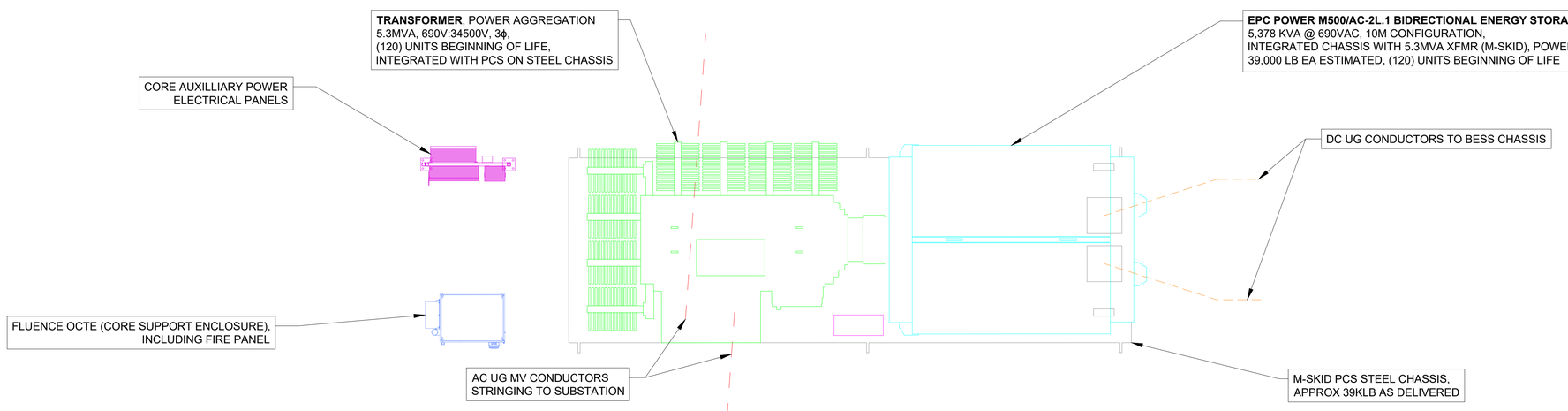
1. DC Disconnect Switch
2. DC Box
3. Deflagration Panels x 4
4. Passive Vents x 2
5. Multi-criteria Detector x 4
6. DCPM x 3
7. HVAC
8. Chiller Compartment
9. UPS
10. Aerosol Canister
11. AC Power Terminal Block
12. Enclosure Controller
13. F-Stop Button
14. Battery Modules
15. Enclosure Door x 6
16. Electronic Circuit Breaker (ECB) (not shown)

Figure 1 - 3: Major Gridstack Pro 2000 Battery Enclosure Components - Typical



1 PLAN VIEW OF BESS YARD WITH 10 FOOT AISLES - DETAIL
Scale: PER FIDUCIAL





2 PLAN VIEW OF CORE PCS EQUIPMENT GROUP, TYP OF (120)
Scale: PER FIDUCIAL

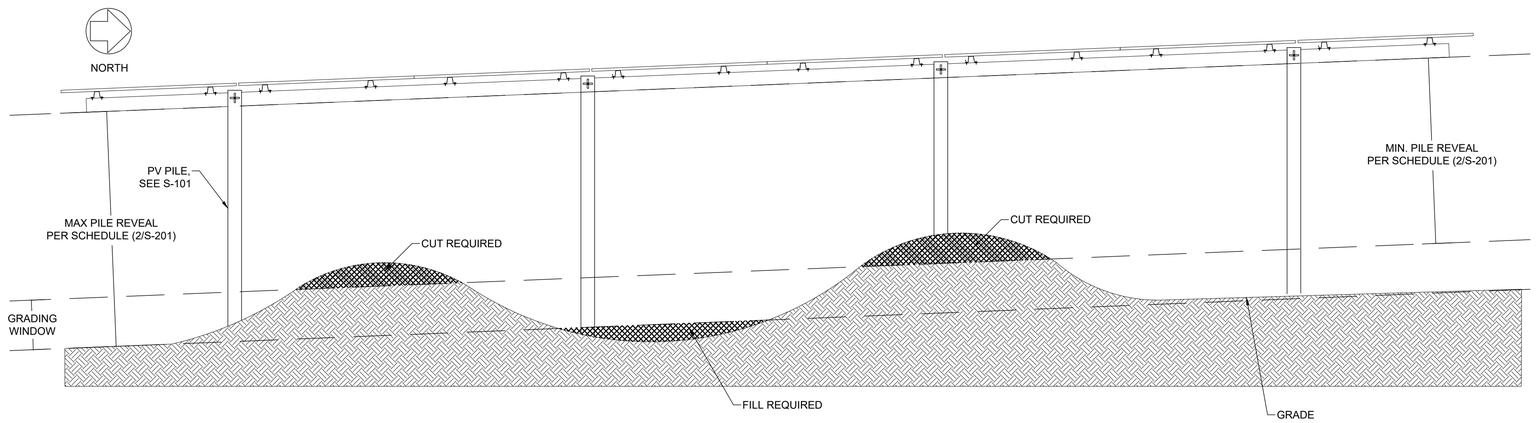
LONGROAD AGUA FRIA BESS
BESS YARD LAYOUT - DETAIL
450MW, 1800MWH

ISSUED FOR PRICING
NOT FOR CONSTRUCTION

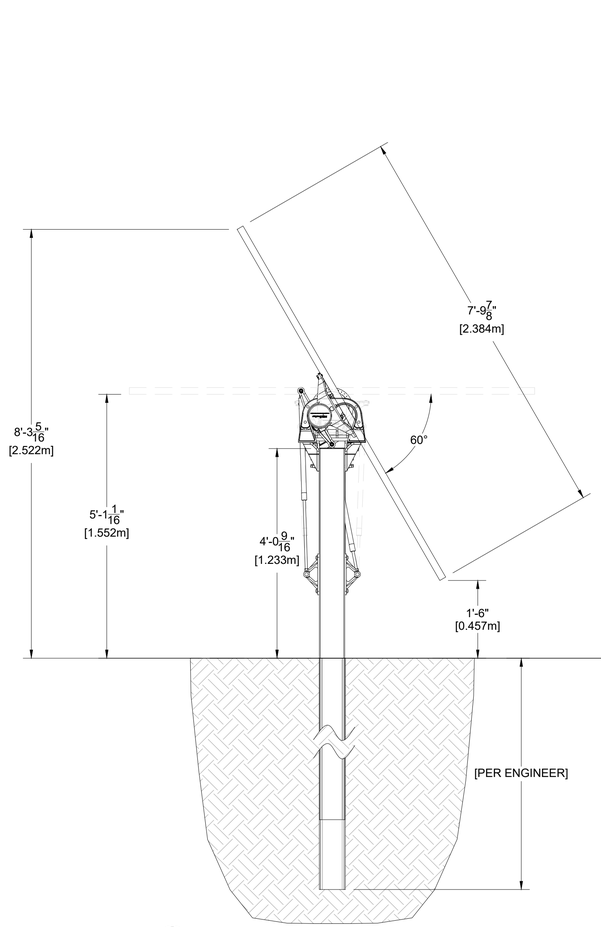
v.03 2025-0708 dsm

BESS LAYOUT DETAIL

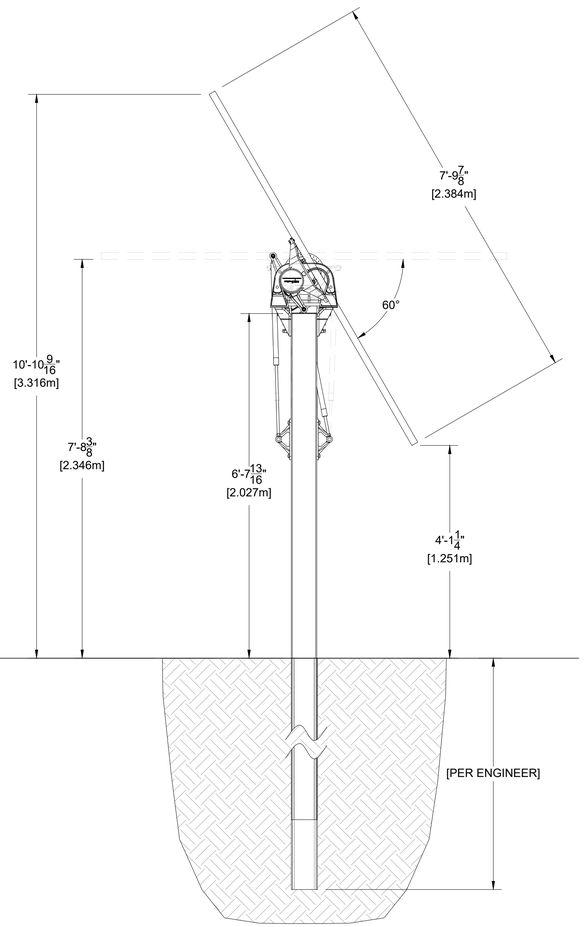
E1.03



1 S-201 GRADING TOLERANCE EXHIBIT
NOT TO SCALE



1A - TYPICAL MINIMUM PIER HEIGHT DETAIL
SCALE: N.T.S.



1B - TYPICAL MAXIMUM PIER HEIGHT DETAIL
SCALE: N.T.S.

CLIENT

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SHEET NAME
SITE DETAILS AND PILE REVEAL TOLERANCES

SHEET NUMBER
S-201

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EAGLE MODULES

THE MOST DEPENDABLE SOLAR PRODUCT



EAGLE® G7B

605-630 WATT • N-TYPE BIFACIAL

Positive power tolerance of 0~+3%

- NYSE-listed since 2010, Bloomberg Tier 1 manufacturer
- Top performance in the strictest 3rd party labs
- Automated manufacturing utilizing artificial intelligence
- Vertically integrated, tight controls on quality
- Premium solar factories in USA and Vietnam

KEY FEATURES

N-Type Technology
N-type cells offer Jinko's in-house TOPCon technology with better performance and improved reliability.

Multi Busbar Half Cell Technology
Better light trapping and current collection to improve module power output and reliability.

Bifacial Power Gain
N-Type architecture increases bifaciality for higher backside bonus and better lifetime yield.

Low Temperature Coefficient
Best in class temperature coefficient for highest lifetime energy yield in all climates.

Industrial Grade Construction
Fire Type 29 with optimized dual-glass construction and aluminum frame for highest mechanical load resistance.

Shade Tolerant
Twin array design allows continued performance even with shading by trees or debris.

Enhanced Mechanical Strength
Tested and certified to withstand:
5400 PA front side max static test load
2400 PA rear side max static test load

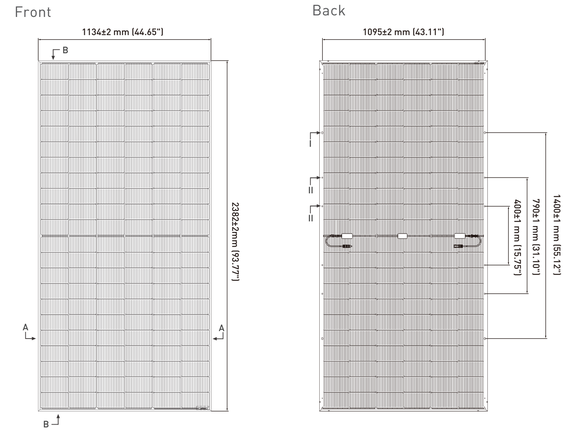
Warranty
12-year product and 30-year linear power warranty.

- ISO9001:2015 Quality Standards
- ISO14001:2015 Environmental Standards
- IEC61215, IEC61730 certified products
- ISO45001: 2018 Occupational Health & Safety Standards
- UL61730 certified products

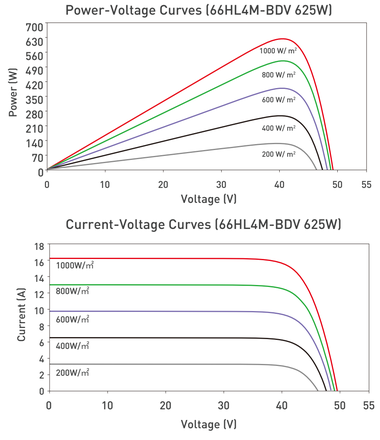
BUILDING YOUR TRUST IN SOLAR. WWW.JINKOSOLAR.US

Jinko Solar

ENGINEERING DRAWINGS



ELECTRICAL PERFORMANCE



MECHANICAL CHARACTERISTICS

No. of Half Cells	132 (2 x 66)
Dimensions	2382 x 1134 x 30mm (93.77 x 44.65 x 1.18in)
Weight	32.4kg (71.42lbs)
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68 Rated
Output Cables	12 AWG, 1400mm (55.12in)
Fire Type	Type 29
Pressure Rating	5400Pa (Snow) & 2400Pa (Wind)

TEMPERATURE CHARACTERISTICS

Temperature Coefficients of Pmax	-0.29%/°C
Temperature Coefficients of Voc	-0.25%/°C
Temperature Coefficients of Isc	0.045%/°C
Nominal Operating Cell Temperature (NOCT)	45±2°C
Bifacial Factor	80±5%

MAXIMUM RATINGS

Operating Temperature (°C)	-40°C - +85°C
Maximum System Voltage	1500VDC
Maximum Series Fuse Rating	35A

PACKAGING CONFIGURATION

(Two pallets = One stack)

36pcs/pallet, 14pallets/container, 504pcs/40 HQ Container

WARRANTY

12-year product and 30-year linear power warranty

1st year degradation not to exceed 1%, each subsequent year not to exceed 0.4%, minimum power at year 30 is 87.4% or greater.

ELECTRICAL CHARACTERISTICS

Module Type	JKM605-66HL4M-BDV		JKM610-66HL4M-BDV		JKM615-66HL4M-BDV		JKM620-66HL4M-BDV		JKM625-66HL4M-BDV		JKM630-66HL4M-BDV	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	605Wp	457Wp	610Wp	461Wp	615Wp	464Wp	620Wp	468Wp	625Wp	472Wp	630Wp	476Wp
Maximum Power Voltage (Vmp)	40.31V	37.76V	40.46V	37.92V	40.60V	38.10V	40.74V	38.25V	40.88V	38.44V	41.02V	38.62V
Maximum Power Current (Imp)	15.01A	12.10A	15.08A	12.15A	15.15A	12.19A	15.22A	12.24A	15.29A	12.28A	15.36A	12.32A
Open-circuit Voltage (Voc)	48.48V	46.05V	48.68V	46.24V	48.88V	46.43V	49.08V	46.62V	49.28V	46.81V	49.48V	47.00V
Short-circuit Current (Isc)	15.90A	12.83A	15.96A	12.88A	16.02A	12.93A	16.08A	12.98A	16.14A	13.03A	16.20A	13.08A
Module Efficiency STC (%)	22.40%		22.58%		22.77%		22.95%		23.14%		23.32%	

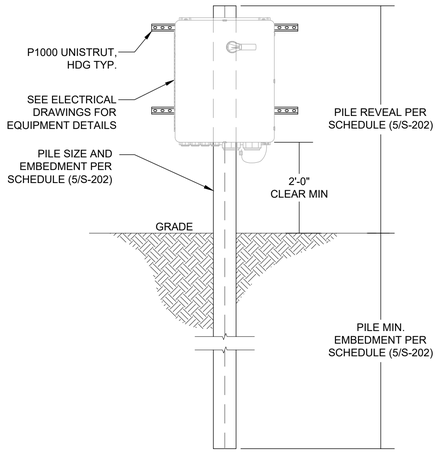
*STC: Irradiance 1000W/m² Cell Temperature 25°C AM = 1.5
NOCT: Irradiance 800W/m² Ambient Temperature 20°C AM = 1.5 Wind Speed 1m/s

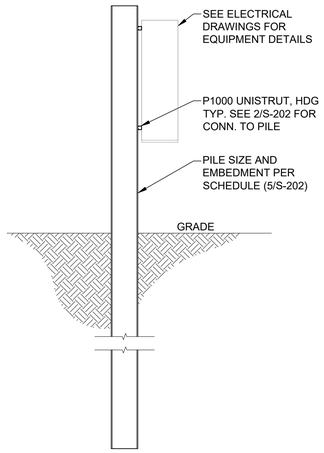
*Power measurement tolerance: ±3%

The company reserves the final right for explanation on any of the information presented hereby. JKM605-630N-66HL4M-BDV-F1-US

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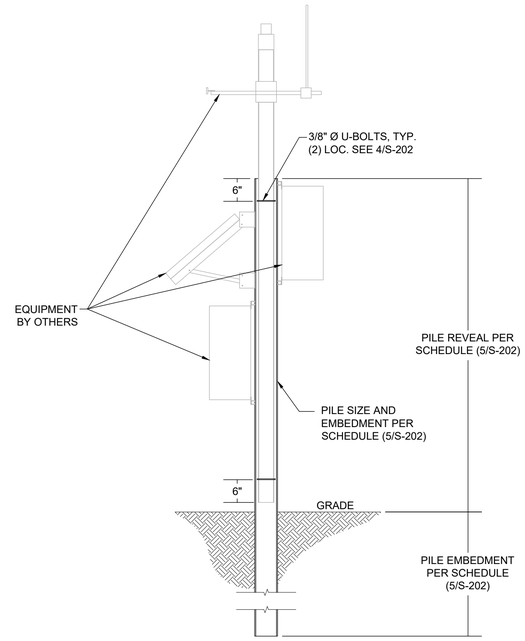
Jinko Solar



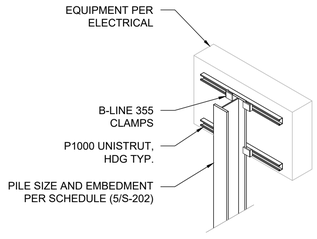


1 S-202 COMBINER BOX FOUNDATION
SCALE: 1" = 20'

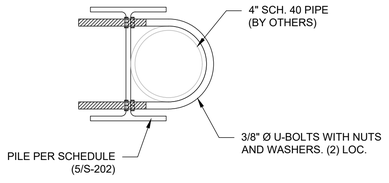
NOTES:
1. P1000 REFERS TO UNISTRUT STRUCTURAL CHANNEL. FABRICATOR TO DETERMINE HOLE / SLOT PROFILE BASED ON EQUIPMENT MOUNTING LOCATIONS. "KO", "HS", "H3", "WT", "T", PROFILES ARE ACCEPTABLE. "SL" & "DS" SLOT PROFILE ARE NOT ACCEPTABLE.
2. B-LINE 355 CLAMPS ARE SUFFICIENT AS LONG AS THEY ARE THE EXTERIOR RATED GALVANIZED VERSION (355ZN).
3. STRUT FRAME AND HARDWARE SHALL BE HOT DIPPED GALVANIZED.
4. USE 3/8" UNISTRUT BOLTS, CHANNEL NUTS AND HARDWARE.
5. PILE SECTION SHALL MEET OR EXCEED THE SMALLEST SOLAR PV RACKING PILE SPECIFIED FOR THE PROJECT.
6. VALIDATION DESIGN CAN BE PROVIDED FOR OTHER POST CONFIGURATIONS.
7. COMBINER BOX SHALL BE MOUNTED AT A MINIMUM 12" ABOVE THE MAX HWL.
8. SEE ELEC. DRAWINGS FOR INFORMATION NOT SHOWN.
9. ALL MOUNTING LOCATIONS TO BE VERIFIED BY FABRICATOR.



3 S-202 MET STATION FOUNDATION
SCALE: 1" = 20'



2 S-202 COMBINER BOX CONNECTION
SCALE: 1" = 20'



4 S-202 MET STATION U BOLT DETAIL
SCALE: 1" = 4'-0"

CLIENT

PROJECT
AGUA FRIA SOLAR

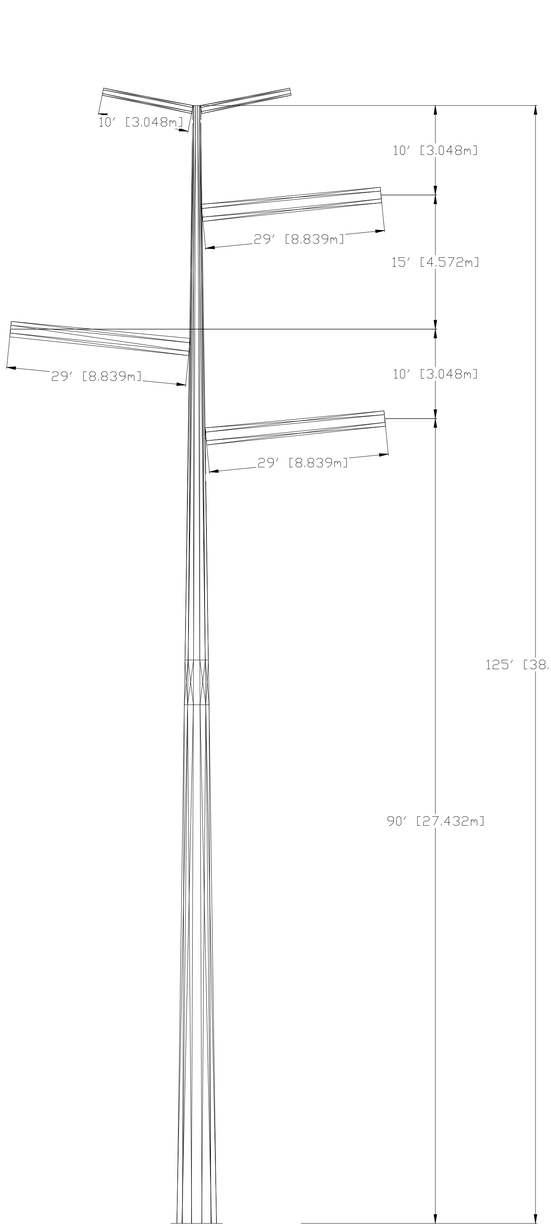
LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

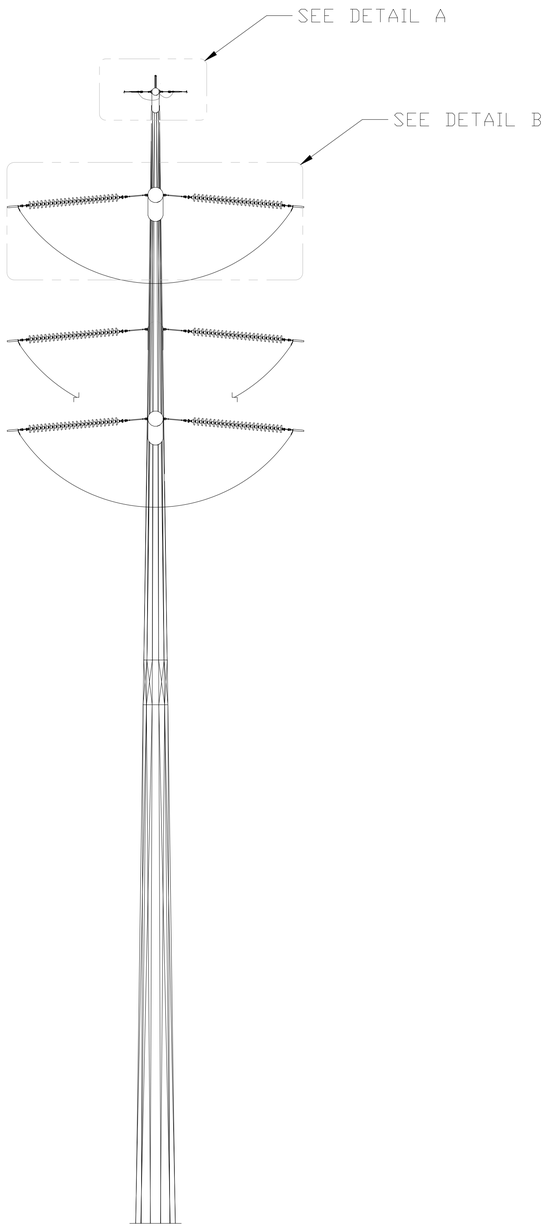
SHEET NAME
COMBINER BOX & MET STATION FOUNDATION

SHEET NUMBER
S-202

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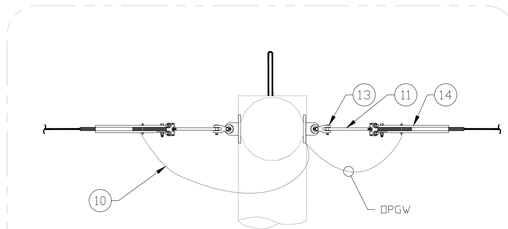
FRONT VIEW
SCALE: 1/8"=1'-0"



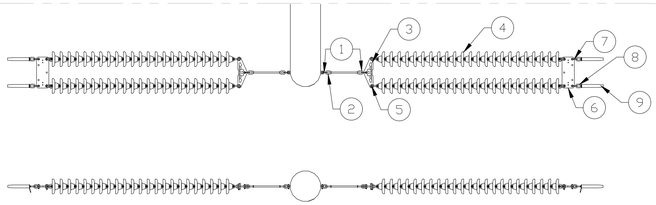
SIDE VIEW
SCALE: 1/8"=1'-0"

EHV DEADEND, 500KV					
DOUBLE INSULATOR 50K LB ASSEMBLY, 500KV					
ITEM	PART NUMBER	DESCRIPTION	QUANTITY	MATERIAL	UBS lB
1	974153001	ANCHOR SHACKLE	2	FORGED STEEL	120,000
2	LK150	CHAIN LINK	1	FORGED STEEL	150,000
3	947604006	YOKE PLATE	1	GALVANIZED STEEL	100,000
4	SEE CHART	INSULATOR, ANSI 52-11	–	POLYMER	50,000
5	SC501BNKSN	SOCKET CLEVIS	2	DUCTILE IRON	50,000
6	YPX5011275	YOKE PLATE	1	GALVANIZED STEEL	50,000
7	AS50IIBNKSN	ANCHOR SHACKLE	3	FORGED STEEL	60,000
8	FHOEC5012BNKSN	CHAIN EYE – CLEVIS EXT. LINK (12")	1	FORGED STEEL	50,000
9		COMPRESSION DEADEND W/TERMINAL	3	ALUMINUM	FULL TENSION
10		OPGW-93KA2S – 87KN			
11		LINK PLATE, HOLE SPACING			
12		#4 CU BONDING JUMPER			
13		Y-CLEVIS CLEVIS, ROTATED 90			
14		BOLTED DEASN-END FOR OPGW			

NOTES:
1) LINE ANGLE (0) WILL CHANGE DEPENDING ON STRUCTURE LOCATION. SEE STAKING TABLES AND/OR PLAN AND PROFILES FOR STRUCTURE LINE ANGLES.



DETAIL "A"
OPGW DEAD-END ASSEMBLY
SCALE: NTS



DETAIL "B"
DEAD-END INSULATOR ASSEMBLY
SCALE: 1/4"=1'-0"

DEADEND POLE AND HEAVY ANGLE FOR 500 kV

PRELIMINARY - NOT FOR CONSTRUCTION

FASTGRID

FastGrid, LLC 225 E Germann Road Suite 310
Gilbert, AZ 85297

REV	DESCRIPTION	DATE
00	PRELIMINARY DESIGN DRAWING	11/25/24

PROJECT NAME:
AGUA FRIA
PV SOLAR POWER
SUBSTATION FACILITY

PROJECT ADDRESS:
YAVAPAI COUNTY
ARIZONA

SEAL: PRELIMINARY

DATE: 11/25/24
PROJECT #: 100082
DRAWN BY: AS
CHECKED BY: LV

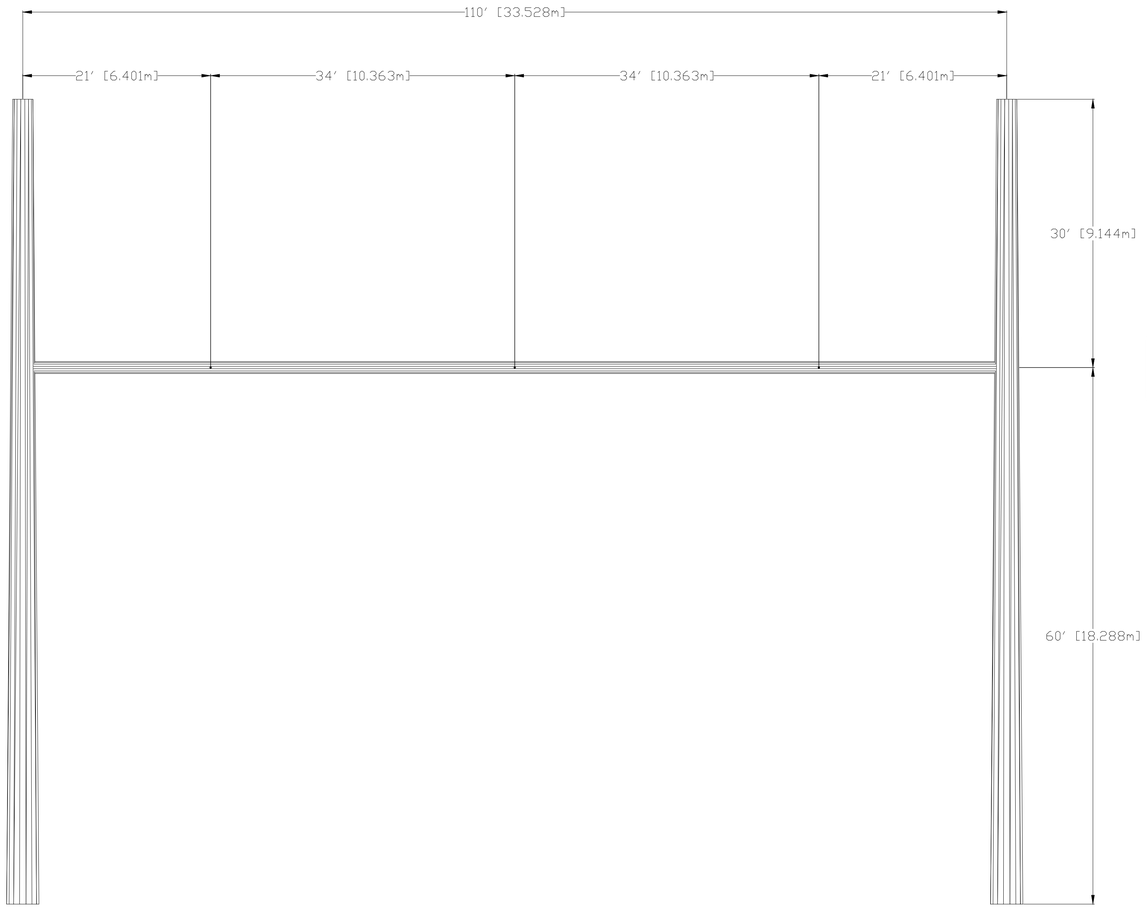
SHEET NAME:
STRUCTURE DETAILS

SHEET #: E-3021
REV #: 00

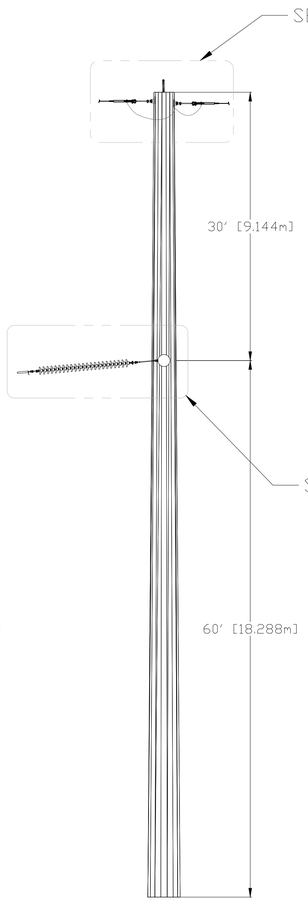
PLOT DATE: martes, noviembre 26, 2024
PLOT BY: Diana
SAVED BY: Diana
LOCATION: C:\USERS\DIANA\WISERGY\PM - AGUA FRIA 500 KV SUBSTATION\03. WORKING\AGUA FRIA 500KV-LTTCADIE-3021

EHV DEADEND, 500KV					
DOUBLE INSULATOR 50K LB ASSEMBLY, 500KV					
ITEM	PART NUMBER	DESCRIPTION	QUANTITY	MATERIAL	UBS lB
1	974153001	ANCHOR SHACKLE	2	FORGED STEEL	120,000
2	LK150	CHAIN LINK	1	FORGED STEEL	150,000
3	947604006	YOKE PLATE	1	GALVANIZED STEEL	100,000
4	SEE CHART	INSULATOR, ANSI 52-11	–	POLYMER	50,000
5	SC501BNKSN	SOCKET CLEVIS	2	DUCTILE IRON	50,000
6	YPX50111275	YOKE PLATE	1	GALVANIZED STEEL	50,000
7	AS50IBNKSN	ANCHOR SHACKLE	3	FORGED STEEL	60,000
8	FHOEC5012BNKSN	CHAIN EYE – CLEVIS EXT. LINK (12")	1	FORGED STEEL	50,000
9		COMPRESSION DEADEND W/TERMINAL	3	ALUMINUM	FULL TENSION
10		OPGW-93KA2S – 87KN			
11		LINK PLATE, HOLE SPACING			
12		#4 CU BONDING JUMPER			
13		Y-CLEVIS CLEVIS, ROTATED 90			

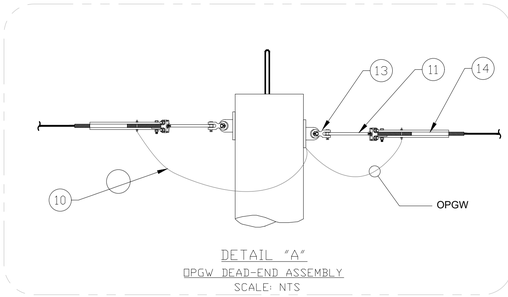
NOTES:
1) LINE ANGLE (θ) WILL CHANGE DEPENDING ON STRUCTURE LOCATION. SEE STAKING TABLES AND/OR PLAN AND PROFILES FOR STRUCTURE LINE ANGLES.



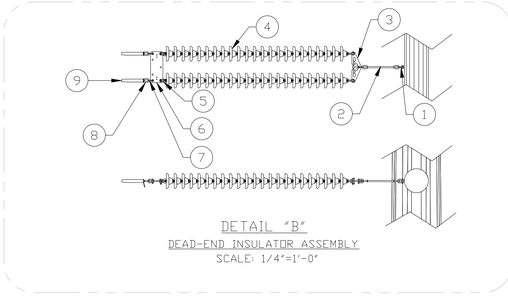
FRONT VIEW
SCALE: 1/8"=1'-0"



SIDE VIEW
SCALE: 1/8"=1'-0"



DETAIL "A"
OPGW DEAD-END ASSEMBLY
SCALE: NTS



DETAIL "B"
DEAD-END INSULATOR ASSEMBLY
SCALE: 1/4"=1'-0"

DEADEND H-FRAME 500 kV
FOR COLLECTION SUBSTATION AND DUGAS SUBSTATION

PRELIMINARY - NOT FOR CONSTRUCTION

FASTGRID

FastGrid, LLC 225 E Germann Road Suite 310
Gilbert, AZ 85297

REV	DESCRIPTION	DATE
00	PRELIMINARY DESIGN DRAWING	11/25/24

PROJECT NAME:
AGUA FRIA
PV SOLAR POWER
SUBSTATION FACILITY

PROJECT ADDRESS:
YAVAPAI COUNTY
ARIZONA

SEAL: PRELIMINARY

DATE: 11/25/24
PROJECT #: 100082
DRAWN BY: AS
CHECKED BY: LV

SHEET NAME:
STRUCTURE DETAILS

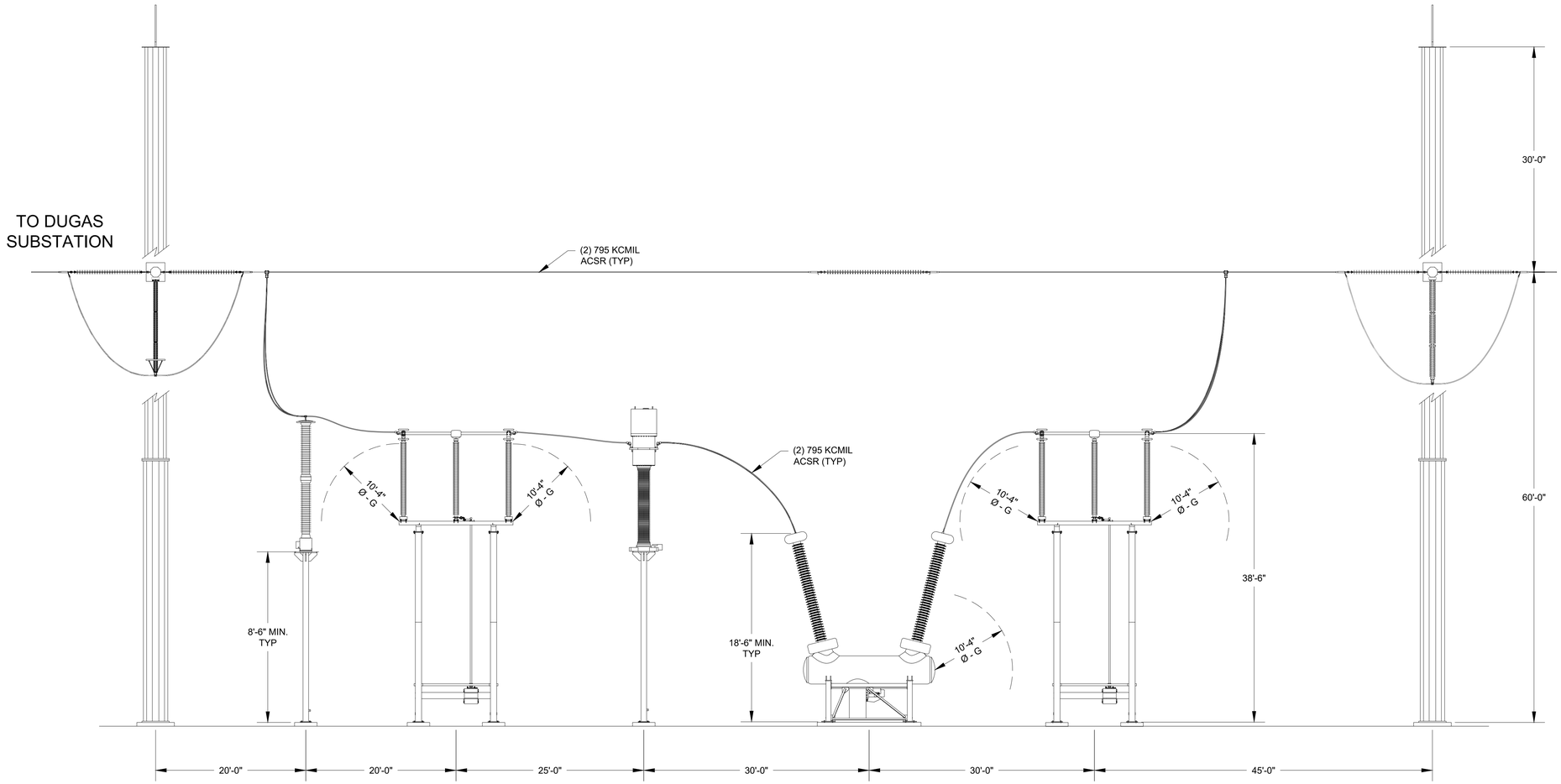
SHEET #: E-3020
REV #: 00

PLOT DATE: martes, noviembre 26, 2024
PLOT BY: Diana
SAVED BY: WS-06
LOCATION: C:\USERS\DIANA\WISERGY\PM - AGUA FRIA 500 KV SUBSTATION\03. WORKING\AGUA FRIA 500KV-LTC\ADE-3020

MINIMUM CLEARANCE						
VOLTAGE		MINIMUM METAL-TO-METAL DISTANCE FOR RIGID BUS PHASE-TO-PHASE	DESIGN CENTERLINE TO CENTERLINE PHASE SPACING FOR RIGID BUS	RECOMMENDED CLEARANCE TO GROUND PARTS FOR RIGID BUS	MINIMUM CLEARANCE BETWEEN OVERHEAD BUS & GROUND FOR PERSONNEL SAFETY	MINIMUM CLEARANCE BETWEEN OVERHEAD BUS AND ROADWAY
KV	BIL					
500	1550	25'-0"	25'-0"	10'-4"	18'-6"	30'-0"
34.5	200	1'-6"	4'-0"	1'-3"	10'-0"	22'-0"

GENERAL NOTES

1. EQUIPMENT SHOWN FOR REFERENCE ONLY. ACTUAL EQUIPMENT MAY VARY.
2. IF ACTUAL EQUIPMENT VARIES FROM EQUIPMENT SHOWN, CONTRACTOR IS RESPONSIBLE FOR INSTALLING EQUIPMENT TO ENSURE CORRECT ELECTRICAL FUNCTIONALITY, TO MAINTAIN ALL REQUIRED ELECTRICAL CLEARANCE, AND TO VERIFY THAT THERE WILL BE NO CONSTRUCTABILITY ISSUES WITH EQUIPMENT AND APPURTENANCES.
3. CONTRACTOR TO VERIFY PHASING.
4. ALL HORIZONTAL BUS SPANS SHALL HAVE A 1/4" Ø WEEP HOLE AT MID SPAN.
5. DISTANCE FROM BOTTOM OF BASEPLATE TO TOP OF CONCRETE NOT TO EXCEED 2 TIMES ANCHOR BOLT DIAMETER.
6. ALL CLAMPS, CONNECTORS AND OTHER PARTS ENERGIZED AT THE 500kV LEVEL SHALL BE CORONA FREE HARDWARE TYPE.



A Elevation
SCALE: 1/8" = 1'

REFERENCE DRAWINGS

E-2001	COLLECTOR SUBSTATION - SWITCHING ONE-LINE DIAGRAM
E-2010	COLLECTOR SUBSTATION - GENERAL ARRANGEMENT
E-2011 THRU E-2015	COLLECTOR SUBSTATION - BUS ELEVATIONS

FastGrid, LLC 225 E Germann Road Suite 310
Gilbert, AZ 85297

REV	DESCRIPTION	DATE
00	PRELIMINARY DESIGN DRAWING	11/15/24

PROJECT NAME:
AGUA FRIA
PV SOLAR POWER
SUBSTATION FACILITY

PROJECT ADDRESS:
YAVAPAI COUNTY
ARIZONA

SEAL: PRELIMINARY

DATE: 11/15/24
PROJECT #: 100082
DRAWN BY: JC
CHECKED BY: LV

SHEET NAME:
BUS ELEVATION A

SHEET #: E-2011
REV #: 00

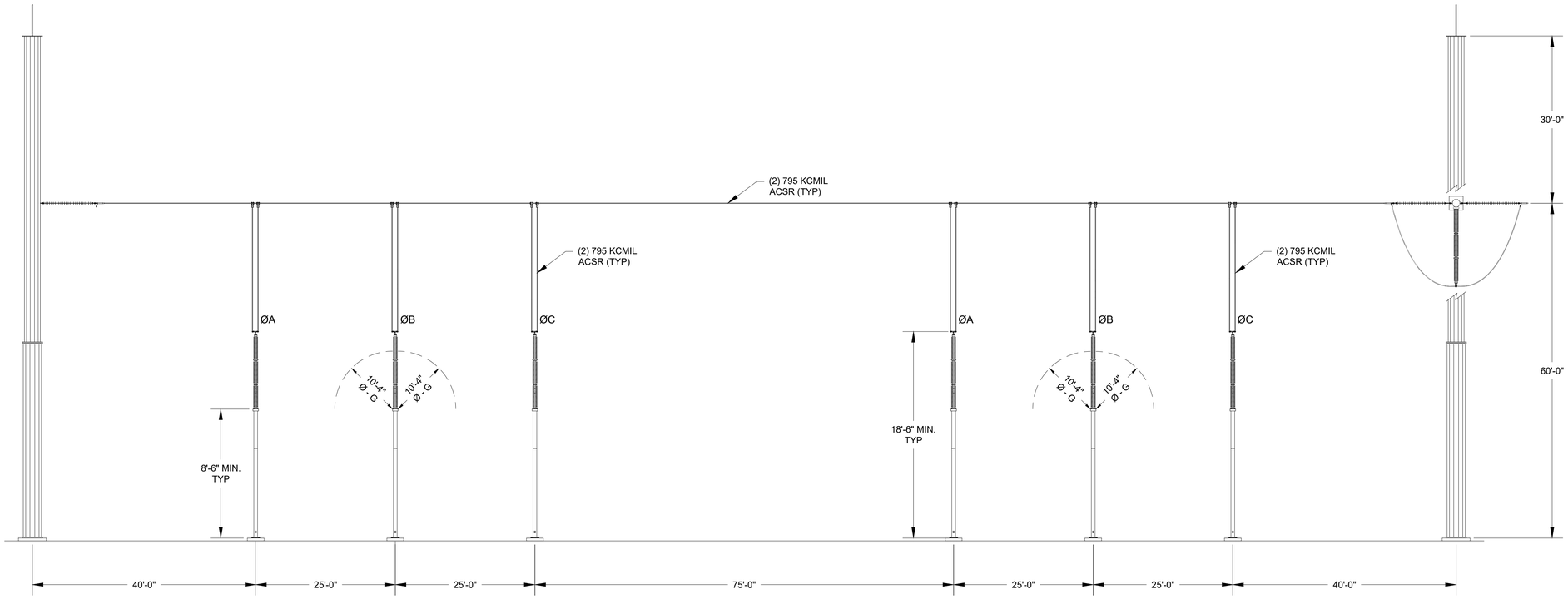
PRELIMINARY - NOT FOR CONSTRUCTION

PLOT DATE: Thursday, November 14, 2024
PLOT BY: WS-09
SAVED BY: Juan Carlos
LOCATION: C:\USERS\WS-09\WISERGY\PM - AGUA FRIA 500 KV SUBSTATION\03. WORKING\PHYSICAL\CAD\AGF-E-2011

MINIMUM CLEARANCE						
VOLTAGE		MINIMUM METAL-TO-METAL DISTANCE FOR RIGID BUS PHASE-TO-PHASE	DESIGN CENTERLINE TO CENTERLINE PHASE SPACING FOR RIGID BUS	RECOMMENDED CLEARANCE TO GROUND PARTS FOR RIGID BUS	MINIMUM CLEARANCE BETWEEN OVERHEAD BUS & GROUND FOR PERSONNEL SAFETY	MINIMUM CLEARANCE BETWEEN OVERHEAD BUS AND ROADWAY
KV	BIL					
500	1550	25'-0"	25'-0"	10'-4"	18'-6"	30'-0"
34.5	200	1'-6"	4'-0"	1'-3"	10'-0"	22'-0"

GENERAL NOTES

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2. IF ACTUAL EQUIPMENT VARIES FROM EQUIPMENT SHOWN, CONTRACTOR IS RESPONSIBLE FOR INSTALLING EQUIPMENT TO ENSURE CORRECT ELECTRICAL FUNCTIONALITY, TO MAINTAIN ALL REQUIRED ELECTRICAL CLEARANCE, AND TO VERIFY THAT THERE WILL BE NO CONSTRUCTABILITY ISSUES WITH EQUIPMENT AND APPURTENANCES.
3. CONTRACTOR TO VERIFY PHASING.
4. ALL HORIZONTAL BUS SPANS SHALL HAVE A 1/4" Ø WEEP HOLE AT MID SPAN.
5. DISTANCE FROM BOTTOM OF BASEPLATE TO TOP OF CONCRETE NOT TO EXCEED 2 TIMES ANCHOR BOLT DIAMETER.
6. ALL CLAMPS, CONNECTORS AND OTHER PARTS ENERGIZED AT THE 500kV LEVEL SHALL BE CORONA FREE HARDWARE TYPE.



500kV LOW BUS SUPPORT

500kV LOW BUS SUPPORT

B Elevation
SCALE: 3/32" = 1'

REFERENCE DRAWINGS

E-2001	COLLECTOR SUBSTATION - SWITCHING ONE-LINE DIAGRAM
E-2010	COLLECTOR SUBSTATION - GENERAL ARRANGEMENT
E-2011 THRU E-2015	COLLECTOR SUBSTATION - BUS ELEVATIONS

FASTGRID
FastGrid, LLC 225 E Germann Road Suite 310
Gilbert, AZ 85297

REV	DESCRIPTION	DATE
00	PRELIMINARY DESIGN DRAWING	11/15/24

PROJECT NAME:
AGUA FRIA
PV SOLAR POWER
SUBSTATION FACILITY

PROJECT ADDRESS:
YAVAPAI COUNTY
ARIZONA

SEAL: PRELIMINARY

DATE: 11/15/24
PROJECT #: 100082
DRAWN BY: JC
CHECKED BY: LV

SHEET NAME:
BUS ELEVATION B

SHEET #: E-2012
REV #: 00

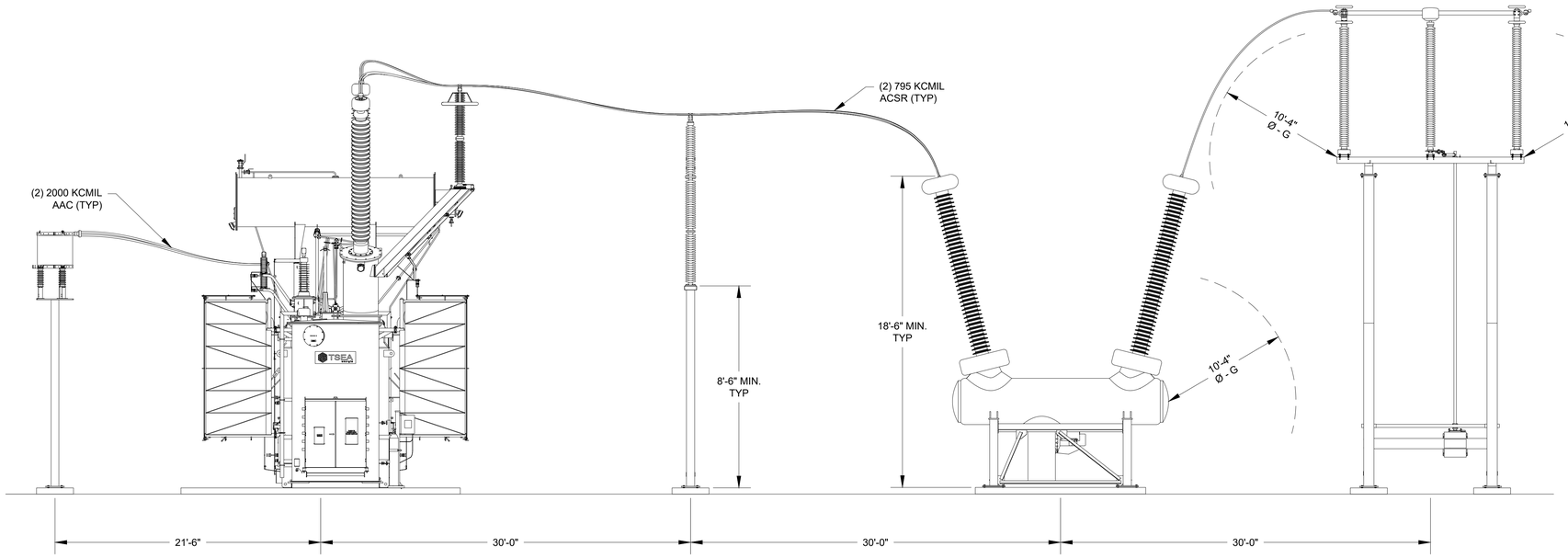
PRELIMINARY - NOT FOR CONSTRUCTION

PLOT DATE: Friday, November 15, 2024
PLOT BY: Juan Carlos
SAVED BY: Juan Carlos
LOCATION: C:\USERS\JUAN CARLOS\WISERGY\PM - DOCUMENTS\01. PROJECTS\WE01920\AGUA FRIA 500 KV SUBSTATION\03. WORKING\PHYSICAL\R02\CAD\AGF-E-2012

MINIMUM CLEARANCE						
VOLTAGE		MINIMUM METAL-TO-METAL DISTANCE FOR RIGID BUS PHASE-TO-PHASE	DESIGN CENTERLINE TO CENTERLINE PHASE SPACING FOR RIGID BUS	RECOMMENDED CLEARANCE TO GROUND PARTS FOR RIGID BUS	MINIMUM CLEARANCE BETWEEN OVERHEAD BUS & GROUND FOR PERSONNEL SAFETY	MINIMUM CLEARANCE BETWEEN OVERHEAD BUS AND ROADWAY
KV	BIL					
500	1550	25'-0"	25'-0"	10'-4"	18'-6"	30'-0"
34.5	200	1'-6"	4'-0"	1'-3"	10'-0"	22'-0"

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C Elevation
SCALE: 3/16" = 1'

REFERENCE DRAWINGS

E-2001	COLLECTOR SUBSTATION - SWITCHING ONE-LINE DIAGRAM
E-2010	COLLECTOR SUBSTATION - GENERAL ARRANGEMENT
E-2011 THRU E-2015	COLLECTOR SUBSTATION - BUS ELEVATIONS

FASTGRID

FastGrid, LLC 225 E Germann Road Suite 310
Gilbert, AZ 85297

REV	DESCRIPTION	DATE
00	PRELIMINARY DESIGN DRAWING	11/15/24

PROJECT NAME:
AGUA FRIA
PV SOLAR POWER
SUBSTATION FACILITY

PROJECT ADDRESS:
YAVAPAI COUNTY
ARIZONA

SEAL: PRELIMINARY

DATE: 11/15/24
PROJECT #: 100082
DRAWN BY: JC
CHECKED BY: LV

SHEET NAME:
BUS ELEVATION C

SHEET #: E-2013
REV #: 00

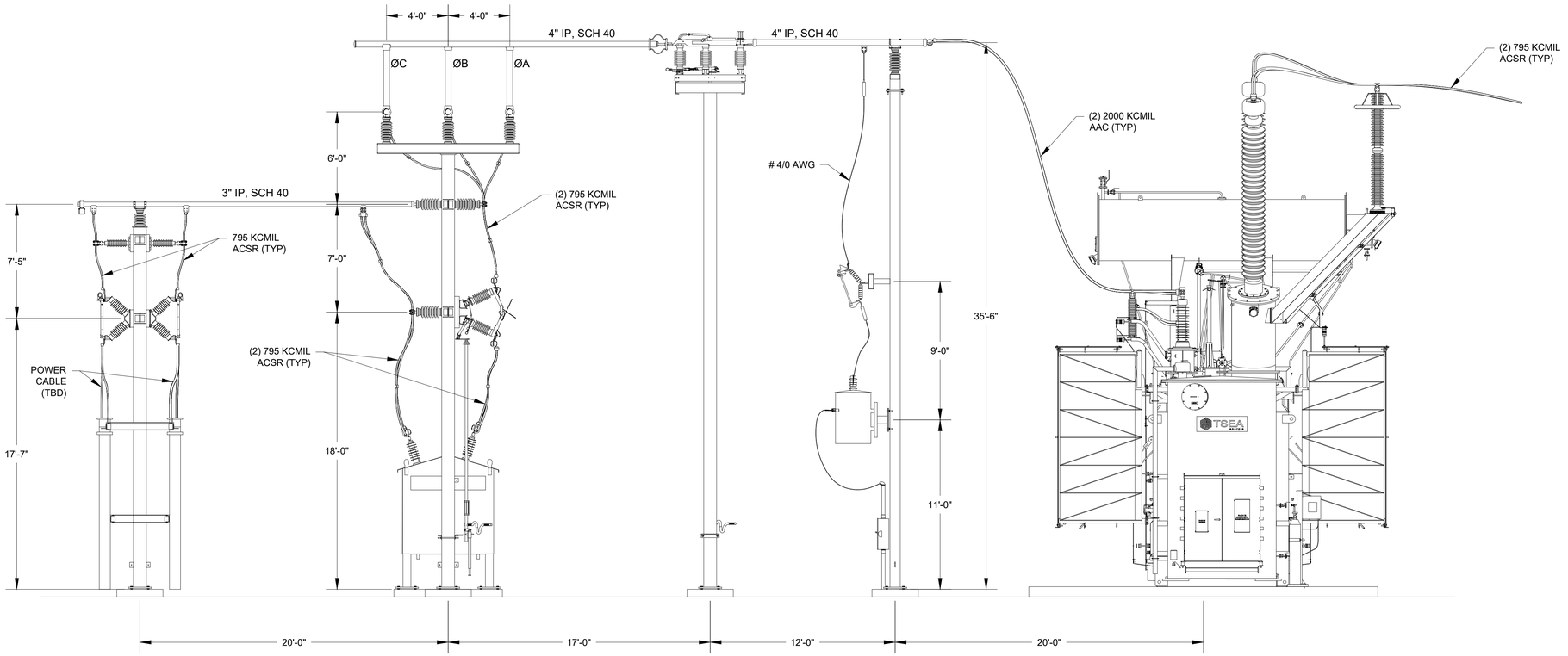
PRELIMINARY - NOT FOR CONSTRUCTION

PLOT DATE: Thursday, November 14, 2024
PLOT BY: WS-09
SAVED BY: Juan Carlos
LOCATION: C:\USERS\WS-09\WISERGY\PM - AGUA FRIA 500 KV SUBSTATION\03. WORKING\PHYSICAL\CAD\AGF-E-2013

MINIMUM CLEARANCE						
VOLTAGE		MINIMUM METAL-TO-METAL DISTANCE FOR RIGID BUS PHASE-TO-PHASE	DESIGN CENTERLINE TO CENTERLINE PHASE SPACING FOR RIGID BUS	RECOMMENDED CLEARANCE TO GROUND PARTS FOR RIGID BUS	MINIMUM CLEARANCE BETWEEN OVERHEAD BUS & GROUND FOR PERSONNEL SAFETY	MINIMUM CLEARANCE BETWEEN OVERHEAD BUS AND ROADWAY
KV	BIL					
500	1550	25'-0"	25'-0"	10'-4"	18'-6"	30'-0"
34.5	200	1'-6"	4'-0"	1'-3"	10'-0"	22'-0"

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D Elevation
SCALE: 1/4" = 1'

REFERENCE DRAWINGS

E-2001	COLLECTOR SUBSTATION - SWITCHING ONE-LINE DIAGRAM
E-2010	COLLECTOR SUBSTATION - GENERAL ARRANGEMENT
E-2011 THRU E-2015	COLLECTOR SUBSTATION - BUS ELEVATIONS

FASTGRID
FastGrid, LLC 225 E Germann Road Suite 310
Gilbert, AZ 85297

REV	DESCRIPTION	DATE
00	PRELIMINARY DESIGN DRAWING	11/15/24

PROJECT NAME:
AGUA FRIA
PV SOLAR POWER
SUBSTATION FACILITY

PROJECT ADDRESS:
YAVAPAI COUNTY
ARIZONA

SEAL: PRELIMINARY

DATE: 11/15/24
PROJECT #: 100082
DRAWN BY: JC
CHECKED BY: LV

SHEET NAME:
BUS ELEVATION D

SHEET #: E-2014
REV #: 00

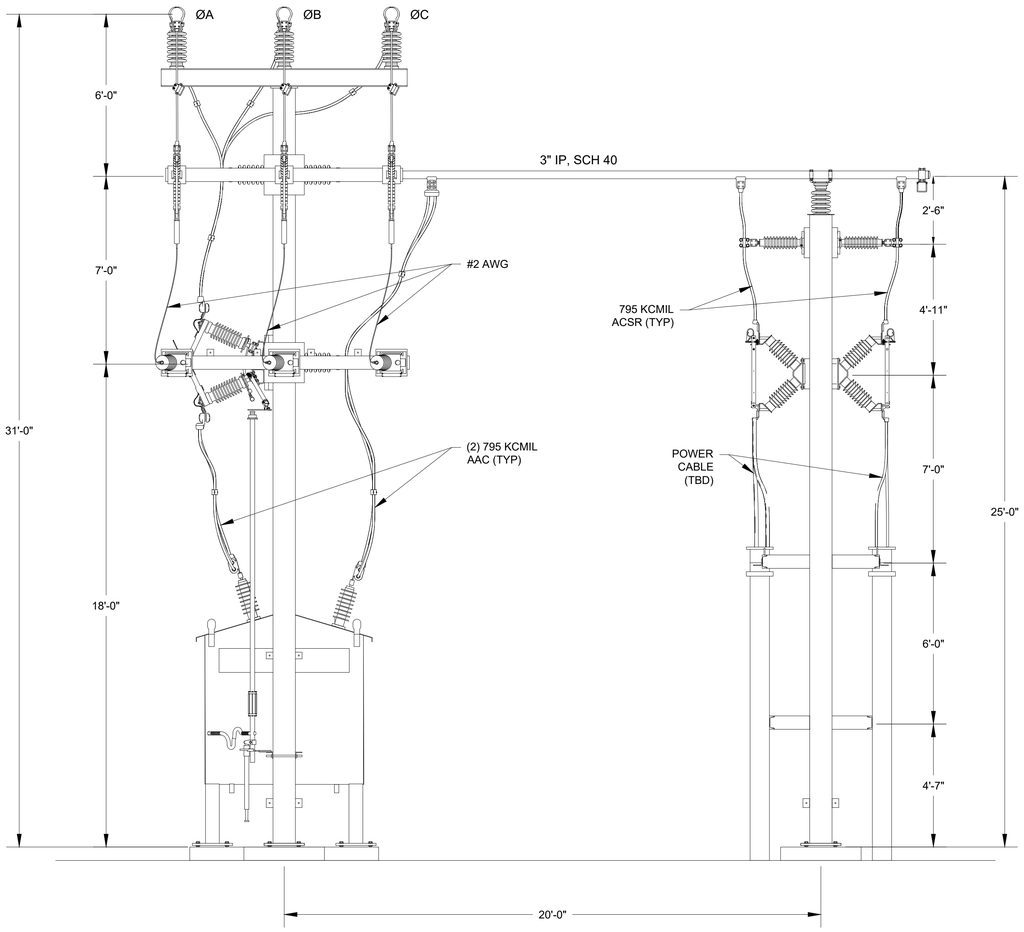
PRELIMINARY - NOT FOR CONSTRUCTION

PLOT DATE: Friday, November 15, 2024
PLOT BY: Juan Carlos
SAVED BY: Juan Carlos
LOCATION: C:\USERS\JUAN CARLOS\WISERGY\PM - DOCUMENTS\01. PROJECTS\WE01920\AGUA FRIA 500 KV SUBSTATION\03. WORKING\PHYSICAL\R02\CAD\AGF-E-2014

MINIMUM CLEARANCE						
VOLTAGE		MINIMUM METAL-TO-METAL DISTANCE FOR RIGID BUS PHASE-TO-PHASE	DESIGN CENTERLINE TO CENTERLINE PHASE SPACING FOR RIGID BUS	RECOMMENDED CLEARANCE TO GROUND PARTS FOR RIGID BUS	MINIMUM CLEARANCE BETWEEN OVERHEAD BUS & GROUND FOR PERSONNEL SAFETY	MINIMUM CLEARANCE BETWEEN OVERHEAD BUS AND ROADWAY
KV	BIL					
500	1550	25'-0"	25'-0"	10'-4"	18'-6"	30'-0"
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34.5 kV
FEEDER BAY

RISER
FRAME

E Elevation
SCALE: 3/8" = 1'

REFERENCE DRAWINGS

E-2001	COLLECTOR SUBSTATION - SWITCHING ONE-LINE DIAGRAM
E-2010	COLLECTOR SUBSTATION - GENERAL ARRANGEMENT
E-2011 THRU E-2015	COLLECTOR SUBSTATION - BUS ELEVATIONS

FASTGRID
FastGrid, LLC 225 E Germann Road Suite 310
Gilbert, AZ 85297

REV	DESCRIPTION	DATE
00	PRELIMINARY DESIGN DRAWING	11/15/24

PROJECT NAME:
AGUA FRIA
PV SOLAR POWER
SUBSTATION FACILITY

PROJECT ADDRESS:
YAVAPAI COUNTY
ARIZONA

SEAL: PRELIMINARY

DATE: 11/15/24
PROJECT #: 100082
DRAWN BY: JC
CHECKED BY: LV

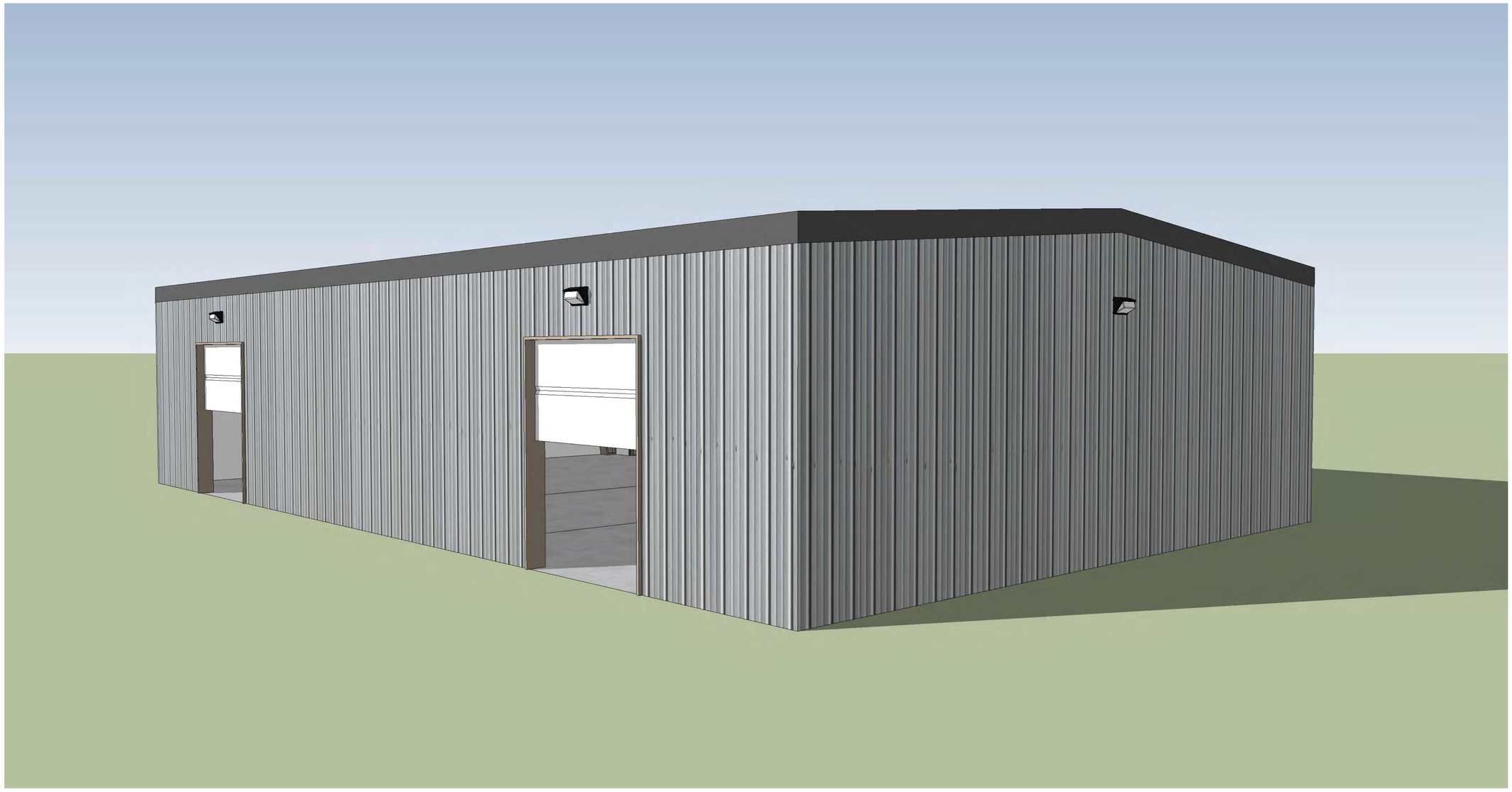
SHEET NAME:
BUS ELEVATION E

SHEET #: E-2015
REV #: 00

PRELIMINARY - NOT FOR CONSTRUCTION

PLOT DATE: Thursday, November 14, 2024
PLOT BY: WS-09
SAVED BY: Juan Carlos
LOCATION: C:\USERS\WS-09\WISERGY\PM - AGUA FRIA 500 KV SUBSTATION\03. WORKING\PHYSICAL\CAD\AGF-E-2015

ATTACHMENT 1
O&M WAREHOUSE
REPRESENTATIVE FLOOR PLAN



Design Firm:

MBA Energy & Industrial
Design / Build Division
www.mba-nrg.com

Drawings Information:

Date: *July 23, 2019*
Location:
City or County:

Project Information:

Project Type: *New Construction*
Construction: *Industrial*
Building SF: 3,000

Design Criteria

Snow Load: *TBD*
Frost Depth: *TBD*
Seismic: *TBD*
Wind Speed: *TBD*
Regulation: *TBD*

MBA Energy & Industrial
Design / Build Division
www.mba-nrg.com

Prospero Solar

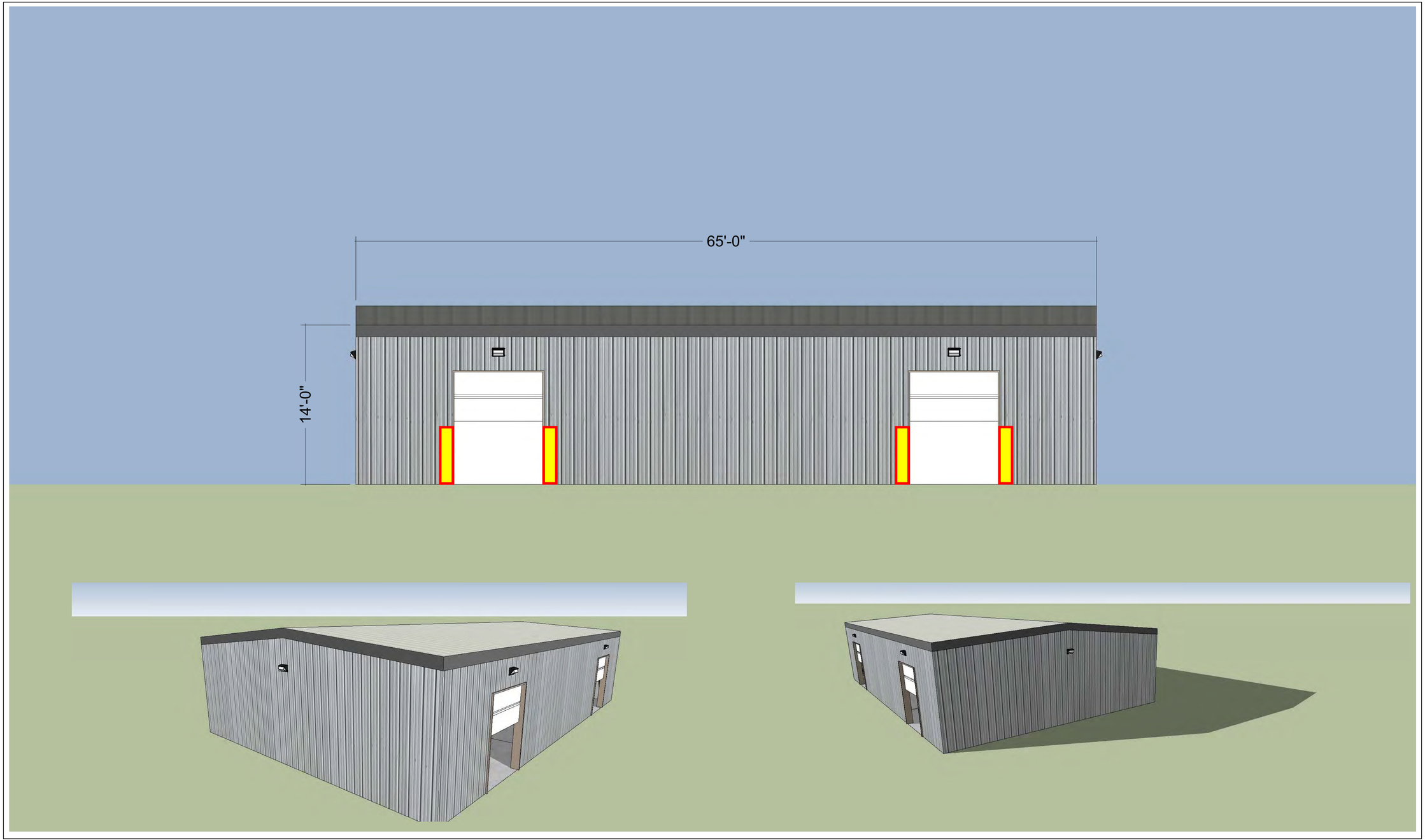
Cover

Date: 07.23.19
Rev:

G-1

Copyright MBA Energy & Industrial 2018

ATTACHMENT 1
O&M WAREHOUSE
REPRESENTATIVE FLOOR PLAN



All details, dimensions, and finishes to be verified by Owner and Contractor

Scale: 1/4" = 1'
24x36 Arch D

MBA Energy & Industrial
Design / Build Division
www.mba-nrg.com

Prospero Solar

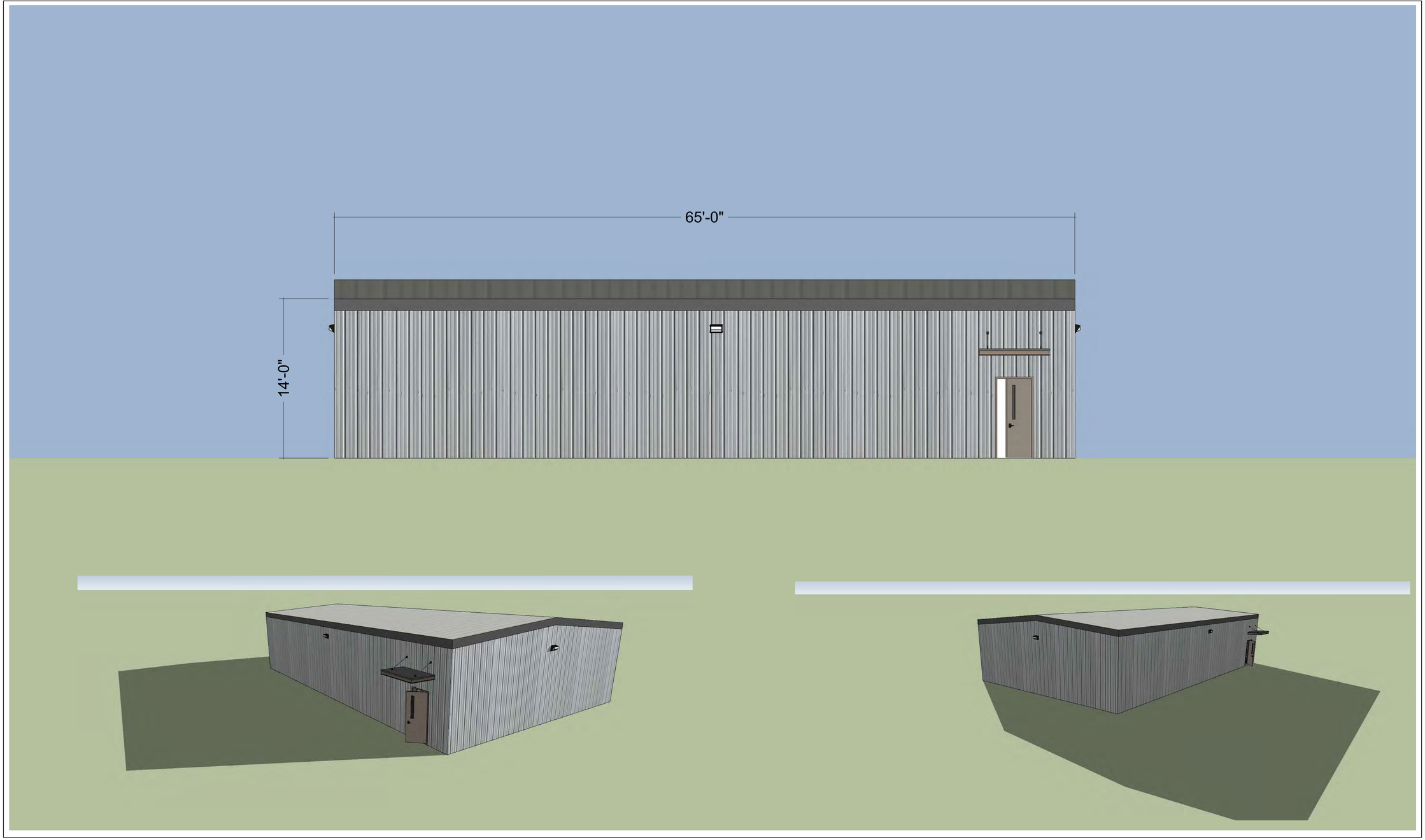
South Elevation

Date: 07.23.19
Rev:

A-4

Copyright MBA Energy & Industrial 2018

ATTACHMENT 1
O&M WAREHOUSE
REPRESENTATIVE FLOOR PLAN



All details, dimensions, and finishes to be verified by Owner and Contractor

Scale: 1/4" = 1'
24x36 Arch D

MBA Energy & Industrial
Design / Build Division
www.mba-nrg.com

Prospero Solar

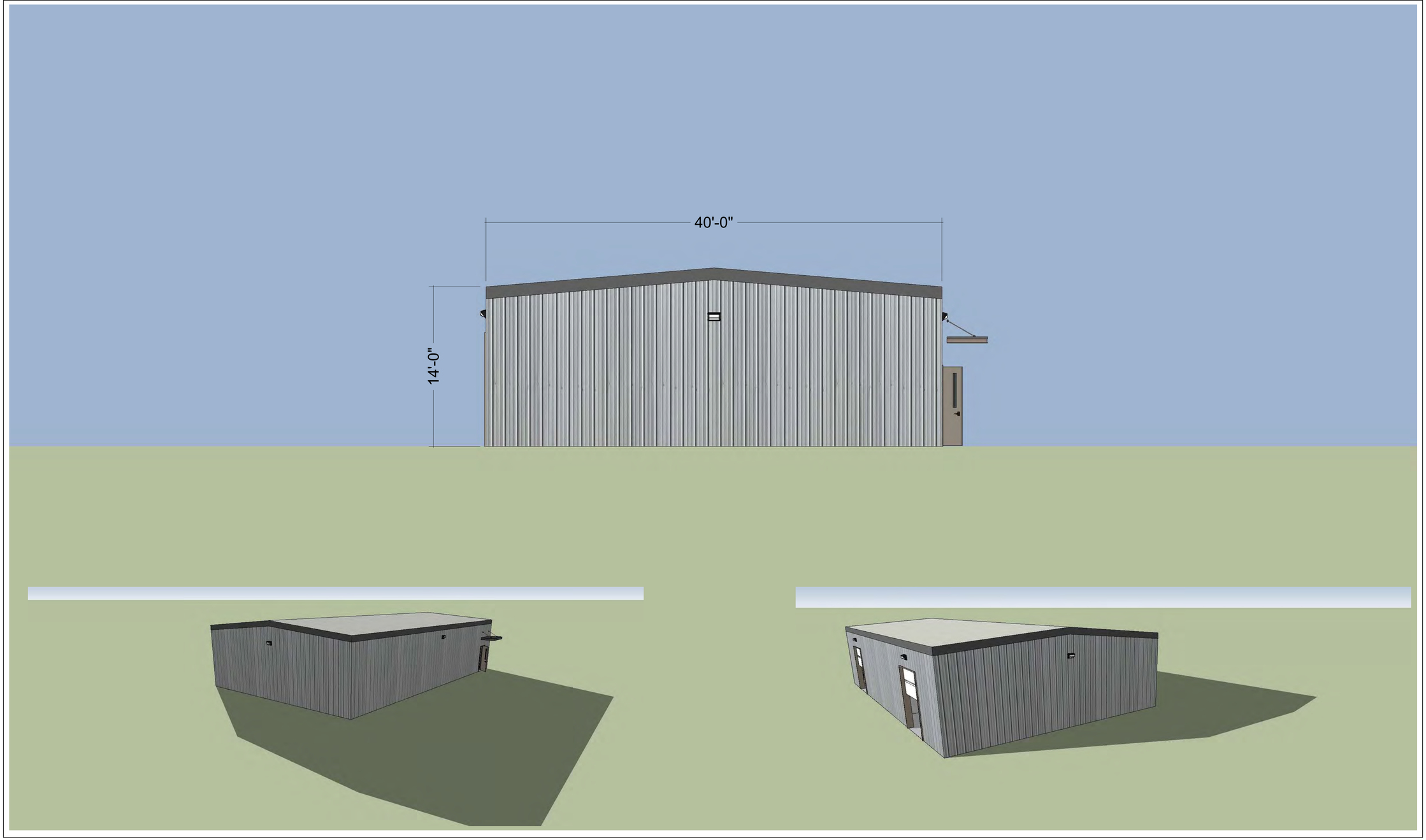
North Elevation

Date: 07.23.19
Rev:

A-5

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ATTACHMENT 1
O&M WAREHOUSE
REPRESENTATIVE FLOOR PLAN



All details, dimensions, and finishes to be verified by Owner and Contractor

Scale: 1/4" = 1'
24x36 Arch D

MBA ENERGY & INDUSTRIAL

MBA Energy & Industrial
Design / Build Division
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Prospero Solar

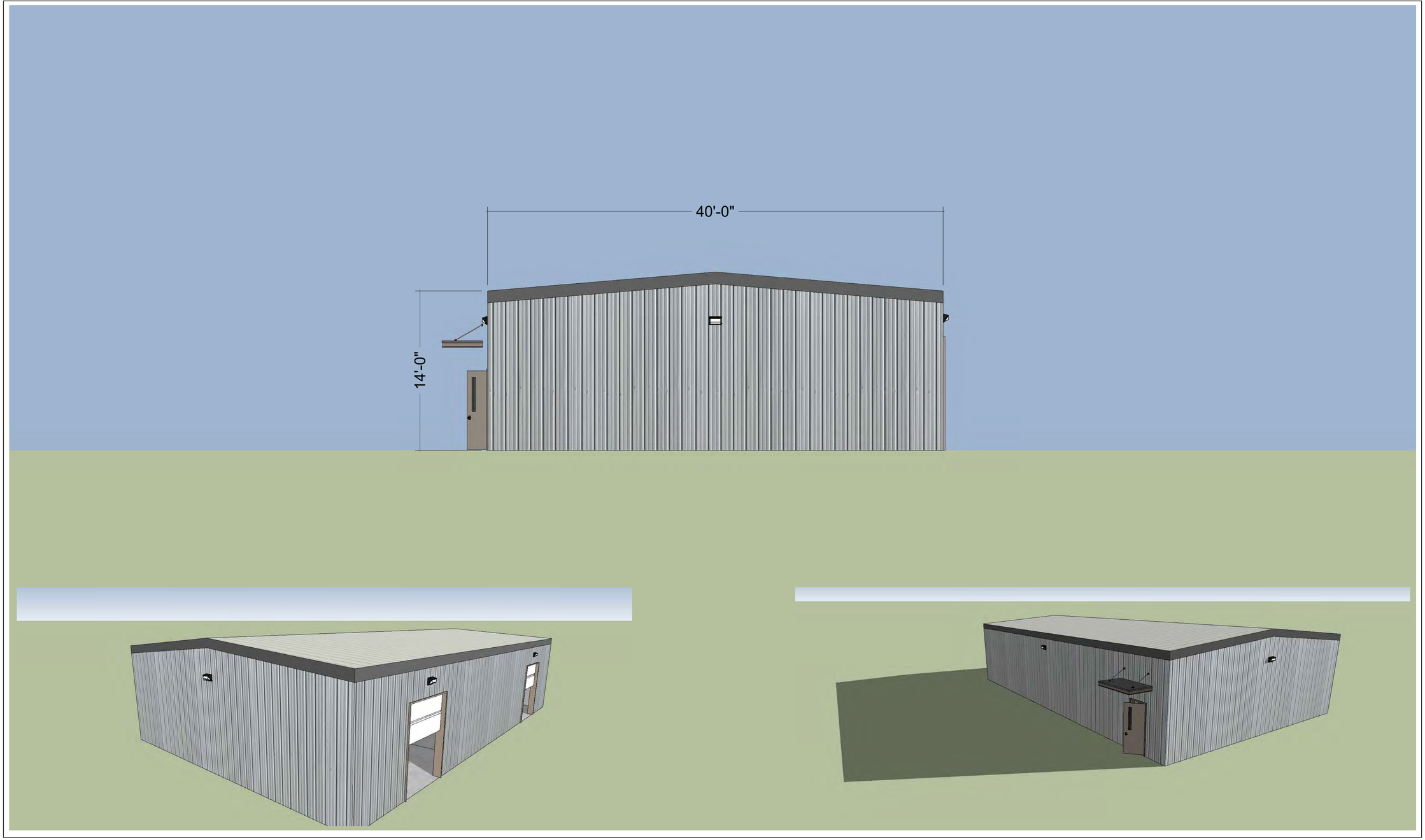
East Elevation

Date: 07.23.19
Rev:

A-6

Copyright MBA Energy & Industrial 2018

ATTACHMENT 1
O&M WAREHOUSE
REPRESENTATIVE FLOOR PLAN



All details, dimensions, and finishes to be verified by Owner and Contractor

Scale: 1/2" = 1'
24x36 Arch D

MBA ENERGY & INDUSTRIAL

MBA Energy & Industrial
Design / Build Division
www.mba-nrg.com

Prospero Solar

West Elevation

Date: 07.23.19
Rev:

A-7

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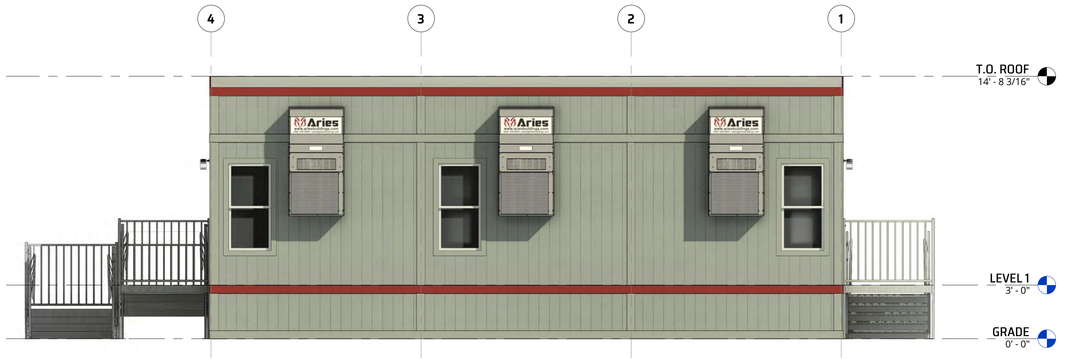
Typical Construction Trailer



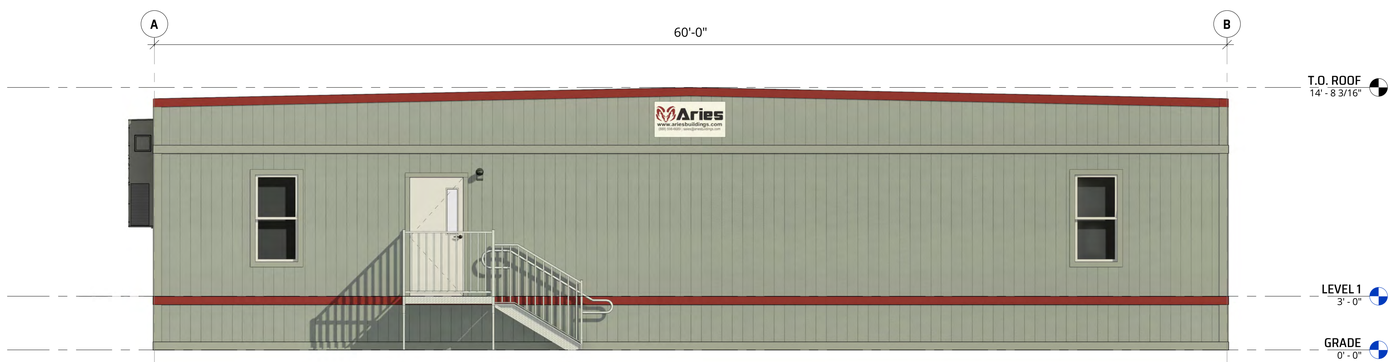
1 ENTRY ELEVATION
1/4" = 1'-0"



2 LEFT ELEVATION
1/4" = 1'-0"



3 RIGHT ELEVATION
1/4" = 1'-0"



4 REAR ELEVATION
1/4" = 1'-0"

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(888) 598-6689 | sales@ariesbuildings.com

INSTA SPACE
36x60 OFFICE COMPLEX
ARIES BUILDING SYSTEMS

REV	DATE	DESCRIPTION

DRAWN BY: ABS
DATE: 07/24/23

EXTERIOR ELEVATIONS

A-200

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Agua Fria Solar and Storage Project – Response to Comment Matrix for Solar Facility Use Permit Application

Item	Comment from County	Response	Location
1	Please update the Letter of Intent (written on March 28, 2025) to indicate the project is currently in the application phase and address the Board of Supervisors.	The Letter of Intent has been updated to indicate the project's current status and has been submitted as an additional document with the resubmittal.	Submitted on Citizenserve
2	Please provide a copy of the ASLD lease agreement, their initial review report, the AZ Corporation Commission CEC, and any other reports that have been received or are pending.	The following items have been submitted as additional documents with this resubmittal: - A copy of the ASLD Lease Agreement (No. 03-120951) - The approved Arizona Corporation Commission Certificate of Environmental Compatibility (ACC CEC) - A letter from Arizona Game and Fish dated August 28, 2025 - The Planning Authorization Letter (PAL) from ASLD (ASLD does not provide an initial review report, as the PAL provides necessary steps required from ASLD for the permitting process. Longroad is regularly engaged with ASLD and will provide them with the staff report and proposed stipulations prior to any hearings.) - A signed letter from ASLD authorization the Change of Lessee Name for the ASLD Lease - A letter of approval from the Mayer Fire District Board indicating their intent to approve the annexation of the Property into the Mayer Fire District, dated November 19, 2025	Submitted on Citizenserve

3	Please provide a brief summary page at the beginning of each plan, identifying adverse impacts and recommending mitigation. The intent is to provide decision makers with the most relevant information needed to deliberate if the proposed mitigation strategies are adequate to address any concerns they may have about particular aspects of the project.	An 'Executive Summary' section has been added to the beginning of all applicable reports.	1st page of applicable reports
Solar Facility Report			
4	Please explain the reasons for the substation and BESS facility locations. Why are they not more proximate to Old Sycamore Road and the existing substation? Why does the Gen-Tie need to be 1.8 miles in length, with the BESS located so close to the setback for the Interstate ROW if there will be no access from the Interstate? It also appears to encroach into the minimum 500' buffer within the Project Boundary.	The proposed location for the substation and Battery Energy Storage System (BESS) was selected based on three primary considerations: **(1) electrical design requirements, (2) existing infrastructure, and (3) site topography and ground-disturbance minimization**. 1. **Electrical Design Criteria** The substation and BESS are centrally located within the Project area to optimize electrical efficiency, reduce energy losses, and avoid the need for larger transmission cables. Because the Project spans both sides of I-17, a location along Old Sycamore Road would not adequately serve the full southern portion of the Project. 2. **Proximity to Existing Infrastructure** The proposed facilities are positioned adjacent to existing high-voltage transmission lines within the Project site. This placement allows for installation of the new high-voltage line without the need to cross existing infrastructure—an action that would otherwise require the use of taller structures to span the existing 500-kV lines.	Explained here and in Solar Facilities Report Executive Summary

		3. **Topography and Minimizing Ground Disturbance** The site's natural terrain and the goal of minimizing earthwork also guided the selection of the substation and BESS locations. The BESS must remain close to the substation due to the extensive cabling required; separating them would significantly increase cable length and size, resulting in greater ground disturbance. Additionally, areas east of the existing infrastructure, particularly near Old Sycamore Road, are less suitable due to the presence of a wash and steeper slopes. The selected site maintains the required 300-foot setback from the I-17 right-of-way per F.2.j in Section 608 Solar Facilities and includes enhanced visual screening to reduce visibility of the BESS from highway motorists.	
Development Plan			
5	Please show all improvements and structural renderings, including guard shack, storage buildings, etc. Explain how the fence heights and PV panels' maximum tilt/rotation height will be based on natural grade.	Additional renderings have been added to the Development Plan showing typical Operations & Maintenance Warehouse and Construction Trailer designs. Sheet S-201 of the Development Plan includes a Grading Tolerance Exhibit. This exhibit shows approximately how grading is determined beneath PV arrays. PV trackers allow for particular tolerance of grade, depending on the tracker technology. This grading window determines areas that will require grade or fill in order to install the trackers.	Development Plan, Sheets S-201 and C-172

		A similar approach is used for determining fence heights, as there is a tolerance allowed for gaps beneath fence. The proposed fencing for the PV areas is game fencing and will be designed to follow the natural undulation of the ground will adhering to the tolerances displayed on Sheet C-172.	
6	Please show proposed temporary parking area (plans for construction phase) for employees and work vehicles/equipment in addition to the permanent parking. It is understood there may be changes made prior to a final site plan.	The Site and Grading Plans within the Development Plan have been updated to include temporary laydown and temporary parking areas. These areas will be used for temporary employee parking, and will shift as construction moves throughout the Project site. The only permanent parking area will be adjacent to the Operations & Maintenance building, as depicted on the Development Plan.	See Site and Grading Plan Sheets
7	Clearly show all fencing on the maps with accompanying details of how the different fence types are in compliance with Section 608 and Arizona Game & Fish Department guidelines. There appear to be some discrepancies between maps, and it may be beneficial to provide a dedicated "fencing plan" map.	A dedicated Fence Plan has been added to the Development Plan (Sheet C-170). Additionally, details of how the different fence types are in compliance with Section 608 and AGFD guidelines have been added to the Sheets C-171, C-172 and C-173.	Development Plan, Sheets C-170, C-171, C-172, and C-173
8	Please provide a dimensioned rendering of a representative PV panel, including a photo of surface covering (finished look).	A representative module specification sheet has been added to the Development Plan, including the panel mechanical characteristics and key features, engineering drawings, and a photo of the surface covering.	Development Plan
9	Due to the large area of the project, consider breaking up additional maps into quadrants or other portions as done with the Overall Site and Grading map. At minimum, this will be required for the Development Area map used for the Initial Site Plan and the Existing Grade Slope Detail map	The Development Area Map and the Existing Grade Slope Detail Map are now shown on multiple sheets to allow for greater inclusion and legibility of details.	Development Plan

	to ensure sufficient inclusion and legibility of details.		
10	Please make sure the project extent/Development Areas are clearly shown on all maps.	The Project Development Area boundary has been added to all pages of the Development Plan and Site Plan.	Development Plan
11	Please label the 500' buffer within the Project Boundary and actual distances of all required setbacks from the Development Areas.	The 500' buffer is shown on the Development Plan with red dashed line. Two callouts have been added highlighting this buffer. The required setbacks are shown in the legend under "Yavapai County Solar Ordinance Setbacks." Any deviation from these setbacks is further explained and included as a Waiver Request in Section 3.0 of the Solar Facilities Report.	Development Plan, OVERALL EXHIBIT – 1 and Solar Facilities Report Section 3.0, Waiver Request
12	Please explain how setbacks were measured from riparian areas, e.g., centerline or top of bank. Setbacks should extend from the edge of floodplains.	Setbacks were measured from edge of FEMA mapped floodplain as mapped in the Project ALTA Survey. The ALTA Survey will be refreshed prior to submittal of Construction and Building Permits to accurately reflect FEMA Floodplain boundaries at the time of Project construction. The Project is committed to adhering to the required 500' or greater setback from the edge of the FEMA Floodplain.	Development Plan
13	Please show clearly distinguished contrasting colors on the Existing Grade and Slope Detail map. Both the 0-5% and 5-8% slopes are shown in a similar green color.	The Existing Grade and Slope Detail Map has been adjusted to show 0-5% slopes in green and 5-8% slopes in yellow. Additionally, this map is now shown on multiple pages and includes the Development Area boundary to show more detail.	Development Plan, Sheets C-160 – C-166
Wildlife Protection Plan			
14	Provide an additional brief summary of compliance or noncompliance with agency recommendations, e.g., instances where recommended corridors or linkages were delineated to meet or exceed recommendations.	See Executive Summary of the Revised Wildlife Protection Plan.	Executive Summary in Wildlife Protection Plan

Cultural Resources Management Plan (CRMP)			
15	Provide the name and credentials of consultants	See Executive Summary of the Revised Plan. Becky Caroli, M.S. - Arizona Antiquities Act-permitted Project Director; Qualified Archaeologist under Secretary of the Interior and Arizona State requirements Jocelyn Bernatchez, PhD - Arizona Antiquities Act-permitted Principal Investigator; Qualified Archaeologist under Secretary of the Interior and Arizona State requirements WestLand Resources, Inc. - Arizona Antiquities Act Blanket Permit 2025-072bl (Authorizes noncollection archaeological or paleontological survey upon lands of the state of Arizona under rules implementing A.R.S. §15-1631 and A.R.S. §41-841 et seq, the Arizona Antiquities Act, in Arizona Board of Regents Policy Manual, Chapter 8[B], Policies 8-201 through 8-207).	Credentials provided here and in the Executive Summary of the CRMP
16	Please include correspondence with tribal representatives. This may be a single sample of the initial contact letter if all were identical, along with the list of recipients and any responses.	See Executive Summary and Confidential Appendix A of the Revised Plan.	Executive Summary and Confidential Appendix A of the CRMP
17	Please provide correspondence with ASLD and SHPO and/or summary responses provided by them.	See Executive Summary and Confidential Appendix A of the Revised Plan. SHPO concurred with Reclamation's Determination No Adverse Effect to Historic Properties for the federal undertaking interconnection of the Project's gen-tie component. ASLD and SHPO consultation for the Project Development Area has not yet occurred.	Executive Summary and Confidential Appendix A of the CRMP

		Consultation will be completed prior to start of construction. Consultation must confirm that any potential adverse impacts have been avoided, minimized and/or mitigated before construction can begin.	
18	Please indicate when the remaining Class III surveys will be conducted and when the final reports will be submitted.	See Executive Summary of the Revised Plan. The Applicant will have a final approved Class III survey, plan, and determination that any potential adverse impacts have been avoided, minimized and/or mitigated prior to start of construction.	Executive Summary of the CRMP
19	Show the intersection of identified sites with the project extent/Development Areas and required setbacks on the Prehistoric Resource Cultural Site Types map.	See Executive Summary of the Revised Plan. Setbacks are required for significant sites. Significant sites will be determined through the ASLD process. The Applicant will have a final approved Class III survey, plan, and determination that any potential adverse impacts have been avoided, minimized and/or mitigated prior to start of construction. The request to default to the ASLD process has been added as a waiver to the Solar Facilities Report Section 3.0, Waiver Request.	Executive Summary of the CRMP and Solar Facilities Report Section 3.0, Waiver Request
Landscaping Plan			
20	Consider including representative images from the site and simulations for vegetation in PV panel areas.	A representative rendering of the proposed revegetation within the solar panel array areas has been added to the Landscaping Plan as **Figure 3**. It illustrates the intended outcome of the revegetation plan and depicts the anticipated post-construction conditions after approximately 2 years.	Figure 3 in the Landscaping Plan
Land Use Impacts			
21	Please indicate if and what type of public access may be allowed within the Project Boundaries or any adjacent portions of leased area.	The Applicant is aware of the recreational importance of Ash Creek to the local community and is committed to making the Project as	Section *4.0 Impact and Mitigation* in the

		minimally disruptive to recreational activities in the surrounding areas as possible. Ash Creek will be kept as is and will not be fenced into the Development Area in order to minimize impacts. The Project will meet or exceed the required setback of 500 feet for Ash Creek, as shown in the Development Plan. The Project has been designed to avoid Ash Creek, which will allow for the public to continue to use Ash Creek.	Land Use Impacts and Mitigation Report
Visual Impact Analysis			
22	Additional KOPs are requested along I-17 fronting the BESS and from the edge of project boundaries from both approaches. Progressive still shots from a "drive-by" vantage from I-17 looking to either side are also recommended.	An additional KOP on southbound I-17 fronting the BESS has been added to the Visual Impact Analysis (Figure 2-13). Four additional photo points from a drive by vantage on I-17 have also been added to the Visual Impact Analysis (Figures 2-14 – 2-17). Discussion of these additional viewpoints and simulations have been added to the Visual Impact Analysis.	See Visual Impact Analysis, Figures 2-13 – 2-17

Shums Coda Associates
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Report prepared by: Eldon Gibb, Planning Consultant with Shums Coda
Project location: 34°23'05.7"N 112°05'29.9"W
Zones: RCU-2A
Project Acres: 4,215 acres
Development Area: 1,930 acres

7 Parcels total:

800-20-056X - 1,521 acres
800-20-043S - 652 acres
800-20-044P - 292 acres
800-20-044H - 882 acres
800-20-056W - 33 acres
800-20-044U - 408 acres
800-20-044V - 427 acre

Plan Overview of the Site Plan and Development Plan, Solar Facility Report, Noise Report and Preliminary Decommissioning Plan:

1. The project is considered large scale and applies to Yavapai Ordinance section 608- Solar Facilities. The project is expected to produce up to 450 MW of clean solar power with an additional 450 MW of storage capacity. Buildout of the project is expected to take between 18 and 24 months. Once constructed, a maximum of 5 employees will operate the site using minimal water and producing minimal noise. Once constructed, traffic will not substantially change in the area.
2. Community outreach for solar projects of this type and size are critical. The applicant has acknowledged their intent to be transparent with stakeholders including adjacent landowners keeping these individuals up to date and involved in public comment and/or feedback.
3. The project scope covers approximately 4,215 acres of Arizona State Land. The land that the project sits on is currently zoned RCU-2A. Nearby residential development (existing and new) is minimal. The site plan identifies 6 dwelling units in the area with the closest being 1,620 feet from the security / game fence. There is an existing high voltage transmission line and substation nearby which is favorable. I-17 splits the project providing a north (north of I-17) and south (south of I-17) project area. Access to the northern half of the Project will be from Old Sycamore Road with there being 5 separate access points into the facility. Access to the southern half of the Project is from the existing Dugas Road with a private access easement. The private access easement includes a bridge crossing over Ash Creek on private land. There is 1 access point into the

facility on this southern portion of the development.

4. As shown on the plan, the projects includes the following items:
    a. Solar field of photovoltaic modules (1,219 acres)
    b. On-site project substation (4 acres)
    c. Battery energy storage system (BESS) (32 acres)
    d. A generation-tie line to connect the Project to the existing transmission network
    e. An operation and maintenance building (less than 4 acres)
    f. Associated civil infrastructure including fencing, access driveways and gates, driveways, on-site parking, drainage channels, retention basins, and Project signage.

Ordinance Review 608 - Solar Facilities:

1. Upon reviewing the project in conjunction with Yavapai Ordinance Section 608 Solar Facilities it appears the project meets the purpose of this section such that it:
    a. Minimizes and mitigates impact on natural, cultural, and Recreational Resources with recommended action items to provide further detail for consideration as detailed below,
    b. Maintains and protects wildlife populations and corridors, viewsheds, vegetative communities, dark skies, air quality and noise with recommended action items to provide further detail for consideration as detailed below
    c. Protects property values,
    d. Provides private landholders (State) economic diversity,
    e. Provides a decommissioning plan, with recommended action items to provide further detail for consideration as detailed below
2. As stated in Subsection C - General provisions 2(c), one mile is required between other Solar facilities. Yavapai County will need to verify this requirement is being met before considering this application.
3. The application has been submitted and complies with the application requirements found in 608-D-2(a)(b) and (l). The plan did not include items (c) Wildlife Protection Plan; (e) Stormwater Management Plan; (f) Visual Impact Study; (g) Landscape Plan; (i) Traffic Plan; (j) Airport study; and (k) Land Use Impacts and mitigation. Yavapai County should verify if this information has been received and request any additional information .
4. As stated in Subsection C - General Provisions 4(a), the site plan identifies the required 500' foot buffer zone and there are areas on the plan that encroach this area Including fencing and retention. The applicant is asking for a waiver in this regard which the county will need to approve a waiver in this regard. As stated in Subsection C - General provisions 4(b), there are wildlife corridors identified on the plan. The Arizona Game and Fish Department should review the plan to ensure these corridors are efficient for the wildlife in the area.
5. As stated in 608 - F Development and Performance Standards, The project Location and

dimensions are accurately zoned (RCU-2A) and is under the maximum 3,000 acre development area. The plan identifies the development area as being 1,930 acres.

6. In regards to Yavapai County ordinance 608 - F(d) - Preferred sites, the proposal is adjacent to and/or near transmission lines which is identified as being an option for a preferred site as provided in 608 - F(d)(7). Based on the data provided, this application should be considered as a preferred site due to the proximity of the transmission lines. Yavapai County ordinance 608 - F(d)(7) reads "project sites that use or are near an existing or planned substation, or transmission line or other satisfactory inter-tie location." Yavapai County should consider any/all characteristics of this site to ensure it is a preferred site.
7. The buildout of the site encroaches slopes greater than 10% as required by 608 F(2)(g). This area is minimal but Yavapai County will need to consider a waiver in this regard.
8. The following setbacks were observed: The required one-mile separation from a residence is not being met as noted on the plan (1,620 ft.) and required in 608 F(2)(a) The project also has areas that encroach the required 500' ft floodplain setback required in 608 F(2)(b). The county will need to consider a waiver in this regard.
9. Solar panel heights are shown at 10 feet 11 inches fully extended. This height meets the maximum 20' feet from grade height when fully tilted as required by 608 F (3)(a,b). The other structures (facilities maintenance building and construction trailer) are less than the 35' feet maximum.
10. The proposal includes 3 crossings for wildlife and the fences appear to not create dead ends or areas to trap wildlife. The plan should be reviewed by the Arizona Game and Fish Department as stated in 608 F(4)-Wildlife corridors.
11. As stated in 608 F(6) - screening, It appears screening is adequate for the project (secured fencing around the site); however, Yavapai County may want to consider additional screening requirements for the development as seen from the highway and may request a visual impact study, photo matched renderings or photomontages to illustrate and better understand the proposal as seen from driving on the highway.
12. As stated in 608-F(1) noise is limited to 50 DBA which the Noise Report indicates will be maintained. The plan identifies the development to be between 35 and 45 DBA on average with the worst case scenario being 47 DBA.
13. The county should consider approving the decommissioning and reclamation plan with the total being $13,729,133. Ordinance 608-M states "The estimate shall establish the full amount of the decommissioning and reclamation cost without regard to the possibility of salvage value unless the Board of Supervisors accepts the value of the salvage as part of a third-party engineer's analysis, as updated every five (5) years with the rest of the cost estimate to ensure reasonable and accurate estimates."
14. In regards to 608 F(9) - Glare Impact, and as indicated in subsection D.2.j of this Section, Yavapai County may want to require a glare impact study for the Federal Aviation Administration (FAA) to review and determine impacts on any nearby airports if applicable.

Additional Action Items Yavapai County may want to consider as Conditions Of Approval (COA's)

1. Approval of a Development Agreement as outlined in 608-E.
2. Approval of a Site Maintenance Agreement to ensure the site is kept orderly as outlined in 608-G(1).
3. The proposal shall be constructed and maintained as portrayed in the exhibits approved.
4. As stated in 608 Section D solar use permits may be approved for a 40 year period with the applicant able to apply for a single ten year extension if the project remains in compliance with ordinance and the approved plan. The renewal shall be approved by the Board of Supervisors. The approval of this permit shall address the length of the use permit and if an extension(s) will be allowed. (Ordinance allows up to 40 yrs and one 10 year extension if the site remains in compliance).
5. Disturbance of land shall not exceed outside of the project scope. This is a condition commonly added by legislative bodies for new development projects.
6. The applicant shall (at a minimum of 1 yr. Prior to the expiration of the solar use permit) notify staff in writing of future plans for the facility which may include decommissioning, reclamation and/or renewal.
7. In regards to 608 F(8), outdoor lighting should be limited to levels that do not cross into wildlife corridors and shall comply with section 603 light pollution control. Light poles shall not exceed 18' feet tall and be approved by the county.
8. In regards to 608 F(11), Signs shall comply with section 601 sign code and a sign permit shall be obtained
9. In regards to 608 F(12), the Solar Facility shall be designed, constructed, tested, and operated to fully comply with all applicable County, state, and federal laws, regulations, codes, and requirements. The Solar Facility shall also comply with the most current standards set forth by industry regulating bodies, including the Western Electricity Coordinating Council (WECC) and North American Electric Reliability Corporation (NERC) planning standards, as approved by the Federal Energy Regulatory Commission (FERC), the National Electric Safety Code (NES) standards, and Federal Aviation Administration (FAA) regulations.
10. A construction management plan shall be submitted prior to construction
11. All undeveloped portions of the subject property shall be maintained in a natural undisturbed, and debris-free condition. The project operator shall monitor noxious weed density and provide mitigation to eradicate or prevent the spread of such weeds.
12. A public road improvement, repair and maintenance plan should be reviewed and approved by public works
13. The project owner shall be responsible to maintain all of their stormwater facilities
14. County employees and designated third party inspectors shall have access to the site within 48 hours notice to conduct inspections

AGUA FRIA SOLAR AND STORAGE PROJECT

TECHNICAL REPORT ADDENDUM

Prepared by Shums Coda Associates for Yavapai County

By Barbara Rice, CBO/CFM

Introduction: The submitted Solar Facility Report, Public Safety, Fire Protection & Emergency Plan and Preliminary Decommissioning plan were reviewed for consideration of a Conditional Use Permit for the proposed solar facility project. This technical report addendum outlines the considerations for conditional use permit as well as what would need to be reviewed under construction permit. For conditional use permit, the current determination is approved conditional with final design requirements that are typically submitted at construction review. This report includes insertion ready recommendations for the applicant should the County require addressing construction permit requirements at this conditional use application. The matrix included in this report outlines the best practice and relevant code requirements for the proposed solar facility.

2024 IFC / NFPA 855 Code Alignment and Compliance Matrix

Reviewed documents: Solar Facility Report | Public Safety, Fire Protection & Emergency Management Plan | Preliminary Decommissioning Plan

Prepared as a consolidated technical report addendum | July 2026

Project	Agua Fria Solar and Storage Project, Yavapai County, Arizona
Primary criteria	2024 International Fire Code (IFC), especially Sections 1205 and 1207
Referenced ESS standard	NFPA 855, 2023 edition, as referenced by the 2024 IFC
Review basis	December 2025 Solar Facility Report; December 2025 Public Safety Plan; August 2025 Preliminary Decommissioning Plan
Purpose	Identify demonstrated compliance, gaps, final-design dependencies, and insertion-ready revisions

PRELIMINARY CODE REVIEW FOR CONDITIONAL USE PERMIT- FINAL COMPLIANCE IS SUBJECT TO CONSTRUCTION PERMIT APPLICATION AND AHJ APPROVAL WHICH SHALL INCLUDE FINAL EQUIPMENT / SITE DESIGN

1. Executive Summary

The three project documents establish a useful zoning, emergency-management, and decommissioning framework, but they do not yet demonstrate complete compliance with the 2024 IFC and NFPA 855 for a utility-scale lithium-ion battery energy storage system (BESS). The principal deficiency is not an identified design violation; it is the absence of final-design evidence and explicit commitments for the fire-code submittals, listings, large-scale fire-test data, site layout, fire-department access, water supply analysis, detection, suppression, gas detection, explosion control, emergency operations, commissioning, maintenance, and damaged-battery disposition required for approval of construction permit.

The project is described as an up-to-450 MW solar facility with an up-to-450 MW BESS. The decommissioning plan further describes an eight-hour BESS with up to 3,600 MWh. Because the installation exceeds IFC/NFPA 855 threshold quantities, the final design should be treated as a full utility-scale ESS installation and supported by a coordinated fire code package before construction permits are issued.

- Add an express governing-code statement: 2024 IFC Section 1207 and NFPA 855 (2023), together with the adopted electrical, building, and fire-department access/water-supply requirements.
- Require UL 9540-listed ESS equipment and project-specific UL 9540A test reports that match the proposed cell, module, rack, enclosure, spacing, state of charge, ventilation, and suppression configuration.
- Convert the current general emergency response plan into an ESS-specific Emergency Operations Plan developed with Mayer Fire District, including isolation, remote shutdown, re-ignition monitoring, toxic/flammable gas hazards, defensive strategy, evacuation and shelter criteria, and post-incident recovery.
- Carry fire-code obligations through decommissioning, including shutdown and isolation sequencing, state-of-charge reduction, damaged/unstable battery handling, qualified transport, hazardous-material characterization, fire watch, and emergency access until all ESS hazards are removed.

1.1 Cross-Document Data Reconciliation

Item	Solar Facility Report	Public Safety Plan	Decommissioning Plan	Required Resolution
Solar capacity	Up to 450 MW	Up to 450 MW	Up to 450 MW-AC	None
BESS power / energy	Up to 450 MW; energy duration not consistently stated	BESS included; detailed energy not stated	Up to 3,600 MWh; eight-hour duration	State both MW and MWh in every document and identify usable vs nameplate energy.
Project life	35 years in economic narrative	Lifecycle language, no fixed term	40-year useful life	Select one design/operating life or distinguish economic analysis from design life.
Gen-tie length	Approximately 1.8 miles	Approximately 1.8 miles	Approximately 1.8 miles in narrative; approximately 5,000 LF in quantities	Correct the quantity and cost basis or explain included segment.
Fire water	Not established	Minimum 30,000-gallon tank discussed with fire district	Not carried into removal scope	Final hydraulic/duration analysis and decommissioning disposition required at permit application. Provide document from Fire District with fire flow approval and whether IFC Appendix B and or NFPA 1142 are utilized.

Item	Solar Facility Report	Public Safety Plan	Decommissioning Plan	Required Resolution
Battery disposition	General best-practice statements	Emergency response only	Enclosures treated largely as scrap steel Applicable for noncombustible typical steel enclosures.	Separate batteries/cells/electrolyte from enclosure steel and use qualified recycling/disposal assumptions.

2. Consolidated Compliance Comparison Matrix

Status key: Addressed = adequately stated at the current planning level; Partial = concept appears but lacks code-specific detail; Not Demonstrated = no adequate evidence in the reviewed documents; Final Design = compliance depends on equipment selection, testing, calculations, or approved construction documents.

Code topic / reference	Core requirement (summary)	Current documents	Status	Required action / evidence
IFC 1201.3; 1207.1; NFPA 855	Stationary ESS must comply with IFC Section 1207 and NFPA 855.	The documents cite county zoning and general best practices but do not clearly adopt the fire-code framework.	Partial	Add governing-code language to all three documents. Typically required at construction permit application
IFC permit / construction documents; 1207.1.3	Submit plans, equipment data, hazard information, and code compliance documentation to the fire code official.	No consolidated ESS fire-code submittal schedule is identified.	Not Demonstrated	Commit to a final BESS Fire Protection and Hazard Mitigation Report before permit issuance. Per Code, Required at Construction Permit Application.
IFC 1207.2; NFPA 855	ESS equipment must be listed and labeled for the application, typically to UL 9540.	LFP chemistry and prospective vendors are described, but listing evidence is absent.	Final Design	Provide UL 9540 certificates, installation manuals, and field evaluation path for any deviations. Compliance with UL9540 and 9540A required as part of Construction Permit application.
IFC 1207.1.5 / 1207.5; NFPA 855; UL 9540A	Large-scale fire testing must support propagation, separation, suppression, gas, and explosion-control decisions.	No project-specific UL 9540A reports or test-to-design comparison.	Not Demonstrated	Submit complete cell/module/unit/installation-level reports and a design-conformance matrix. Required per code as Construction Permit application.

Code topic / reference	Core requirement (summary)	Current documents	Status	Required action / evidence
IFC 1207.1.4; NFPA 855	Commissioning plan and commissioning report are required for installed safety systems.	General operations readiness is stated; formal commissioning is not.	Not Demonstrated	Provide commissioning scope for BMS, detection, alarms, ventilation, suppression, shutdown, communications, and SCADA. All required per code as part of Construction Permit application.
IFC 1207.1.6; NFPA 855	Operations and maintenance documentation and periodic testing must be maintained.	O&M resources and remote monitoring are described generally.	Partial	Add inspection, testing, preventive maintenance, impairment, recordkeeping, and software/change-control requirements. All required per code as part of Construction Permit application.
IFC 1207.1.7; NFPA 855	An Emergency Operations Plan must address hazards, response, shutdown, and coordination.	The ERP focuses on notification, accountability, assembly, and evacuation.	Partial	Replace/add an ESS-specific EOP appendix with fire-service tactical information.
IFC 1207.4; NFPA 855 Ch. 4/9	Approved location, maximum stored energy, fire areas, and exposure protection.	BESS is shown as a central 35-acre site; unit layout and energy segmentation are absent.	Final Design	Provide scaled layout, unit/rack energy, fire-area/array segmentation, exposures, and property-line distances. All required per code as part of Construction Permit application.
IFC 1207.5; NFPA 855	Separation between ESS units, groups, buildings, lot lines, and exposures must meet prescriptive criteria or test-supported alternatives.	No container spacing or exposure analysis.	Not Demonstrated	Show dimensions and cite applicable prescriptive or UL 9540A-supported separation. All required per code as part of Construction Permit application.
IFC Ch. 5; NFPA 855	Fire apparatus roads, gates, turnarounds, load capacity, grade, width, and all-weather access must be approved.	General site access and security are discussed; fire apparatus geometry is not established.	Partial	Provide fire access plan, two-access analysis where required, Knox/approved gate access, and maintained access during incidents/decommissioning. All required per code as part of Construction Permit application.

Code topic / reference	Core requirement (summary)	Current documents	Status	Required action / evidence
IFC Ch. 5; Appendix B/C if adopted; NFPA 855	Approved fire water supply and hydrant/tank arrangement based on hazard and response strategy.	A minimum 30,000-gallon tank is proposed based on NFPA 1142 discussion.	Partial	Provide AHJ-approved water-supply basis, usable volume, fill connection, fire department connection/draft point, freeze/seismic protection, inspection, and refill provisions.
IFC 1207.6; NFPA 855	Automatic fire detection and alarm/notification are required as applicable.	No detector type, zoning, supervision, alarm routing, or annunciation is described.	Not Demonstrated	Provide smoke/heat/off-gas detection design, alarm matrix, remote transmission, local annunciation, and loss-of-communications response. All required per code as part of Construction Permit application.
IFC 1207.6; NFPA 855	Fire suppression or other approved fire control must be supported by listing and test data.	No suppression strategy is defined.	Final Design	Identify container-level and exposure-protection strategy; demonstrate compatibility with UL 9540A results and manufacturer instructions. All required per code as part of Construction Permit application.
IFC 1207.6.2; NFPA 855	Ventilation and gas detection must control hazardous accumulations where required.	No off-gas, ventilation, purge, or gas-monitoring criteria.	Not Demonstrated	Provide gas species, detection thresholds, ventilation/purge sequence, alarm actions, and responder monitoring plan. All required per code as part of Construction Permit application.
IFC 1207.6.3; NFPA 855	Explosion control is required where flammable-gas accumulation is credible.	No deflagration venting/prevention analysis.	Not Demonstrated	Submit explosion hazard analysis and approved control method tied to test data and enclosure geometry. All required per code as part of Construction Permit application.
IFC 1207.3/1207.6; NFPA 855	Battery management, thermal management, abnormal-condition detection, and automatic shutdown must be supervised.	SCADA and remote operations are described generally.	Partial	Provide cause-and-effect matrix for BMS alarms, contactor opening, HVAC shutdown/operation, PCS isolation, and remote emergency stop. All required per code as part of Construction Permit application.

Code topic / reference	Core requirement (summary)	Current documents	Status	Required action / evidence
IFC 1207; NFPA 855	Emergency shutdown controls and disconnects must be accessible, identified, and coordinated with responders.	No final disconnect locations or labeling scheme.	Final Design	Show rapid isolation points, lockout/tagout boundaries, stored-energy persistence, and responder-accessible controls. All required per code as part of Construction Permit application.
IFC 1207; IFC 509; NFPA 855	Hazard identification, equipment marking, placards, and emergency contact information must be provided.	General assembly signage is addressed; ESS hazard signage is not.	Partial	Add NFPA 704/ESS hazard placards as applicable, equipment labels, site map, emergency contacts, and no-entry/arc-flash warnings. All required per code as part of Construction Permit application.
IFC 1207; NFPA 855	Security must prevent unauthorized access without delaying emergency responders.	Perimeter fencing and check-in controls are described.	Addressed / Final Design	Retain security concept; add approved emergency gate access, key box, gate override, and responder route marking. All required per code as part of Construction Permit application.
IFC Ch. 49 or locally applicable WUI provisions; NFPA 855 exposure control	Vegetation and combustible loading around ESS and access routes must be controlled.	Fuel breaks and fire-resistant native revegetation are proposed.	Partial	Define defensible-space dimensions, mowing/clearance triggers, inspection frequency, herbicide restrictions, and hot-work controls. All required per code as part of Construction Permit application.
IFC Ch. 33; hot work provisions	Construction fire safety, temporary access, hot work, smoking, combustible waste, and impairment controls.	Construction ERP and worker training are present but not a full construction fire prevention plan.	Partial	Add a construction fire prevention plan and designated Fire Prevention Program Superintendent. All required per code as part of Construction Permit application.
IFC 1207.1.7; NFPA 855	First-responder training and pre-incident planning must reflect the installed technology and hazards.	Training is offered to Mayer Fire District; frequency is to be determined.	Partial	Require pre-COD drill, annual refresher/site walk, updated tactical sheet, and post-modification retraining.

Code topic / reference	Core requirement (summary)	Current documents	Status	Required action / evidence
NFPA 855; manufacturer / UL 9540A data	Emergency strategy must address thermal runaway, delayed ignition, re-ignition, toxic gas, ejecta, and runoff.	Current ERP does not contain BESS tactical hazards.	Not Demonstrated	Add defensive/containment strategy, exclusion zones, atmospheric monitoring, re-entry criteria, minimum monitoring duration, and runoff controls. All required per code as part of Construction Permit application.
IFC hazardous materials provisions; NFPA 855	Damaged, defective, or recalled batteries require isolation, stabilization, and approved disposition.	No damaged-battery management procedure.	Not Demonstrated	Add quarantine/isolation area criteria, OEM response, thermal monitoring, packaging, transporter and receiving-facility documentation. All required per code as part of Construction Permit application.
Decommissioning interface with IFC/NFPA 855	Fire and explosion safeguards must remain active until batteries are removed and hazards eliminated.	Decommissioning scope treats BESS enclosures mainly as heavy scrap.	Not Demonstrated	Add an ESS decommissioning safety plan and line-item costs for battery-specific handling. All required per code as part of Construction Permit application.

3. Insertion-Ready Revisions Recommendations (If required by Yavapai County for Conditional Use Permit) - Solar Facility Report

3.1 Add to Executive Summary / Best Practices

3.2 Add New Section: Fire Code Design Commitments

- Final BESS equipment selection and site arrangement will not rely solely on generic vendor statements. The submitted UL 9540A reports shall represent the proposed cell chemistry, module, rack, cabinet or container, state of charge, spacing, ventilation, thermal management, and suppression configuration. Any difference will be identified and evaluated by the engineer of record and accepted by the fire code official.
- The final site plan shall identify each BESS unit and its rated energy, grouping/array limits, clear separation distances, adjacent exposures, property lines, fire apparatus roads, gates, staging areas, water-supply facilities, emergency disconnects, fire alarm annunciation, and responder access points.
- The Project will maintain an approved emergency contact and remote operations capability on a 24-hour basis. Loss of SCADA communications, impairment of a safety system, abnormal battery condition, fire alarm, gas alarm, or thermal runaway indication will initiate documented notification and escalation procedures.
- No claim of final fire-code compliance is made until the AHJ approves the final construction documents, equipment data, test reports, calculations, commissioning plan, and Emergency Operations Plan.

4. Insertion-Ready Revisions (If required by Yavapai County for Conditional Use Permit)- Public Safety, Fire Protection & Emergency Management Plan

4.1 Replace / Expand Fire Protection Section

The BESS fire protection program shall comply with the 2024 IFC and NFPA 855 (2023), as approved by the fire code official. The program will be based on the hazards demonstrated by the final listed system and project-specific UL 9540A test data. It will address fire propagation, radiant heat and exposure protection, flammable and toxic gases, explosion hazards, projectile/ejecta hazards, electrical isolation, stranded energy, delayed ignition and re-ignition, contaminated runoff, and post-incident stabilization. Fire protection features shall remain in service and supervised whenever batteries contain hazardous stored energy, including during construction energization, operation, maintenance, incident recovery, repowering, and decommissioning.

4.2 Add ESS Emergency Operations Plan Elements

- 24-hour emergency contacts for the owner/operator, remote operations center, OEM, qualified battery response contractor, environmental response contractor, Mayer Fire District, law enforcement, and County OEM.
- A one-page responder tactical sheet showing entrances, apparatus routes, staging, BESS blocks, unit identification, water supply, electrical disconnects, emergency stops, control/annunciator locations, drainage paths, and evacuation routes.
- Alarm and notification sequence for BMS events, off-gas detection, smoke/heat detection, fire alarm, suppression activation, HVAC failure, loss of communications, and confirmed thermal runaway.
- Remote shutdown and isolation procedures, including limitations of shutdown, residual voltage, DC hazards, and the time batteries may remain energized or capable of re-ignition.
- Initial isolation and exclusion zones that can be increased by the Incident Commander based on UL 9540A data, atmospheric monitoring, wind, ejecta, radiant heat, and exposure conditions.
- A defensive response framework unless the Incident Commander, manufacturer guidance, and approved pre-incident plan support another tactic. Personnel shall not enter a BESS enclosure involved in thermal runaway or fire unless specifically authorized under an approved procedure.
- Continuous or periodic monitoring for flammable gas, carbon monoxide and other relevant toxic gases; criteria for evacuation, shelter-in-place, re-entry, termination of fire watch, and transfer back to the owner.
- Post-fire actions addressing prolonged cooling/monitoring, re-ignition, security, damaged-unit isolation, forensic preservation, contaminated water/soil, notifications, and qualified removal and transport.
- Pre-COD responder orientation and drill, annual refresher/site walk, and retraining following material equipment, layout, software, or emergency-procedure changes.

4.3 Water Supply and Access

The proposed 30,000-gallon water tank shall be treated as a preliminary commitment rather than a demonstrated final fire flow. Before construction permit issuance, the applicant shall obtain Mayer Fire District approval of the required usable volume, delivery rate, duration, tank refill method, fire department connection or drafting arrangement, apparatus access and staging, and any hydrants or exposure-protection appliances. The final plan shall also document road width, vertical clearance, grade, turning radii, load-bearing capacity, all-weather surface, gate width and emergency access controls. Access and water supply shall be maintained throughout the period that energized batteries or damaged batteries remain on site.

5. Insertion-Ready Revisions (If required by Yavapai County for Conditional Use Permit)- Preliminary Decommissioning Plan

5.1 Add New Section: BESS Decommissioning Fire and Hazard Controls

Decommissioning of the BESS shall be performed under a project-specific BESS Decommissioning Safety Plan prepared before work begins and reviewed with the fire code official and Mayer Fire District. The plan shall be consistent with the 2024 IFC, NFPA 855, manufacturer instructions, applicable hazardous-material and transportation requirements, and the approved Emergency Operations Plan. Fire detection, alarm, thermal management, gas detection, ventilation, suppression, remote monitoring, emergency communications, access, and water supply shall remain operational to the extent required until the batteries have been de-energized, removed, or otherwise rendered nonhazardous.

- Inventory every battery enclosure, rack/module population, chemistry, state of health, state of charge, recall or incident history, and visible damage before removal.
- Coordinate controlled shutdown, electrical isolation, lockout/tagout, verification of absence of voltage where practicable, and reduction of state of charge in accordance with OEM-approved procedures.
- Segregate normal batteries from damaged, defective, recalled, overheated, water-impacted, or unstable batteries. Establish an approved temporary isolation/quarantine area with separation, weather protection, security, thermal monitoring, spill control, and emergency access.
- Use qualified personnel, packaging, labeling, manifests, transporters, and receiving recycling or disposal facilities. Do not characterize complete battery enclosures as ordinary scrap steel until batteries, electrolyte-containing components, and regulated materials have been removed and accepted by qualified facilities.
- Maintain fire watch and atmospheric monitoring during disconnection, module/rack removal, loading, and handling when indicated by the hazard assessment or OEM instructions.
- Include procedures for dropped or damaged modules, abnormal heating, off-gassing, fire, severe weather, and transportation incidents, including immediate notification and isolation actions.
- Preserve apparatus roads, gates, staging areas, water supply, site identification, and emergency contact information until the fire code official accepts final hazard removal.
- Update the decommissioning cost estimate to include battery discharge/stabilization, OEM or specialty contractor support, hazardous-material characterization, fire watch, gas monitoring, special packaging, qualified transport, recycling/disposal fees, incident contingency, and maintenance of emergency systems.

5.2 Revise BESS Cost Assumption

Replace the assumption that BESS enclosures will be loaded and sold primarily as scrap steel with a component-based disposition model. The estimate should separately address: (1) cells/modules/racks and electrolyte-bearing components; (2) electronic controls and BMS equipment; (3) refrigerants/coolants and fire-suppression agents; (4) copper, aluminum, and steel; (5) concrete and foundations; and (6) damaged or nonconforming batteries requiring special handling. Salvage credit for battery materials should not be used to reduce financial assurance unless supported by a conservative, documented market and receiving-facility basis.

6. Required Final Submittal Checklist(If required by Yavapai County for Conditional Use Permit) Required by IFC at the time of Construction Permit Application

☐ Final code analysis identifying adopted IFC edition, amendments, NFPA 855 edition, and AHJ interpretations.

☐ Final equipment schedule with chemistry, manufacturer, model, power (MW), energy (MWh), unit/rack capacity, state-of-charge limits, and listings.

☐ UL 9540 listing certificates and complete UL 9540A reports with engineer comparison to the installed configuration.

☐ Scaled BESS layout and exposure/separation analysis.

☐ Fire apparatus access, gates, staging, turning, and road construction plan.

☐ Fire water supply calculation and Mayer Fire District approval.

☐ Fire detection, alarm, off-gas detection, ventilation, suppression/fire-control, and explosion-control design narratives and drawings.

☐ BMS/SCADA cause-and-effect matrix and emergency shutdown/isolation plan.

☐ Emergency Operations Plan, responder tactical sheet, SDS/hazard information, and training/drill plan.

☐ Commissioning plan and final commissioning report.

☐ Inspection, testing, maintenance, impairment, and management-of-change program.

☐ Construction fire prevention plan and energization-phase emergency plan.

☐ Damaged/defective battery management and post-incident recovery plan.

☐ BESS decommissioning safety plan and revised financial assurance estimate.

7. Compliance Determination

Based on the planning-level documents reviewed, the project is capable of being designed to comply with the 2024 IFC and NFPA 855, but complete compliance is not yet demonstrated. The appropriate current determination is CONDITIONAL / FINAL DESIGN REQUIRED. Approval should be conditioned on submission and AHJ acceptance of the evidence listed in Section 6 and incorporation of the revisions in Sections 3 through 5.

8. References and Review Basis

- International Code Council, 2024 International Fire Code, Chapter 12, including Sections 1205 and 1207.
- National Fire Protection Association, NFPA 855, Standard for the Installation of Stationary Energy Storage Systems, 2023 edition.
- UL Solutions, UL 9540, Energy Storage Systems and Equipment; UL 9540A, Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems.
- Agua Fria Solar and Storage Project, Solar Facility Report, December 2025.
- Agua Fria Solar and Storage Project, Public Safety, Fire, and Emergency Management Plan, December 2025.
- Preliminary Decommissioning Plan for the Agua Fria Solar and Storage Project, August 2025.

August 28, 2025

Ms. Lindsey Kester
Longroad Energy

Electronically submitted to: lindsey.kester@longroadenergy.com

RE: Agua Fria Solar Project and Post-Construction Wildlife Monitoring Plan

Dear Ms. Kester:

The Arizona Game and Fish Department (Department) appreciates the opportunity to review the Agua Fria Solar Project and Post-Construction Wildlife Monitoring Plan. The Department understands that Longroad Energy (Longroad) proposes to construct an up to 450 MW photovoltaic (PV) solar facility with a battery energy storage system (BESS) and associated infrastructure on approximately 4,215 acres of Arizona State Land Department (ASLD) lands near Arcosanti in Yavapai County, Arizona. The facility will be located east of the Agua Fria River in semi-desert grassland. An approximately 1.8-mile 500 kV generation intertie (gen-tie) transmission line would connect the facility to the Dugas Substation. Agua Fria Solar will be the first project submitted to Yavapai County following the adoption of the Section 608 *Solar Facilities* Ordinance Amendment.

Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission (Commission), has jurisdictional authority and public trust responsibilities to conserve and protect the state fish and wildlife resources. In addition, the Department manages threatened and endangered species through authorities of Section 6 of the Endangered Species Act and the Department's Section 10(a)(1)(A) permit. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department recognizes that appropriate coordination, proper planning, and voluntary implementation of best management practices allow projects to be developed that avoid, minimize, or offset potential impacts to wildlife and recreational access during development and operation of the facilities. Longroad has coordinated with the Department on the Agua Fria project since January 2025, and multiple meetings have been held to discuss measures to maintain wildlife movement in the area, incorporate wildlife-compatible fencing designs, conduct wildlife monitoring, and address other conservation measures. The Department appreciates Longroad's coordination and looks forward to continued collaboration during project planning, development, and monitoring. For your consideration, the Department provides the

GOVERNOR: KATIE HOBBS **COMMISSIONERS:** CHAIR MARSHA PETRIE SUE, SCOTTSDALE | JEFF BUCHANAN, PATAGONIA | JAMES E. GOUGHNOUR, PAYSON
KURT KERR, PINETOP | CLAY HERNANDEZ, TUCSON **DIRECTOR:** TOM P. FINLEY **DEPUTY DIRECTOR:** JOSHUA W. HURST

AZGFD Wildlife Plan Feedback Page 2 of 4

following comments based on the agency's statutory authorities, public trust responsibilities, and special expertise related to wildlife resources and recreation.

Maintaining habitat connectivity is a priority for the Department, and wildlife movement corridors are important for wildlife to respond to changing environmental conditions. Longroad requested pronghorn telemetry data within the project area and worked with the Department to interpret this data and determine the placement of wildlife corridors, with varying widths up to over 1,300 feet, to facilitate movement through the facility. The Department appreciates Longroad's flexibility in incorporating both north-south and east-west corridors into the design and eliminating "dead ends" that could trap wildlife. The Department also appreciates Longroad's decision to increase the planned duration of post-construction wildlife camera monitoring from one to two years to gather more robust data. It is recommended that camera monitoring occurs at least one year after construction to evaluate wildlife use patterns after site conditions have stabilized. Monitoring wildlife use of varying corridor sizes will help assess effectiveness and inform the design of future solar facilities. The Department looks forward to continued coordination with Longroad on post-construction movement monitoring at the facility and the opportunity to review the final monitoring report.

Based on discussions with Longroad, the following measures are also planned to reduce potential impacts to wildlife and habitat:

- The Department understands that Longroad plans to continue to work with species experts to discuss potential impacts to Yellow-billed Cuckoo, a federally Threatened species with designated critical habitat adjacent to the project. The Department appreciates that the project will be set back from suitable riparian habitat surrounding Ash Creek and the Agua Fria River.
- The Department understands that Longroad plans to implement wildlife-compatible fencing designs to allow for smaller wildlife species to move freely through the area and make use of any habitat within the project boundary.
- The Department understands that Longroad will ensure that new power lines follow the Avian Power Line Interaction Committee's current version of the *Suggested Practices for Avian Protection on Power Lines and Reduced Avian Collisions with Power Lines*.
- The Department understands that Longroad plans to conduct surveys for nesting birds prior to vegetation removal and/or construction activities that occur during the breeding season, as per the Migratory Bird Treaty Act, as well as conduct surveys for burrowing species prior to construction.

Finally, the Department offers the following general recommendations to reduce potential impacts to wildlife and habitat:

- The Department recommends conducting minimal grading in the project area and, to the extent possible, retaining habitat features underneath the panels, including vegetation and soils. Keeping the existing soil and root structures intact would serve to minimize erosional run-off and help reduce biodiversity loss within the site (Grodsky and Hernandez 2020[1]).

[1] https://www.nature.com/articles/s41893-020-0574-x

- To help minimize the disturbance to pronghorn and reduce impacts on pronghorn recruitment, the Department recommends that construction activities occur outside the fawning season (mid-May to mid-June) to the extent feasible.
- A variety of Arizona Species of Greatest Conservation Need (SGCN) have the potential to occur within the project area. If wildlife are encountered during project activities, the Department recommends moving them out of harm's way, no more than 0.25 mile outside the project boundary within similar habitat. Please note that the Department has an interactive website, Arizona Wildlife Conservation Strategy[2], that includes the most recent list of SGCN to help navigate and identify conservation opportunities.
- If trenching or digging of large holes will occur, the Department recommends that trenching/digging and backfilling crews work together to minimize the number of open holes/trenches at any given time. Where trenches/holes cannot be backfilled immediately, the Department recommends escape ramps be constructed in each hole and at least every 300 feet in trenches. Escape ramps can be short lateral trenches or wooden planks sloping to the surface, ramp slopes should be less than 45 degrees (1:1). Trenches or holes that have been left open should be inspected for animals and animals removed prior to backfilling.
- Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations (Davies et. al. 2013[3]). The Department recommends using only the minimum amount of light needed for safety. If feasible, "warmer" narrow spectrum lighting (amber, orange, red) is wildlife-friendly and should be used as often as possible to minimize the number of species affected by lighting. It is also beneficial that all lighting is shielded, canted, or cut to minimize the amount of upward shining light.
- Please ensure the project complies with Arizona Native Plant Law[4] regulations. A Native Plant Inventory may need to be conducted to identify, record, and coordinate plant salvage efforts for species that are Protected under the Arizona Native Plant Law.
- To minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects, and pathogens, the Department encourages taking precautions to wash and/or decontaminate equipment before entering and leaving the site. See the Arizona Department of Agriculture website[5] for a list of prohibited and restricted noxious weeds and the Arizona Native Plant Society[6] for recommendations on control methods. To view a list of documented invasive species or to report invasive species in or near the project area, visit iMapInvasives[7], which is a national cloud-based application for tracking and managing invasive species.
- The Department recommends revegetating disturbed areas with native drought-tolerant species that represent the natural surrounding landscape. Landscaping with native plants can help support wildlife and pollinator species in the area while reducing dust and

[2] https://awcs.azgfd.com
[3] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3657119
[4] https://agriculture.az.gov/plantsproduce/native-plants
[5] https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds
[6] https://aznps.com/invas
[7] https://imap.natureserve.org/imap/services/page/map.html

erosion. In addition, the applicable land management agencies should be consulted regarding guidelines for revegetation efforts.

Thank you for the opportunity to provide input on the Agua Fria Solar Project and Post-Construction Wildlife Monitoring Plan. The Department appreciates Longroad's partnership on this project and looks forward to continued collaboration. For further coordination, please contact Jessica Potter at jpotter@azgfd.gov or 623-236-7618.

Sincerely,

Callie Cavalcant

Callie Cavalcant
Habitat, Evaluation, and Lands Branch Chief

cc: Kriselle Colvin – Regional Supervisor, Mesa
Karen Klima – Regional Supervisor, Kingman

AZGFD #M25-08041738

WILDLIFE PROTECTION PLAN FOR THE AGUA FRIA SOLAR AND STORAGE PROJECT – YAVAPAI COUNTY, ARIZONA

PREPARED FOR:

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December 2025

ICF. 2025. *Wildlife Protection Plan for the Agua Fria Solar and Storage Project – Yavapai County, Arizona*. December. (ICF 104629.) Sacramento, CA. Prepared for Agua Fria, LLC.

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Acronyms and Abbreviations

Acronym	Definition
Applicant	Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona
APLIC	Avian Power Line Interaction Committee
AGFD	Arizona Game and Fish Department
ASLD	Arizona State Land Department
ASLD Land	Land managed by the Arizona State Land Department
BGEPA	Bald and Golden Eagle Protection Act
ESA	Endangered Species Act
gen-tie	generation-tie
IBA	Important Bird Area
IPaC	Information for Planning and Consultation
Longroad	Longroad Development Company, LLC
MBTA	Migratory Bird Treaty Act
Project	Agua Fria Solar and Storage Project
Solar Ordinance	Solar Facilities Ordinance
USFWS	U.S. Fish and Wildlife Service

Executive Summary

This Wildlife Protection Plan for the Agua Fria Solar and Storage Project (Project) has been prepared by ICF on behalf of Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona (Applicant) to fulfill the requirements under Section 608, *Solar Facilities*, of the Yavapai County Planning and Zoning Ordinance[1] (County Ordinance). The Applicant has carefully considered Yavapai County requirements and has also coordinated with the Arizona Game and Fish Department (AGFD) to design the Project to avoid and minimize effects on wildlife resources to the extent feasible. The Applicant has also exceeded AGFD recommendations and County ordinances by committing to additional measures.

Avoidance and minimization measures include recommendations from AGFD, requirements from the County ordinances, and the Applicant's additional voluntary commitments that exceed agency recommendations or requirements. Measures are summarized at a high level below.

- Project Siting
    - Approximately half of the leased Project Area (approximately 2,284 acres) will remain undeveloped and unfenced.
    - Development within Critical Habitat will be avoided.
    - Development within Important Bird Areas will be avoided.
    - Development within mapped and defined wildlife linkages or corridors will be avoided.
    - The Development Area is set back from the Agua Fria River and from Ash Creek, which are areas known to facilitate wildlife movement. The actual setback at all locations from the Agua Fria River and Ash Creek meets or exceeds the 500-foot setback requirement.
    - The Development Area is sited outside of washes and streams.
- Environmental Awareness
    - All personnel will be trained on the Wildlife Protection Plan and resource protection measures, including discovery and reporting protocols.
    - Fencing Design
    - "Dead-ends" where entrapment could occur will be eliminated.
    - Wildlife friendly fencing designs will be used.
    - Only the areas containing Project infrastructure within the Development Area will be fenced.
- Avian Collision
    - Lines will be designed and maintained to minimize avian collisions and electrocution.
    - Anti-reflective coatings on solar panels will be used.

[1] Yavapai County Section 608 Solar Facilities available at: https://www.yavapaiaz.gov/files/sharedassets/public/v/1/development-and-permits/development-services/documents/news/sec-608-solar-facilities-approved-11-6-24-in-effect-12-4-24-watermarked.pdf

- Lighting
  - Nighttime work will be limited.
  - Motion-activated lights and downward-directed/hooded lights will be used to minimize unnecessary lighting and skyward illumination.
  - Lighting along perimeter fencings will be avoided wherever feasible.
- Vegetation management
  - Existing vegetation outside of Development Areas will be left intact.
  - Revegetation of temporarily disturbed areas will occur.
  - Mowing will be used instead of herbicides, when feasible, to control weeds.
  - A Vegetation Management Plan will be prepared to guide implementation throughout the life of the Project.
- Post-Construction Wildlife Monitoring
  - Camera monitoring will document wildlife use of the Project Area during operations.

The Applicant has coordinated extensively with AGFD to consider and address their comments and recommendations. Table ES-1 summarizes the recommendations from AGFD and how the Applicant has addressed each one. Table ES-2 summarizes Yavapai County ordinance requirements related to wildlife resources and how the Applicant is addressing each one. The Applicant has exceeded these AGFD recommendations and County ordinances by committing to additional measures summarized in Table ES-3.

Table ES-1. Summary of Arizona Game and Fish Department Recommendations

Recommendations	Compliance
Site project to avoid riparian areas to the extent possible. Locate panels near I-17 on either side of the highway to the extent possible. Incorporate 100-foot minimum wildlife movement corridors. Develop and conduct camera studies.	Letter from AGFD dated Sept 15, 2021, acknowledges the Applicant's voluntary effort to adhere to these recommendations and the Applicant's voluntary effort to exceed recommendations and additionally secure the Orme Ranch Conservation Easement. The Applicant is committed to these recommendations as memorialized in Section 5, Wildlife Protection Measures.
Maximize the minimum 100-foot wildlife movement corridors as feasible and prevent potential dead-ends. Minimize grading and maintain vegetation and habitat features. Follow Wildlife Compatible Fencing Guidelines to enable smaller wildlife species to move freely through the area. Encourage following Recommendation for Domestic Sheep and Goat Management.	Letter from AGFD dated July 20, 2023, acknowledges the Applicant's additional voluntary effort to incorporate these recommended design features for the Project The Applicant is committed to these recommendations as memorialized in Section 5, Wildlife Protection Measures. Note that the Project will not include sheep grazing so recommendations for sheep management are not relevant.
Online Environmental Review Tool report recommendation to comply with Endangered Species Act and Migratory Bird Treaty Act. Phase or minimize construction activities during pronghorn fawning season. Use non-reflective coatings on solar panels. Conduct surveys for nesting birds prior to vegetation removal or construction activities that occur during the breeding season. Survey for burrowing mammal and other Arizona Species of Greatest Conservation Need in advance of construction. Use one-way exclosures on burrows or move them out of harm's way no more than 0.25 mile outside of project in similar habitat.	The Applicant is committed to these recommendations from letter from AGFD dated July 20,2023, as memorialized in Section 5, Wildlife Protection Measures.

Recommendations	Compliance
Guidelines for Solar Development in Arizona Best Management Practices: · Comply with the Arizona Native Plant Law. · Take precautions to wash or decontaminate equipment to minimize the potential introduction or spread of exotic invasive species. · Minimize open trenches and include escape ramps in cases where traches or holes must be left open. · Implement Avian Power Line Interaction Committee (APLIC) standards for new aerial power lines. · Revegetate disturbed areas with native drought-tolerant species that represent the natural surrounding landscape. · Reduce artificial light at night.	The Applicant is committed to these recommendations from letter from AGFD dated July 20, 2023, and another letter dated February 07, 2025, as memorialized in Section 5, Wildlife Protection Measures.
Request for additional fence design updated to increase wildlife movement areas and prevent dead-ends.	The Applicant committed to additional fence design modification to eliminate potential dead-end areas and increase open space for wildlife movement as recommended by AGFD in multiple meetings between April and August 2025. A letter from AGFD dated August 28, 2025, acknowledges the Applicant's additional voluntary effort to incorporate these recommendations. The additional fence design changes are memorialized in the Agency Correspondence Appendix and the current Development Plan for this application.

Table ES-2. Summary of Yavapai County Ordinance Requirements Related to Wildlife

Requirements	Compliance
(C)(4): Establish a minimum of a 500-foot buffer zone to mitigate the effects of the Solar Facility upon surrounding properties and wildlife.	The Project Development Area is designed to include setbacks from any designated Critical Habitat, IBA, and wildlife movement corridor surrounding the Project. The Agua Fria River and Ash Creek are designated Critical Habitats, IBAs, and provide wildlife movement corridors. The Applicant has established a minimum 500-foot setback from the FEMA floodplain of the Agua Fria River and Ash Creek; the actual average setback between these features and the Project Development Area is 1,080 feet. The setback is memorialized in the current Development Plan for this application
(E)(4)(a): Compliance with AGFD guidelines for handling Special-Status Species, if encountered. Consultation with AGFD and USFWS, as appropriate.	All personnel on site will be provided with training about appropriate notification procedures to follow should protected species be encountered during construction and operation including consultation with AGFD and the USFWS as required.
(F)(1)(e): Restricted locations that must remain in an undisturbed condition, unless a waiver is granted as described in subsection D.4. (2) Locations with potential significant negative impacts on Special-Status Species and their habitats, other special wildlife designations such as Critical Habitat and Important Bird Areas, identified wildlife corridors.	The Project Development Area is designed to be setback from any designated Critical Habitat, IBA, and wildlife movement corridor surrounding the Project. The Agua Fria River and Ash Creek are designated Critical Habitats, IBAs, and provide wildlife movement corridors. The Applicant has established a minimum 500-foot setback from the FEMA floodplain of the Agua Fria River and Ash Creek; the actual average setback between these features and the Project Development Area is 1,080 feet. The setback is memorialized in the current Development Plan for this application
(F)(2): Setbacks (c) One thousand (1,000) feet from federally protected lands (e.g., National Park, National Monument, Conservation Lands), and five hundred (500' feet from other federally managed lands. (e) Five hundred (500) feet from forested or heavily vegetated areas or from transitional habitat areas. (i) Six hundred fifty (650) feet from each parcel corner on land parcels with checkerboard ownership arrangements (i.e., public land/private land) for wildlife habitat connectivity.	The Development Area is over 1,000 feet from the Agua Fria National Monument and setback a minimum of 500 feet from the Prescott National Forest, forested or heavily vegetated areas, or transitional habitat areas. The Project is not located in or within 650 feet of a checkerboard ownership arrangement.

Requirements	Compliance
(F)(4) Creation of areas for wildlife movement/habitat linkage outside of established wildlife corridors, in consultation with AGFD. Includes wildlife permeable fencing for small animals.	The following measures were determined in consultation with AGFD. Approximately 2,284 acres (approximately half of the Project Area) will remain unfenced for the use and movement of wildlife. Fencing is designed to avoid dead-ends where wildlife could become trapped. Solar facility fencing will be permeable to small animals by leaving gaps between the bottom of the fence and the ground. Perimeter fencing around photovoltaic arrays is composed of game fencing: small mesh woven wire with no barbed wire so wildlife will not get entangled.
(F)(6)(a)(4) Fencing will minimize visual impacts and be designed to minimize impacts on wildlife.	Same as above.
(G)(3) The Solar Facility operator will train field personnel/workers on proper ingress/egress routes and protocols for working in environmentally, culturally, or archaeologically sensitive areas, and document training efforts.	All personnel will be trained on the Wildlife Protection Plan and resource protection measures including protocols for avoiding environmentally sensitive areas. Trainings will be documented as required onboarding review materials before personnel can access the Project.
(M)(1)(b) All fencing shall be removed and recycled or reused unless the Development Services Director grants approval for any existing perimeter fencing to remain in place, in which case, the Arizona Game and Fish Department will be consulted to ensure that the remaining fence will not negatively impact wildlife.	No fencing will remain after the Project is decommissioned. If any fencing is deemed necessarily permanent, AGFD will be consulted to ensure there are no negative impacts on local wildlife.

Notes: IBA = Important Bird Areas; USFWS = U.S. Fish and Wildlife Service

Table ES-3. Applicant's Additional Wildlife Protection Measures that Exceed Agency Guidance and Recommendations

Description
AGFD has recommended a minimum of 100-foot-wide wildlife corridors within the design. All openings between fenced Development Areas and areas between open space areas exceed 100-foot widths, with many substantially larger.
AGFD has recommended that the Applicant minimize grading and maintain vegetation and habitat features. The Project consists of significant open space within the design with more than half of the Project Area remaining outside of Development Areas and maintaining its existing vegetation. Additionally, existing vegetation will be kept within the Development Area, where feasible, to minimize grading..
AGFD recommended additional fence design updates to increase wildlife movement and prevent dead-ends. The Applicant significantly modified the fencing plan and layout to accommodate this request and to eliminate the potential for dead-ends within the Project.
Both AGFD and Yavapai County requested 500-foot buffers from floodplains, Important Bird Areas, and Critical Habitat. The Applicant altered the Project design, so Development Areas have sufficient buffers from Ash Creek and the Agua Fria River, with an actual average buffer distance from high-sensitivity areas of 1,080 feet.
The Project's limit of disturbance boundaries (including staging areas) will be clearly delineated to ensure that construction crews stay within these areas.
Construction and operations staff will be instructed to stay on designated access roads, or on alternative routes approved by a Project biologist.
Staging areas will be sited in previously disturbed areas or in areas cleared by a Project biologist and staging areas will only be large enough to safely store equipment and allow access.
AGFD fence guidelines recommend exclusion fence be setback a minimum of 300 feet from busy roadways. The Applicant has designed the Project fence to be setback 375 -2,200 feet from the adjacent highway.
Reasonable driving speed limits (e.g., 15 mph) will be established for staff on the Project to minimize the potential for wildlife-vehicle collisions.
All trash, debris, and other materials will be removed from the Project or placed in approved containers daily.
No guns, firearms, or pets will be permitted within the Project Area.

Chapter 1
Introduction

1.1 Purpose of this Report

This Wildlife Protection Plan for the Agua Fria Solar and Storage Project (Project) has been prepared by ICF on behalf of Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona (Applicant) to fulfill the following requirements under Section 608, *Solar Facilities*, of the Yavapai County Planning and Zoning Ordinance[2].

Subsection D.2.c: Solar Facilities Use Permit, Application Requirements

Wildlife Protection Plan: This plan shall be based on the results of the Preliminary Site Investigations. The Wildlife Protection Plan must detail the following information:

(1) An inventory of all Special-Status Species that may be present on or utilize the site;

(2) Identification of existing and proposed wildlife Critical Habitat and Important Bird Areas;

(3) Location and dimensions of wildlife corridors and design details regarding fencing, if any, including a description of potential impacts to wildlife and wildlife movement;

(4) Direct and cumulative impacts to wildlife and Wildlife Linkages and explanation of how these impacts will be avoided through project design, habitat enhancement, stewardship activities, evaluation, continued monitoring, or other mitigation strategies; and

(5) Notations summarizing conditional requirements related to wildlife, such as timing restrictions to reduce or prohibit activities in specified areas during sensitive life cycle events (e.g., active nesting periods and migration movements) and wildlife survey requirements.

(6) Post-construction Wildlife Corridor Monitoring: The owner or operator and their successors shall work with the Arizona Game and Fish Department and the County to determine an appropriate post-construction monitoring plan to validate the effectiveness of implemented wildlife corridors in maintaining habitat connectivity. This may include telemetry and camera studies or other effective options at the time of completion.

1.2 Project Overview

The Project is an up to 450-megawatt nameplate capacity solar photovoltaic power plant. The Project components consist of a solar field of photovoltaic modules, battery energy storage system, Project substation, operations and maintenance building, and ancillary facilities. The Project would be located on Arizona State Trust Land managed by the Arizona State Land Department (ASLD; ASLD Land) and controlled by the Applicant via a solar lease. The Applicant is a subsidiary of Longroad Development Company, LLC (Longroad).

[2] Yavapai County Section 608 Solar Facilities available at: https://www.yavapaiaz.gov/files/sharedassets/public/v/1/development-and-permits/development-services/documents/news/sec-608-solar-facilities-approved-11-6-24-in-effect-12-4-24-watermarked.pdf

In addition, there will be a generation tie (gen-tie) line associated with the Project to connect the power generated from the solar facilities to the grid at Dugas Substation. The gen-tie would be approximately 1.8 miles in length and sited within a corridor located north of Interstate 17, south and east of the existing Dugas Substation, and directly east of the existing 500-kilovolt transmission line corridor. The Applicant received a Certificate of Environmental Compatibility from the Arizona Corporation Commission for the gen-tie in May 2025.

The Project would help Arizona utilities meet growing energy demand and support existing and future energy loads by producing and storing energy and delivering it to the regional transmission grid. The Project would also provide a new energy resource and electrical capacity to help satisfy regional system reliability requirements.

1.3 Project Location and Setting

The Project is located in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project vicinity including several existing high-voltage transmission lines, the existing Dugas Substation, as well as Interstate 17, which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott (Figure 1).

The Project Development Area is defined as the construction footprint for the proposed Agua Fria solar field, battery energy storage system, operations and maintenance building, Project substation, and gen-tie line, which totals approximately 1,930 acres of ASLD Land within the Project on the south and north sides of Interstate 17.

1.4 Wildlife Agency Coordination to Date

Wildlife agency coordination to date has primarily occurred with the Arizona Game and Fish Department (AGFD) and with the U.S. Fish and Wildlife Service through their Information for Planning and Consultation (IPaC). Details of this coordination are summarized below in chronological order, and correspondence records are included in Appendix A. Refer to Appendix B for a copy of the updated February 28, 2025, Arizona Environmental Online Review Tool Report and IPaC species list.

September 15, 2021: Letter from AGFD to the Applicant, regarding the Applicant's coordination with AGFD regarding wildlife mitigation for the Project, formerly known as the Dugas Solar Facility.

July 20, 2023: Letter from AGFD to the Applicant regarding the Department's recommendations and best management practices for design of the Project.

January 6, 2025: Virtual meeting to review updated design and wildlife corridors.

February 7, 2025: Letter from AGFD to the Applicant reviewing a Project component, the Agua Fria Gen-Tie Project.

February 26, 2025: Email request from the Applicant to AGFD for American pronghorn (*Antilocapra americana americana*) movement data to inform design of the Project.

February 28, 2025: Generation of an updated Arizona Environmental Online Review Tool Report for the Project.

April 2, 2025: Virtual meeting between the Applicant and AGFD to discuss American pronghorn movement data and Project design considerations.

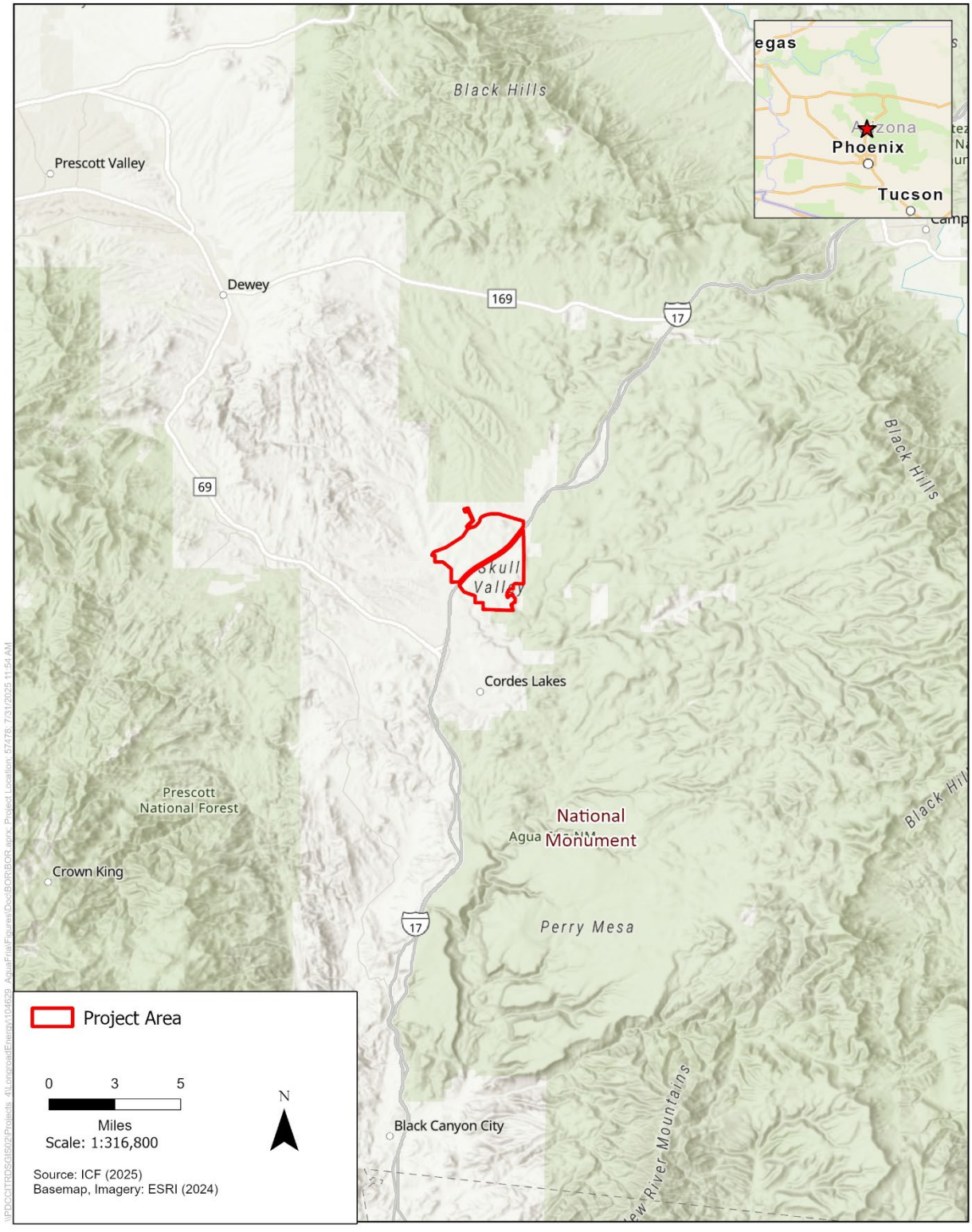
June 12, 2025: Virtual meeting between the Applicant and AGFD to present additional design changes that improve open space areas and facilitate wildlife movement in response to new pronghorn movement data.

July 31, 2025: Virtual meeting between the Applicant and AGFD to present updated design and post-construction wildlife monitoring plan for the Project.

August 1, 2025: Email from Applicant to AGFD confirming post-construction wildlife monitoring plan.

August 28, 2025: Letter from AGFD to the Applicant confirming measures planned to reduce potential impacts to wildlife and habitat and reiterating recommendations. Letter includes an acknowledgment of the post-construction wildlife monitoring plan components.

In addition, AGFD, USFWS, Audubon Society, Trout Unlimited, and Backcountry Hunters & Anglers are formal stakeholders in the Project's Citizen Participation Plan and have been provided with all Project notifications including informational mailers, open house invitations, and other Project update communications.



ICF

Figure 1
Agua Fria Solar Project
Project Location

Figure 1. Project Location

Chapter 2
Regulatory Setting

The following laws and regulations are relevant to wildlife protection within the Project Area.

2.1 Federal

2.1.1 Endangered Species Act

Pursuant to the federal Endangered Species Act (ESA), the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service have authority over projects that may result in take of a species listed as threatened or endangered under the act, or a species that is a candidate for listing as threatened or endangered. *Take* is defined under the ESA, in part, as killing, harming, or harassing. Under federal regulations, take is further defined to include habitat modification or degradation that results, or is reasonably expected to result, in death or injury to wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. If a likelihood exists that a Project would result in take of a federally listed species, either an incidental take permit, under Section 10(a) of the ESA, or a federal interagency consultation, under Section 7 of the ESA, is required.

2.1.2 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act, as amended in 1964, was enacted to protect fish and wildlife when federal actions result in the control or modification of a natural stream or body of water. The statute requires federal agencies to take into consideration the effect that water-related projects would have on fish and wildlife resources. Consultation and coordination with USFWS and AGFD are required to address ways to prevent loss of and damage to fish and wildlife resources, and to further develop and improve these resources.

2.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) domestically implements a series of international treaties that provide for migratory bird protection. The MBTA authorizes the Secretary of the Interior to regulate the taking of migratory birds. The act further provides that it is unlawful, except as permitted by regulations, "to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird…" (16 USC 703). This prohibition includes both direct and indirect acts, although harassment and habitat modification are not included unless they result in direct loss of birds, nests, or eggs. The current list of species protected by the MBTA can be found in the July 31, 2023, *Federal Register* (88 FR 49310–49355). This list comprises several hundred species, including essentially all native birds. Permits for take of nongame migratory birds can be issued only for specific activities, such as scientific collecting, rehabilitation, propagation, education, taxidermy, and protection of human health and safety and of personal property. Take of nongame migratory birds cannot be authorized through the MBTA. USFWS publishes a list of birds of conservation concern to identify migratory nongame birds that are likely to become candidates for listing under ESA without additional conservation actions. The birds of conservation concern list is intended to stimulate coordinated and collaborative conservation efforts among federal, state, tribal, and private parties.

2.1.4 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) (16 USC 668) prohibits take and disturbance of individuals and nests. Take permits for birds or body parts are limited to religious, scientific, or falconry pursuits. However, the BGEPA was amended in 1978 to allow mining developers to apply to USFWS for permits to remove inactive golden eagle (*Aquila chrysaetos*) nests in the course of "resource development or recovery" operations. With the 2007 removal of bald eagle from the ESA list of threatened and endangered species, USFWS issued new regulations to authorize the limited take of bald eagles (*Haliaeetus leucocephalus*) and golden eagles under the BGEPA, where the take to be authorized is associated with otherwise lawful activities. A final Eagle Permit Rule was published on September 11, 2009 (74 FR 46836–46879; 50 CFR 22.26), which was revised in 2016 (81 FR 91494), and amended on February 12, 2024 (89 FR 9920).

A permit authorizes limited, non-purposeful take of bald eagles and golden eagles, and can be applied for by individuals, companies, government agencies (including tribal governments), and other organizations to allow disturbance of or otherwise take eagles in the course of conducting lawful activities, such as operating utilities and airports. Under BGEPA, *take* is defined as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest or disturb." *Disturb* is defined in the regulations as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available: (1) injury to an eagle; (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior." Most permits issued under the new regulations authorize disturbance. In limited cases, a permit may authorize the physical take of eagles, but only if every precaution is first taken to avoid physical take.

2.2 State

2.2.1 Arizona Wildlife Conservation Strategy

AGFD developed the Arizona Wildlife Conservation Strategy to guide the collaborative conservation of Arizona's wildlife, particularly the Species of Greatest Conservation Need (AGFD 2022). The Strategy focuses on conservation across both public and working landscapes, and conservation actions revolve around land and water protection and management, species management, education and awareness, law and policy, livelihood, economic, and other incentives, and external capacity building. Conservation actions focus on benefiting wildlife through conservation of their habitats, and monitoring of both wildlife and their habitats are included.

2.2.2 Arizona Revised Statutes Title 17 – Game and Fish

Title 17 of Arizona's Revised Statutes sets forth regulations relevant to conservation and management of Arizona's wildlife that are overseen by AGFD and the Arizona Game and Fish Commission. These include lawful hunting and angling, restoration projects, and protection of wildlife habitat, among others. Under these regulations, it is unlawful to take, wound, kill, handle, or possess those plant and wildlife species listed as special status by the AGFD, which include species that are federally listed under ESA or by the U.S. Forest Service or Bureau of Land Management or a candidate for listing under ESA, are listed under the Arizona Native Plant Law, or are state listed as a Species of Greatest Conservation Need. Projects that may result in take require coordination with AGFD and the applicable federal agencies.

The following includes sections of Title 17, Chapters 1-3, that are relevant to the Project.

Section 17- 236, Subsection A – Taking Birds and Possession of Raptors

It is unlawful to take or injure any bird or harass any bird upon its nest, or remove the nests or eggs of any bird, except as may occur in normal horticultural and agricultural practices and except as authorized by commission order. Nothing in this title shall be construed to prohibit the taking of such birds for scientific purposes under permits issued by the commission.

Section 17- 237 – Pollution of Waters

The commission is authorized to bring suit in the name of the state against any person, corporation, or government agency, to restrain or enjoin the person, corporation, or government agency from discharging or dumping into a stream or body of water in the state any deleterious substance which is injurious to wildlife.

Section 17- 255.02 – Prohibitions Related to Aquatic Invasive Species

Except as authorized by the commission, a person shall not:

1. Possess, import, ship or transport into or within this state, or cause to be imported, shipped or transported into or within this state, an aquatic invasive species.2. Notwithstanding section 17-255.04, subsection A, paragraph 4, release, place or plant, or cause to be released, placed or planted, an aquatic invasive species into waters in this state or into any water treatment facility, water supply or water transportation facility, device or mechanism in this state.

3. Notwithstanding section 17-255.04, subsection A, paragraph 4, place in any waters of this state any equipment, watercraft, vessel, vehicle or conveyance that has been in any water or location where aquatic invasive species are present within the preceding thirty days without first decontaminating the equipment, watercraft, vessel, vehicle or conveyance.

Section 17- 309, Subsection A – Prohibitions Related to Taking and Handling of Wildlife

2. Take, possess, transport, release, buy, sell or offer or expose for sale wildlife except as expressly permitted by this title.

Section 17- 314 – Illegally Taking, Wounding, Killing or Possessing Wildlife

This section states civil penalties that may be imposed for unlawful taking, wounding, killing, or possessing any of the following wildlife, or part thereof; turkey; javelina; bear; mountain lion; pronghorn; elk; eagle; predatory, fur-bearing, or nongame animal; small game or aquatic wildlife; bighorn sheep; bison; endangered species.

2.3 Local

2.3.1 Yavapai County Section 608 Solar Facilities Ordinance

The Yavapai County Board of Supervisors approved the Solar Facilities Ordinance (Solar Ordinance) on November 6, 2024 (the Solar Ordinance took effect on December 4, 2024). The purpose of the Solar Ordinance was to "*….establish processes, requirements, and performance standards for the placing, design, construction, operation, monitoring, modification, and removal of Utility-Scale Solar Facilities."* With respect to wildlife and wildlife habitat, the Solar Ordinance requires preliminary site

investigations to guide the Project Applicant and the County in determining appropriate siting and design of an installation. The Solar Ordinance requires the preparation of a Wildlife Protection Plan which must detail the following information:

(1) An inventory of all Special-Status Species that may be present on or utilize the site;

(2) Identification of existing and proposed wildlife Critical Habitat and Important Bird Areas;

(3) Location and dimensions of wildlife corridors and design details regarding fencing, if any, including a description of potential impacts to wildlife and wildlife movement;

(4) Direct and cumulative impacts to wildlife and Wildlife Linkages and explanation of how these impacts will be avoided through Project design, habitat enhancement, stewardship activities, evaluation, continued monitoring, or other mitigation strategies; and

(5) Notations summarizing conditional requirements related to wildlife, such as timing restrictions to reduce or prohibit activities in specified areas during sensitive life cycle events (e.g., active nesting periods and migration movements) and wildlife survey requirements.

(6) Post-construction Wildlife Corridor Monitoring: The owner or operator and their successors shall work with the Arizona Game and Fish Department and the County to determine an appropriate post-construction monitoring plan to validate the effectiveness of implemented wildlife corridors in maintaining habitat connectivity. This may include telemetry and camera studies or other effective options at the time of completion.

This document has been prepared to meet the requirements of the Solar Ordinance and the Wildlife Protection Plan.

Chapter 3
Biological Setting

3.1 Special-Status Species Definition

In Arizona, the term "special-status species" refers to plants and animals that are legally protected or considered rare by the scientific community. They include species listed as endangered or threatened under the federal ESA and species of conservation concern, like those identified in Arizona's State Wildlife Action Plan, which identifies Species of Greatest Conservation Need. AGFD has scored each species in the Species of Greatest Conservation Need list into three "Tiers" based on multiple vulnerability criteria (AGFD 2022).

Tier 1 – Deemed vulnerable (scored "1") in at least one of the seven categories and matches at least one of the following:

- Federally listed as endangered or threatened under the federal ESA
- Recently removed from ESA and currently requires post-delisting monitoring
- Specifically covered under a signed conservation agreement, Candidate Conservation Agreement, a Candidate Conservation Agreement with Assurances, or a Conservation Strategy and Assessment or Strategic Conservation Plan
- Closed season species (i.e., no take permitted) as identified in Arizona Game and Fish Commission Orders 40, 41, 42 or 43

Tier 2 – Deemed vulnerable (scored "1") in at least one of the seven categories above but matched none of the additional criteria for Tier 1.

Tier 3 – Species with unknown status in at least one of the seven categories but do not rise to a Tier 2. These species are those for which we are unable to assess status and thus represent priority research and information needs. As more information becomes available, their tier status will be re-evaluated.

3.2 Potential for Occurrence

Species were assessed for their potential to occur within the Project Area on the following basis:

- **None**. Specific to invertebrates, no suitable habitat is present within the Project Area and the Project Area is outside the known population sites or overwintering range for this species. Specific to fish, no suitable habitat is present within the Project Area. Specific to birds, no suitable nesting or overwintering habitat is present within the Project Area.
- **Low**. Low quality suitable habitat is present within the Project Area and there are no records of occurrences within 5 miles of the Project Area, or no suitable habitat is present within the Project Area and there are records of occurrences within 5 miles, and/or the Project Area is outside of the known extant geographic or elevation range.
- **Moderate**. Low quality or limited suitable habitat is present in the Project Area and records of occurrences are located within 5 miles of the Project Area, or quality suitable habitat is present within the Project Area but there are no known records of occurrences within 5 miles of the Project Area.

- **High**. Suitable habitat is present in the Project Area and records of occurrences overlap with the Project Area or are located within 5 miles of the Project Area, and/or the species was observed during surveys.

3.3 Special-Status Species Inventory

The Preliminary Wildlife and Habitat Study for the Project (ICF 2025a) identified 104 special-status species that may be present in the 5-mile study area (i.e., the Project Area and a 5-mile buffer). Of the 104 species identified in the 5-mile study area, 66—including 1 invertebrate, 3 amphibians, 8 reptiles, 49 birds, and 5 mammals—have a moderate to high potential to occur in the Project Area with potential for impacts (Table 1 in Appendix C). These species and potential impacts from the Project are discussed in detail below and in Chapter 4.

The invertebrate, monarch butterfly (*Danaus plexippus*), has the potential to occur in mesquite scrub and semi-desert grassland within the Project Area (Figure 2) in locations where host milkweed (*Asclepias* spp.) and nectaring (flowering) plants are present.

The amphibians that have a moderate to high potential to occur within the Project Area consist of Arizona toad (*Anaxyrus microscaphus*) and lowland leopard frog (*Rana yavapaiensis*), and Sonoran desert toad (*Incilius alvarius*). These species are expected to occur in desert wash—both Ash Creek and the Agua Fria River—and pond habitats and surrounding upland areas within the Project Area, with the Sonoran desert toad potentially ranging farther into upland areas within the main Project Area (Figure 2).

The reptiles that have a moderate to high potential to occur within the Project Area consist of Arizona black rattlesnake (*Crotalus cerberus*), desert mud turtle (*Kinosternon sonoriense sonoriense*), gila monster (*Heloderma suspectum*), Madrean alligator lizard (*Elgaria kingii*), regal horned lizard (*Phrynosoma solare*), Sonoran coralsnake (*Micruroides euryxanthus*), Sonoran whipsnake (*Coluber bilineatus*), and Sonoran spotted whiptail (*Aspidoscelis sonorae*). The desert mud turtle is expected to occur in desert wash—both Ash Creek and the Agua Fria River—and pond habitats and surrounding upland areas within the Project Area (Figure 2). The remaining snakes and lizards are more generally expected to occur throughout the majority of the Project Area.

The 48 birds with a moderate to high potential to occur within the Project Area include 11 raptors, 32 passerines, and five additional species of mixed taxonomic classifications. Raptors consist of American kestrel (*Falco sparverius*), American peregrine falcon (*Falco peregrinus anatum*), common black hawk (*Buteogallus anthracinus*), elf owl (*Micrathene whitneyi*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), Harris's hawk (*Parabuteo unicinctus*), prairie falcon (*Falco mexicanus*), Swainson's hawk (*Buteo swainsoni*), western burrowing owl (*Athene cunicularia hypugaea*), and western screech-owl (*Megascops kennicottii*). Passerines consist of Abert's towhee (*Melozone aberti*), black-throated gray warbler (*Setophaga nigrescens*), Brewer's sparrow (*Spizella breweri*), broad-tailed hummingbird (*Selasphorus platycercus*), Bullock's oriole (*Icterus bullockii*), cactus wren (*Campylorhynchus brunneicapillus*), canyon towhee (*Melozone fusca*), Cassin's finch (*Haemorhous cassinii*), chestnut-collared longspur (*Calcarius ornatus*), Costa's hummingbird (*Calypte costae*), gray flycatcher (*Empidonax wrightii*), gray vireo (*Vireo vicinior*), hermit thrush (*Catharus guttatus*), hooded oriole (*Icterus cucullatus*), orned lark (*Eremophila alpestris*), juniper titmouse (*Baeolophus ridgwayi*), Lincoln's sparrow (*Melospiza lincolnii*), loggerhead shrike (*Lanius ludovicianus*), MacGillivray's warbler (*Geothlypis tolmiei*), Pacific wren (*Troglodytes pacificus*), pinyon jay (*Gymnorhinus cyanocephalus*), pyrrhuloxia (*Cardinalis sinuatus*), sagebrush sparrow

(*Artemisiospiza nevadensis*), savannah sparrow (*Passerculus sandwichensis*), southwestern willow flycatcher (*Empidonax traillii extimus*), Sprague's pipit (*Anthus spragueii*), Swainson's thrush (*Catharus ustulatus*), Townsend's solitaire (*Myadestes townsendi*), verdin (*Auriparus flaviceps*), vesper sparrow (*Pooecetes gramineus*), western wood-pewee (*Contopus sordidulus*), and Woodhouse's scrub-jay (*Aphelocoma woodhouseii*). All other avian species consist of common nighthawk (*Chordeiles minor*), gila woodpecker (*Melanerpes uropygialis*), Inca dove (*Columbina inca*), killdeer (*Charadrius vociferus*), and yellow-billed cuckoo (Western Distinct Population Segment) (*Coccyzus americanus*). These birds have the potential to occur in all habitats on the Project. Nesting for most species is generally more likely to occur in trees and shrubs—particularly in woodland areas—and artificial structures such as transmission towers, although some species may nest on the ground or in burrows. Certain bird species may even use and nest in developed and disturbed areas (Figure 2).

The mammals that have a moderate to high potential to occur on the Project consist of American pronghorn (*Antilocapra americana americana*), Bailey's pocket mouse (*Chaetodipus baileyi*), desert red bat (*Lasiurus frantzii*), Mexican gray wolf (*Canis lupus baileyi*), and western yellow bat (*Lasiurus xanthinus*). These species are generally expected to occur in grassland, scrub, wash, and riparian woodland habitats, with Bailey's pocket mouse generally more likely to occur in desert scrub. Potential roosting habitat for bats appears to be limited to scrublands (likely marginal) and riparian woodlands (Figure 2).

Among these species with a moderate to high potential to occur, the following were included on USFWS's IPaC list (USFWS 2025) as threatened, endangered, or proposed species:

- Monarch butterfly
- Southwestern willow flycatcher
- Yellow-billed cuckoo
- Mexican gray wolf

For the complete list of potentially occurring special-status species; seven are considered Tier 1 species, fifty-five are considered Tier 2 species, and three are considered Tier 3 species by AGFD, and one species has no AGFD status (monarch butterfly).

3.4 Critical Habitat and Important Bird Areas

3.4.1 Critical Habitat

The Project is adjacent to and overlaps with designated yellow-billed cuckoo (Western Distinct Population Segment) Critical Habitat primarily along Ash Creek, in addition to along the Aqua Fria River (AGFD 2025; USFWS 2025; Figure 3). No Critical Habitat is located within the proposed Development Area. No additional designated or proposed Critical Habitat for the remaining species included on the IPaC list for the Project overlap with or are located within 5 miles of the Project (AGFD 2025; USFWS 2025).

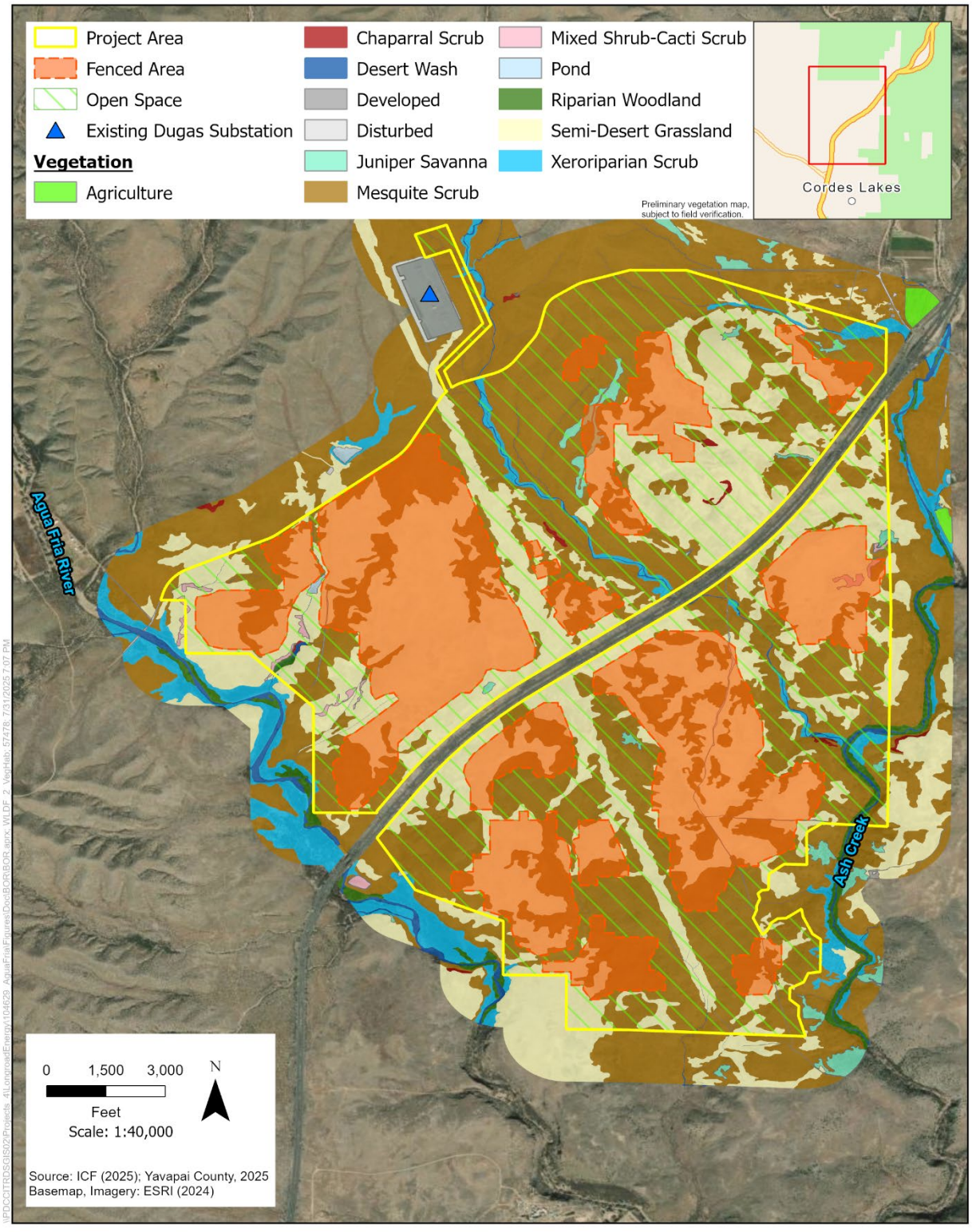


Figure 2
Agua Fria Project
Vegetation and Habitat

Figure 2. Vegetation and Habitat

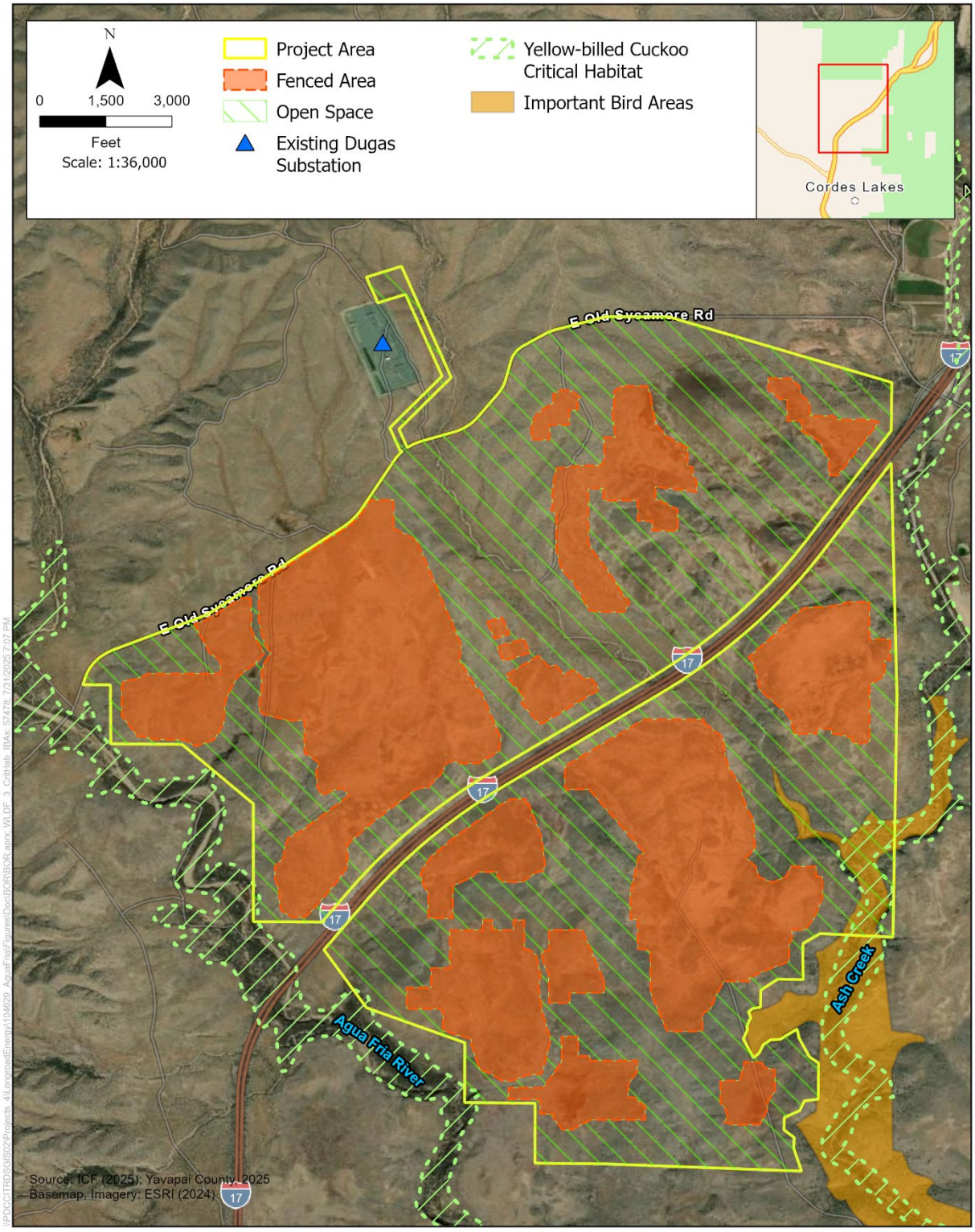
3.4.2 Important Bird Areas

Important Bird Areas (IBAs) are identified by the National Audubon Society using a standardized set of criteria, which focus on identifying sites that support significant populations of bird species, including those that are globally or continentally threatened, those with restricted ranges, or those that congregate in large numbers at specific locations. One IBA occurs within 5 miles of and overlaps with the Project: the Agua Fria National Monument Riparian Corridors IBA (AGFD, 2025; Figure 3). This IBA is a series of plateaus and mesas that are deeply cut by the Agua Fria River and its tributaries. The principal bird attractor for this IBA is the mature, native riparian woodland habitats that provide habitat for western yellow-billed cuckoos.

The northwestern extent of the IBA overlaps with the southeastern portion of the Project Area along Ash Creek. In total, the Agua Fria National Monument Riparian Corridors IBA covers 26.31 square miles, or 16,843 acres, with the majority located south of the Project Area along the Agua Fria River. Approximately 50 acres of the IBA (a fraction of 1%) overlaps with the Project Area, however none of the IBA is located within the Development Area.

3.5 Wildlife Movement

No modeled wildlife linkages or corridors were identified from AGFD's environmental review tool (AGFD 2025). Although not formally marked as wildlife linkage corridors, the Agua Fria River, Ash Creek, and their tributaries create riparian corridors that facilitate wildlife movement through the landscape. An approximately 0.5 mile long (distance as measured along the meandering creek) segment of Ash Creek intersects the Project Area, however it is not within the Development Area.



ICF

Figure 3
Agua Fria Project
Critical Habitat and Important Bird Areas

Figure 3. Critical Habitat and Important Bird Areas

Chapter 4
Direct and Cumulative Impacts

4.1 Potential Project Impacts

Potential impacts on wildlife from utility-scale solar development vary widely by taxa and facility location. Below is a list of potential impacts that may result from Project construction, operation, and decommissioning. Impacts may occur at different temporal (e.g., during the construction, operation, and/or decommissioning phases of the Project) and spatial scales (e.g., within or outside of the Project). The following impacts are applicable to development/construction projects generally, and not necessarily specific to solar facilities.

Construction and Operation

- Habitat loss and fragmentation
- Disrupted wildlife movement patterns and altered habitat use
- Altered ecosystem function from habitat alteration or conversion
- Destruction of burrows of fossorial (burrowing) species
- Crushing or displacement of invertebrates, amphibians, reptiles, ground/shrub nesting birds, and mammals by vehicles/other equipment
- Entrapment of amphibians, reptiles, and small or medium-sized mammals in open trenches
- Disturbance of nesting birds, roosting bats, or other wildlife
- Introduction of diseases and invasive species
- Wildlife collision with infrastructure, heavy equipment, or vehicles
- Wildlife electrocution risk at the substation, power poles and elevated lines, and other electrical equipment

Decommissioning

- Disrupted wildlife movement patterns and altered habitat use
- Destruction of burrows of fossorial (burrowing) species
- Crushing or displacement of invertebrates, amphibians, reptiles, ground/shrub nesting birds, and mammals by vehicles/other equipment
- Entrapment of amphibians, reptiles, and small or medium-sized mammals in open trenches
- Disturbance of nesting birds, roosting bats, or other wildlife
- Introduction of diseases and invasive species
- Wildlife collision with heavy equipment or vehicles

Subsections below provide detail on taxa and topics that have species-focused literature available for review.

4.2 Wildlife

4.2.1 Aquatic and Semi-Aquatic Species

As currently designed, the Project could have no direct impact on aquatic habitat for amphibians, and semi-aquatic reptiles (i.e., desert mud turtle), but may indirectly impact these areas through contamination and runoff during Project construction, operation, and decommissioning. Upland habitat in the vicinity of pond habitats could be directly impacted during construction through habitat removal and fragmentation from construction of the fenced solar arrays and other Project infrastructure, but this would generally be limited in geographic extent and would not be a substantial impact.

Mortality of amphibians and semi-aquatic reptiles could occur during Project construction, operation, and decommissioning through crushing or displacement by vehicles/other equipment—including crushing of fossorial mammal burrows if occupied by these species—or through entrapment if animals cannot escape open trenches. Amphibian and semi-aquatic reptile movement patterns and habitat use could also be disrupted by disturbance from human presence, artificial light at night, and noise/vibrations during construction, operation, and decommissioning. Project activities could introduce diseases and invasive species, which could indirectly affect fish, amphibians, and semi-aquatic reptiles through predation, competition, and decreased health.

Impacts on amphibians, and semi-aquatic reptiles will be avoided and minimized through Project design and application of various measures as discussed in Chapter 5, *Wildlife Protection Measures*.

The Project could contribute to cumulative impacts, including altered ecosystem function from habitat alteration or conversion, on fish, amphibians, and semi-aquatic reptiles and their habitats in Yavapai County. However, impacts will be avoided and minimized through Project design and application of various measures as discussed in Chapter 5 *Wildlife Protection Measures*. In addition, the region surrounding the Project is largely undeveloped including extensive lands managed and protected by the U.S. Forest Service (e.g., Prescott and Coconino National Forests) and the Agua Fria National Monument (administered by the National Park Service). These areas provide robust protections for aquatic and semi-aquatic species and habitats in the region. Considering the context of protected aquatic habitats in the region, the avoidance of and setbacks from the Agua Fria River and Ash Creek, and the Project's designed open space areas, the Project would not have a substantial cumulative impact on these species and their habitats.

4.2.2 Terrestrial and Fossorial Species

Project construction could directly impact habitat for monarch butterfly, reptiles, and non-volant mammals through habitat removal and fragmentation associated with construction of the fenced solar arrays and other Project infrastructure, and could indirectly affect habitat through contamination and runoff during construction, operation, and decommissioning. Monarch butterfly host and nectaring plants and butterflies and larva could be directly impacted through application of pesticides and herbicides during Project operation.

Mortality of monarch butterfly, reptiles, and non-volant mammals could occur during Project construction, operation, and decommissioning through crushing or displacement by vehicles/other equipment—including crushing of fossorial mammal burrows—through entrapment if reptiles and

mammals cannot escape open trenches, or through collision with infrastructure, heavy equipment, or vehicles. Movement patterns and habitat use could also be disrupted by disturbance from human presence, artificial light at night, and noise/vibrations during construction, operation, and decommissioning. Project activities could introduce diseases and invasive species, which could indirectly affect monarch butterfly, reptiles, and non-volant mammals through predation, competition, and decreased health.

Impacts on monarch butterfly, reptiles, and non-volant mammals will be avoided and minimized through Project design and application of various measures as discussed in Chapter 5, *Wildlife Protection Measures*.

The Project could contribute to cumulative impacts, including altered ecosystem function from habitat alteration or conversion, on monarch butterfly, reptiles, and non-volant mammals and their habitats in Yavapai County. However, impacts will be avoided and minimized through Project design and application of various measures as discussed in Chapter 5, *Wildlife Protection Measures*. In addition, the region surrounding the Project is largely undeveloped including extensive lands managed and protected by the U.S. Forest Service (e.g., Prescott and Coconino National Forests) and the Agua Fria National Monument (administered by the National Park Service). These areas provide robust protections for these species and habitats in the region. Considering the context of protected habitats in the region, and the Project's designed open space areas, the Project would not have a substantial cumulative impact on these species and their habitats.

4.2.3 Volant Species

Project construction could directly impact nesting (breeding) habitat for birds and bats through habitat removal and fragmentation associated with Project activities that require removal of bushes, shrubs, trees, and other vegetation. Construction of the solar arrays and other Project infrastructure could directly impact foraging habitat, particularly for species such as raptors that generally forage in more open areas like grassland and scrub habitats. Project construction, operation, and decommissioning could indirectly affect both nesting and foraging habitat through contamination and runoff.

Mortality of birds could occur during Project construction, operation, and decommissioning through crushing or displacement of ground-nesting birds (e.g., Inca dove, killdeer, western burrowing owl) and their nests—which may be built in fossorial mammal burrows—by vehicles/other equipment. Bird and bat collisions with infrastructure, heavy equipment, or vehicles during construction, operation, and decommissioning, particularly when present near breeding habitat, can also lead to mortality, in addition to electrocution due to contact from perching on transmission lines and poles at points of interconnection to above-ground infrastructure, and the Project substation. Movement patterns and habitat use of birds and bats, along with nests and roost sites could also be disrupted by disturbance from human presence, artificial light at night, and noise/vibrations during construction, operation, and decommissioning. Project activities could introduce diseases and invasive species, which could indirectly affect birds and bats through predation, competition, and decreased health. Use of pesticides and herbicides during Project operations could affect prey availability and habitat conditions.

Impacts on birds and bats will be avoided and minimized through Project design and application of various measures as discussed in Chapter 5, *Wildlife Protection Measures*.

The Project could contribute to cumulative impacts, including altered ecosystem function from habitat alteration or conversion, on birds and bats and their habitats in Yavapai County. However, impacts will be avoided and minimized through Project design and application of various measures as discussed in Chapter 5, *Wildlife Protection Measures*. In addition, the region surrounding the Project is largely undeveloped including extensive lands managed and protected by the U.S. Forest Service (e.g., Prescott and Coconino National Forests) and the Agua Fria National Monument (administered by the National Park Service). These areas provide robust protections for these species and habitats in the region. Considering the context of protected habitats in the region, and the Project's designed open space areas, the Project would not have a substantial cumulative impact on these species and their habitats.

4.3 Important Bird Areas

A small portion of an IBA overlaps with the Project Area, however the Project has been designed to avoid this area. Additionally, the IBA has been established to identify and protect the mature riparian habitat in the region, which is being avoided by the Project. Construction noise from the Project is expected to be limited in duration and temporary; with setbacks from the IBA, a significant impact is not expected. Operational noise modeling for the Project indicates that noise levels at the IBA would be less than 50 dBA (not including noise from any existing ambient noise sources such as Interstate 17), a level typically considered a moderately quiet sound level, similar to a quiet office or moderate rainfall (ICF 2025b). Impacts to the IBA are expected to be minimal and discountable. The minimal impacts on IBAs will be avoided and minimized through Project design and application of various measures as discussed in Chapter 5, *Wildlife Protection Measures*.

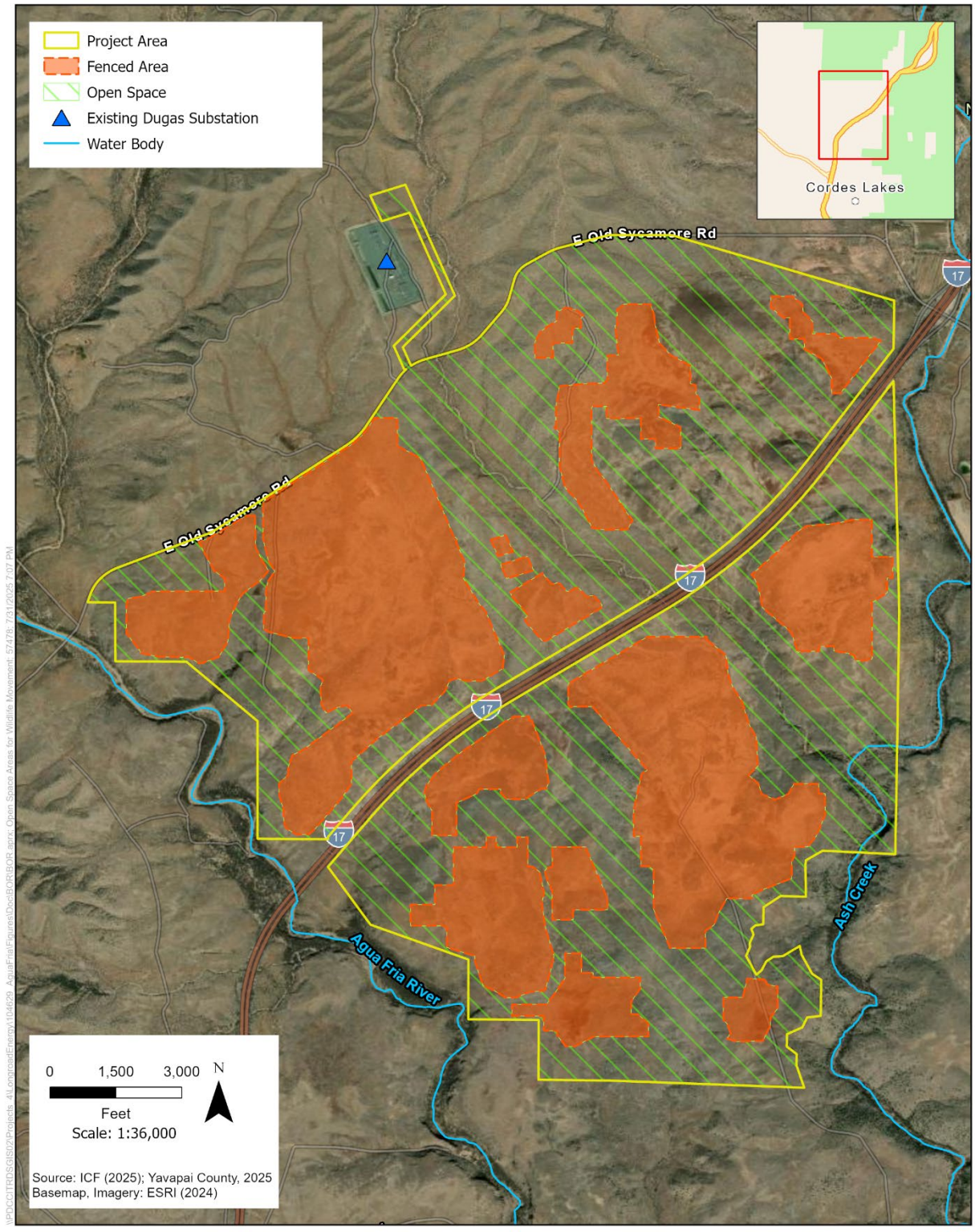
4.4 Wildlife Movement

No mapped or defined wildlife linkage corridors (i.e., those mapped and described in published studies and plans) are located within the Project Area. However, two major habitat features that are known to provide opportunities for wildlife movement in the immediately adjacent areas are the Agua Fria River and Ash Creek. Both are well defined riparian corridors which provide important habitat and cover for species to move in the region. Project infrastructure and associated operational activities will primarily occur on the plateau above these corridors and away from tributaries and are not expected to directly interfere with wildlife moving along the banks of or within the channels.

Construction of Project infrastructure, particularly fenced areas, will directly impact wildlife movement through habitat removal and fragmentation, an impact which may also occur indirectly through habitat degradation from contamination and runoff during construction, operation, and decommissioning. Wildlife movement through the Project Area could be further disrupted and hindered by disturbance from human presence, artificial light at night, and noise/vibrations, in addition to collisions with infrastructure, heavy equipment, or vehicles during construction, operation, and decommissioning. Construction noise is expected to be limited in duration and temporary and with setbacks from Critical Habitat, impacts are not expected to be significant. Operational noise modeling for the Project indicates that noise levels at Ash Creek and the Agua Fria River would be less than 50 dBA (not including noise from any existing ambient noise sources such as Interstate 17), a level typically considered a moderately quiet sound level, similar to a quiet office or moderate rainfall (ICF 2025b).

To minimize and avoid impacts on wildlife movement, the Project is incorporating significant open space to facilitate wildlife movement within and through the Project Area. Impacts on wildlife movement will be avoided and minimized through additional Project design and application of various measures as discussed in Chapter 5, *Wildlife Protection Measures*. Integration of significant open space to facilitate wildlife movement through solar projects is consistent with recent big game (e.g., deer (*Odocoileus* spp.), elk (*Cervus elaphus*), pronghorn) guidance for utility-scale solar projects by Sawyer and Holst (2024:6–8). Avoidance and minimization measures include avoiding siting projects within known migration corridors and seasonal ranges, minimizing direct habitat loss and disturbance, minimizing barrier and movement impacts, and minimizing wildlife-vehicle collisions (Sawyer and Holst 2024:5–9). The Project is also incorporating specific fencing recommendations from AGFD to eliminate "dead-end's" where wildlife could become trapped, and to incorporate additional openings in the fencing to facilitate wildlife movement (Figure 4).

Lastly, the region surrounding the Project is largely undeveloped including extensive lands managed and protected by the U.S. Forest Service (e.g., Prescott and Coconino National Forests) and the Agua Fria National Monument (administered by the National Park Service). These areas provide abundant opportunities for wildlife movement in the region. Considering the context of wildlife movement in the region, the avoidance of and setbacks from the Agua Fria River and Ash Creek, and the Project's designed open space areas, the Project would not have a substantial cumulative impact on wildlife movement in the region because abundant areas for movement already exist on the landscape and would not be affected by the Project.



ICF

Figure 4
Agua Fria Project
Open Space Areas for Wildlife Movement

Figure 4. Open Space and Wildlife Movement Design

Chapter 5
Wildlife Protection Measures and Post-Construction Wildlife Monitoring Plan

5.1 Wildlife Protection Measures

This section presents the Applicant's best practices for wildlife protection measures for all of their projects, with Project-specific modifications and adjustments considering coordination with and recommendations from AGFD and the requirements outlined in the Yavapai County Solar Ordinance.

5.1.1 Project Siting

The Project has been sited to avoid and minimize impacts to biological resources to the greatest extent practicable. Siting considerations for the Project include the following:

- Of the 4,215 Project acres, approximately 2,284 acres will remain unfenced (Figure 4).
- The Project Development Area has been sited outside of areas designated for environmental resource conservation, such as National Wildlife Refuges, Wilderness Areas, or National Monuments. The Project Development Area is sited outside of known important migratory pathways or stopover sites, including the Aqua Fria National Monument IBA.
- The Project Development Area is sited 500 feet from the FEMA floodplain of the Agua Fria River and Ash Creek, which is adequate to minimize disturbance and to facilitate the movement of animals. On average, the Project Development Area is 1,080 feet from designated Critical Habitat along the riparian corridors.
- The Applicant has incorporated additional measures to protect general wildlife movement across the Project Area, including keeping approximately 2,284 acres of the Project Area unfenced for the use and movement of wildlife. These open spaces will preserve existing habitats and facilitate wildlife movement across the Project.
- The Project Development Area is sited outside of designated or proposed Critical Habitat for federally threatened, endangered, or proposed for listing species including yellow-billed cuckoo.
- The Project is sited near I-17 and an existing transmission line corridor, and an existing substation.
- The Project is sited outside of wetlands and other waters of the U.S.
- The Project will comply with all local, state, and federal laws and regulations protecting wildlife and habitats.

5.1.2 Climate Change Reduction

Climate change is a substantial threat to many fish and wildlife species globally. The National Audubon Society suggests that two-thirds of North American birds are at risk of extinction at the current rate of global warming (Wilsey et al. 2019:2,10). Birds are not the only taxon threatened by climate change. Monarch butterfly, western yellow bat, and pronghorn are additional examples of

special-status wildlife present in Yuvapai County and with a high or moderate potential to occur on the Project for which climate change has been identified as a threat to their continued existence (NatureServe 2025; Cain et al. 2018:2).

Shifting from fossil fuels to renewable energy development is a key strategy in global efforts to combat climate change. Renewable energy generation, including solar and battery systems, is a key measure identified in Arizona's climate action plan needed to reduce greenhouse gas emissions in Arizona (Arizona State University and Northern Arizona University, 2025:4). Construction and operation of the Project would contribute to Arizona's renewable energy goals and, in turn, have a positive, direct impact on reducing the threat of climate change on wildlife, including the special-status species identified above.

5.1.3 Environmental Awareness Training

Prior to construction and operation, all supervisory personnel will be instructed on the Wildlife Protection Plan and wildlife resource protection measures, including: 1) applicable federal and state laws; 2) the importance of these resources and the purpose and necessity of protecting them; and 3) Discovery, and Downed Wildlife Observation Program protocols. Supervisory personnel will ensure this information is disseminated to all applicable construction and operations and management personnel, including correct reporting procedures. Operations and management personnel will renew training annually.

5.1.4 Identification, Discovery, and Reporting Protocols

- If construction activities must occur during active seasons for relevant species of concern, the Applicant will conduct surveys ahead of any construction activities (e.g., staging, clearing, ground-disturbing activities) to identify active wildlife locations (e.g., nests, burrows, dens) and implement protective measures, consistent with common practice and AGFD guidelines, as necessary.
- If inactive nests, burrows, or dens are identified during pre-construction surveys, measures to remove or collapse (if allowable) the burrows will be coordinated with the relevant regulatory agency.
- The Applicant is committed to implementing Discovery protocols and its corporate Downed Wildlife Observation Program, which consists of training staff to identify and document active species of concern, as well as injured or dead wildlife.
- The Applicant will contact relevant regulatory agencies in the unlikely event of a casualty of any species protected under the federal ESA or Bald and Golden Eagle Protection Act.

5.1.5 Habitat Disturbance

- Facilities have been consolidated to the extent possible to avoid unnecessary habitat disturbance. The Project has been designed to minimize grading and preserve existing vegetation to the greatest extent practicable. This approach preserves ecosystems including riparian zones along major drainages, and prominent landscape features.
- Of the 4,215 Project acres, approximately 2,284 acres will remain unfenced to allow wildlife movement through the area and to maintain existing habitats and natural drainage.

- The Project's limit of disturbance boundaries (including staging areas) will be clearly delineated to ensure that construction crews stay within these areas.
- Construction and operations staff will be instructed to stay on designated access roads, or on alternative routes approved by a Project biologist.
- Staging areas will be sited in previously disturbed areas or in areas cleared by a Project biologist and staging areas will only be large enough to safely store equipment and allow access.
- An Erosion Control and Stormwater Pollution Prevention Plan will be implemented during construction and operation to ensure that erosion and changes in surface runoff are avoided or minimized to the extent possible.

5.1.6 Trenching

- Trenching/excavation and backfilling crews will minimize the number of trenches/excavation areas left open at any given time during construction.
- Any open trenches or excavation areas will be covered overnight and/or inspected before construction begins the following day to ensure no wildlife has been trapped.
- If trenches/excavation areas cannot be backfilled in a timely manner, then escape ramps will be installed under the direction of a Project biologist.

5.1.7 Fence Design

- Of the 4,215 Project acres, approximately 2,284 acres will remain unfenced to allow wildlife movement through the area.
- Fences constructed around the solar arrays will be designed to allow small wildlife to continue using habitats within the fenced solar arrays.
- The solar arrays will be fenced with wildlife friendly fence.
- Fencing will be designed to eliminate "dead-ends" for large wildlife where they could become trapped.

5.1.8 Avian Collisions

- Low and medium voltage collector lines associated with the Project will be installed underground, to the extent practicable and economically feasible, reducing perching opportunities for raptors and the potential for avian collisions and electrocution.
- Overhead lines will be designed and maintained per the Avian Power Line Interaction Committee (APLIC) current recommended standards in *Suggested Practices for Avian Protection on Power Lines: State of the Art in 2024* (APLIC 2024) and *Reducing Avian Collisions with Power Lines: State of the Art in 2012* (APLIC 2012).
- Solar modules are designed with an anti-reflective coating. This helps prevent any potential for avian collisions with solar modules.

5.1.9 Lighting

- To the maximum extent practicable, construction, operations and maintenance, and decommissioning activities will be limited to the time between dawn and dusk to avoid nighttime illumination of adjacent habitat areas.
- The use of high intensity lighting, steady-burning, or bright lights such as sodium vapor, quartz, halogen, or other bright spotlights will be minimized, and narrow spectrum bulbs with lower color temperatures (i.e., warmer tones such as amber, orange, or red) will be used to limit the range of species affected by lighting. Lights will also be hooded and directed downward to minimize horizontal and skyward illumination.
- Wherever possible, switches, motion-activated, or infrared illumination lights that do not react to animal movements will be used to keep lights turned off when not required.
- Lighting along perimeter fencing will be avoided to the maximum extent possible to minimize illumination of open space areas, especially those located adjacent to riparian corridors.
- Portable lights for operations and maintenance shall follow the same requirements (i.e., light directed toward the work area and restricted to the minimum illumination area and period needed, narrow spectrum bulbs with lower color temperatures) as those for permanent lighting to the degree possible while maintaining crew safety.

5.1.10 Vegetation Management

- Of the 4,215 Project acres, approximately 2,284 acres will remain unfenced. Existing vegetation will be left intact in undeveloped open space areas, to preserve existing native plants and local ecosystems.
- Grading will only be completed where necessary, and non-woody low-growing vegetation will be left in place to the degree practicable to help stabilize the soil during construction and facilitate the site restoration process following construction.
- Areas that are temporarily disturbed during construction or decommissioning, will be revegetated where feasible.
- Revegetation areas will be seeded with a certified weed free seed mix based on plants predominantly native to the site and Yavapai County.
- To the greatest extent possible, traffic will be limited in areas with known weed presence, and equipment will be cleaned prior to delivery to the site to prevent the introduction of weeds.
- Where possible, mowing will be utilized to control weeds as an alternative to herbicides. Blanket herbicides will be minimized in areas where non-invasive plants are present.
- Herbicides used on the Project will be products designated “minimum risk” by the Environmental Protection Agency. All herbicides will be applied by licensed and trained applicators in adherence with all product instructions, will be applied at the lowest effective application rate for the target weeds, and will be applied through spot rather than broadcast applications to minimize impacts on wildlife.

- With respect to timing, efforts will be made to control weeds prior to flowering or development of viable seeds. Further, weed control activities will be timed to minimize impacts to non-invasive plant species, to the greatest extent possible.
- Vegetation management will comply with all relevant fire safety regulations and plans, and erosion and stormwater management plans.
- A Vegetation Management Plan will be prepared and implemented to ensure that vegetation management goals are implemented throughout the life of the Project.

5.1.11 Other Best Management Practices

- Roads constructed as part of the Project will be posted as private roads only for use by authorized personnel in connection with construction and operation of the solar facilities and access will be restricted. Access points will be gated and locked to prevent access by the general public.
- Reasonable driving speed limits (e.g., 15 mph) will be established for staff on the Project to minimize the potential for wildlife-vehicle collisions.
- All trash, debris, and other materials will be removed from the Project or placed in approved containers daily.
- No guns, firearms, or pets will be permitted within the Project Area.
- A Fire Prevention and Control Plan will be prepared and implemented.
- A Spill Prevention, Control, and Countermeasures Plan will be prepared and implemented.

5.2 Post-Construction Wildlife Monitoring Plan

The following wildlife monitoring plan, as coordinated with AGFD (see correspondence in Appendix A regarding a July 31, 2025, meeting), will be implemented post-construction.

5.2.1 Wildlife Training

Prior to operation, all operation personnel will be instructed on the Wildlife Protection Plan and wildlife resource protection measures, including: 1) applicable federal and state laws; 2) the importance of these resources and the purpose and necessity of protecting them; and 3) Discovery, and Downed Wildlife Observation Program protocols to identify and document injured or dead wildlife. Operations personnel will renew training annually.

5.2.2 Wildlife Discovery and Reporting Protocols

All operation personnel will implement wildlife discovery protocols and the Applicant's corporate Downed Wildlife Observation Program, which consists of identifying and documenting species of concern, and reporting to a qualified biologist. A qualified biologist is retained during operation to respond to wildlife discoveries.

5.2.3 Camera Monitoring

Wildlife cameras will be installed at the Project to document post-construction wildlife use of the Project Area focused on wildlife movement across the Project's designed open space areas.

- Equipment: [10] remote, motion-activated, weather-protected wildlife field cameras and audio recording equipment (e.g., AudioMoth loggers or similar)
- Camera Placement: Throughout corridors to gauge use of various open areas
- Data Collection:
  - Two years of monitoring
  - Remote data monitoring, continuous data collection

Reporting will be focused on the list of species observed, the number of observations, and trends according to seasonality or time of day. The Applicant will conduct weekly image review and verification of camera functionality and create a final report at the end of the monitoring period that summarizes results in maps, figures, and tables

Chapter 6
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Appendix A

Agency Coordination and Correspondence

September 15, 2021

Mr. Rick Ferrera
Candela Renewables
343 West Franklin Street
Tucson, AZ 85701

Re: Dugas Solar Facility Wildlife Mitigation

Dear Mr. Ferrera:

The Department would like to thank and acknowledge Candela Renewables (Candela) for the continued work and coordination with the Department regarding the Dugas Solar facility to address wildlife concerns. Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission (Commission), has jurisdictional authority and public trust responsibilities for management of the state's fish and wildlife resources. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations. Similarly, the Department recognizes the importance of planning efforts that contribute to regional and the state's economic growth needs and opportunities to develop renewable energy locations.

The Department recognizes and supports Candela's efforts to coordinate, plan, and voluntarily implement best management practices that avoid, minimize, or mitigate potential impacts to wildlife habitat and populations potentially impacted by the development of the Dugas Solar Facility. Through multiple in-person, virtual, and phone meetings, the Department and Candela collaboratively came up with project designs that will help minimize impacts to species in the project area. These designs include project siting to avoid riparian areas, locating solar panels near I-17 on either side of the highway to the extent possible, and incorporating 100' minimum wildlife corridors throughout the project. In addition, the Department looks forward to working with Candela to develop and conduct camera studies on these wildlife corridors to determine their effectiveness for the species on the landscape. These studies will help inform the design of wildlife corridors for future solar projects throughout the state.

The Department also supports Candela's contributions to the Orme Ranch Conservation Easement. This easement will maintain agricultural uses, protect land and water resources, and provide for conservation measures to protect the natural resources on the Orme Ranch in perpetuity. It also guarantees that the water resources associated with Ash Creek, flowing through the ranch, are tied to the conservation easement.

GOVERNOR: DOUGLAS A. DUCEY **COMMISSIONERS:** CHAIRMAN LELAND S. "BILL" BRAKE, ELGIN | JAMES E. GOUGHNOUR, PAYSON
TODD G. GEILER, PRESCOTT | CLAY HERNANDEZ, TUCSON | KURT R. DAVIS, PHOENIX **DIRECTOR:** TY E. GRAY **DEPUTY DIRECTOR:** TOM P. FINLEY

The Department looks forward to continued communications with Candela regarding the project development, implementation, and future wildlife corridor studies. Please contact me at 623-236-7606 or GRitter@azgfd.gov if you have any questions, or would like to further discuss our concerns and recommendations.

Sincerely,



Ginger Ritter
Project Evaluation Program Supervisor

cc: Luke Thompson, Habitat, Evaluation, and Lands Branch Chief
Joshua Hurst, Regional Supervisor, Mesa
Kelly Wolff, Habitat, Evaluation, and Lands Program Supervisor

AZGFD #M21-09135407

July 20, 2023

Mr. Louis DeRosa
Candela Renewables
500 Sansome Street, Suite 500
San Francisco, California 94111

Electronically submitted to louis.derosa@candelarenewables.com, emily.degrasse@candelarenewables.com, iadarola@39northllc.com

RE: Agua Fria Solar Best Management Practices

Dear Mr. DeRosa:

The Arizona Game and Fish Department (Department) appreciates the continued coordination on the Agua Fria Solar project (formerly the Dugas Solar project). The Department understands that the Arizona State Land Department auction date has been set for August 3, 2023, after which detailed project planning and design will occur. Candela Renewables (Candela) has requested further information on the Department's recommendations and best management practices to help facilitate project design, and the Department looks forward to continued engagement during this process.

Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission, has jurisdictional authority and public trust responsibilities to conserve and protect the state fish and wildlife resources. In addition, the Department manages threatened and endangered species through authorities of Section 6 of the Endangered Species Act and the Department's Section 10(a)(1)(A) permit. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations. For your consideration, the Department provides the following comments based on the agency's statutory authorities, public trust responsibilities, and special expertise related to wildlife resources and recreation.

The Department recognizes and appreciates Candela's efforts to incorporate measures into this project that help avoid, minimize, or offset potential impacts on wildlife during the development and operation of the facility. Arizona has recently seen an increase in the number of proposed and in-development renewable energy generation projects and associated infrastructure. Although each of these projects individually may have a minimal impact on the broader landscape, these projects cumulatively could result in loss of habitat, impact wildlife movements, and affect wildlife-related recreation. Additionally, long-term effects to wildlife can extend several kilometers beyond the footprint of a solar project area (Sawyer et al. 2022[1]). The voluntary measures that Candela has described will not only help reduce these potential effects but will also provide important information to inform the design of future solar facilities.

[1] https://esajournals.onlinelibrary.wiley.com/doi/10.1002/fee.2498

Maintaining habitat connectivity is a priority for the Department, and wildlife movement corridors are important for wildlife to respond to changing environmental conditions. The Department appreciates that the following features will be incorporated into the project design to reduce potential effects on wildlife connectivity:

- The Department understands that washes and other corridors with a minimum width of 100 feet will remain open and unfenced across the project area to facilitate wildlife movement. The Department recommends maximizing the corridor width, as feasible, especially for longer pathways. As discussed, the Department understands these corridors will traverse the full project area without the potential for dead-ends.
- The Department appreciates that minimal grading will occur in the project area and that vegetation and habitat features will be maintained under the panels. These measures will help minimize erosional run-off and reduce biodiversity loss within the site (Grodsky and Hernandez 2020[2]). The Department understands that Candela is considering sheep grazing within the project area and encourages following the *Recommendations for Domestic Sheep and Goat Management in Wild Sheep Habitat*[3].
- The Department appreciates that Candela plans to follow the *Wildlife Compatible Fencing Guidelines*[4] and to raise the bottom of fences above the ground surface to enable smaller wildlife species to move freely through the area and make use of habitat within the project boundary. As discussed, it is important to ensure that the fencing meets these goals while also preventing potential interactions between domestic sheep and wildlife. Department personnel remain available to help determine appropriate fencing design and layout.
- The Department looks forward to continued discussions on potential studies to determine the effectiveness of these connectivity measures, including the use of cameras in the corridors.

The Department offers the following species-specific recommendations; please refer to the attached Online Environmental Review Tool report (HGIS-09119) for further information:

- Several federally-protected species listed under the Endangered Species Act (ESA) have been documented in or adjacent to the project area, including yellow-billed cuckoo, Southwestern willow flycatcher, Mexican spotted owl, Northern Mexican gartersnake, Gila chub, and Gila topminnow. Critical habitat for the yellow-billed cuckoo also intersects the project area. The Department recommends coordinating with the U.S. Fish and Wildlife Service[5] (USFWS) if uncertain about the effects of the project on these species or if the project might not be in compliance with the ESA.
- To minimize potential impacts to American pronghorn the Department recommends phasing construction or minimizing construction activities in this area during the pronghorn fawning season (April–June).
- Large-scale solar PV facilities can result in a high rate of bird mortality due to habitat loss, collision with panels, attraction due to an optical illusion of water, and unknown causes (Kosciuch et al. 2020[6]). The Department encourages the use of non-reflective coatings on the solar panels, which can reduce the appearance of the array as a body of water and reduce the attraction of birds to the site.

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[2] https://www.nature.com/articles/s41893-020-0574-x
[3] https://wafwa.org/wpdm-package/recommendations-for-domestic-sheep-and-goat-management-in-wild-sheep-habitat-2
[4] https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf
[5] https://www.fws.gov/office/arizona-ecological-services/contact-us
[6] https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0232034

- The Department recommends conducting surveys for nesting birds prior to vegetation removal and/or construction activities that occur during the breeding season. The vegetation within the project area may provide nesting opportunities for avian species that are regulated under the Migratory Bird Treaty Act (MBTA). Peak breeding season for birds in this area is generally mid-March through late July; for raptors, it is January through June. If it is anticipated the project will not be in compliance with MBTA, the Department recommends contacting the USFWS for technical assistance.
- Burrowing mammal species could occur within the project area and could be influenced by construction activities and by loss of habitat. Surveys for these species are recommended to determine their presence and to inform pre-construction activities. Department staff are available to assist in identifying suitable conservation measures, such as one-way exclosures on burrows that allow wildlife to exit the burrows and disperse to adjacent lands in advance of construction.
- A variety of other Arizona Species of Greatest Conservation Need (SGCN) have the potential to occur within the project area. If wildlife are encountered during project activities, the Department recommends moving them out of harm's way, no more than 0.25 mile outside the project boundary within similar habitat. Please note that the Arizona State Wildlife Action Plan was recently updated, and the Department has an interactive website, Arizona Wildlife Conservation Strategy[7], that includes the most recent list of SGCN to help navigate and identify conservation opportunities.

Finally, the Department offers the following best management practices to further reduce potential impacts to wildlife and habitat during construction and operation of the facility. Please refer to the Department's *Guidelines for Solar Development in Arizona*[8] for further information about these and other recommendations related to solar energy facilities:

- Because proposed ground disturbance will exceed 0.25 acres in areas with native vegetation, please ensure the project complies with Arizona Native Plant Law regulations[9]. A Native Plant Inventory may need to be conducted to identify, record, and coordinate plant salvage efforts for species that are Protected under the Arizona Native Plant Law.
- To minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects, and pathogens, the Department encourages taking precautions to wash and/or decontaminate equipment before entering and leaving the site. See the Arizona Department of Agriculture website[10] for a list of prohibited and restricted noxious weeds and the Arizona Native Plant Society[11] for recommendations on how to control them. To view a list of documented invasive species or to report invasive species in or near the project area, visit iMapInvasives[12], which is a national cloud-based application for tracking and managing invasive species.
- If trenching or digging of large holes necessary for anchoring project infrastructure will occur for the proposed project, the Department recommends trenching/digging and backfilling crews be close together to minimize the amount of open holes at any given time. Where trenches or holes cannot be back-filled immediately, the Department recommends escape ramps be constructed at

[7] https://awcs.azgfd.com
[8] https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FinalSolarGuidelines03122010.pdf
[9] https://agriculture.az.gov/plantsproduce/native-plants
[10] https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds
[11] https://aznps.com/invas
[12] https://imap.natureserve.org/imap/services/page/map.html

least every 90 meters. Escape ramps can be short lateral trenches or wooden planks sloping to the surface. The Department recommends that slopes be less than 45 degrees (1:1) and trenches and holes that have been left open be inspected to remove animals prior to backfilling.

- The Department recommends following standards established by the Avian Power Line Interaction Committee (APLIC) for new powerlines, which can be found in *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*[13] and *Reduced Avian Collisions with Power Lines: The State of the Art in 2012*[14]. Birds of prey, such as raptors, owls, vultures, and eagles, are vulnerable to powerline strikes and electrocution during construction and operation of transmission lines; power poles can also serve as perches for birds of prey. Tuk Jacobson, the Department's Raptor Coordinator, can provide further information on specific design features and best management practices; he can be contacted at raptors@azgfd.gov or 623-236-7575.
- The Department recommends revegetating disturbed areas with native drought-tolerant species that represent the natural surrounding landscape. Landscaping with native plants can help support wildlife and pollinator species in the area while reducing dust and erosion. In addition, the applicable land management agencies should be consulted regarding guidelines for revegetation efforts.
- Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations (Davies et. al. 2013[15]). The Department recommends using only the minimum amount of light needed for safety. If feasible, narrow spectrum lighting is wildlife-friendly and should be used as often as possible to minimize the number of species affected by lighting. It is also beneficial that all lighting is shielded, canted, or cut to minimize the amount of upward shining light.

Thank you again for the continued engagement on the Agua Fria Solar project. For further coordination, please contact Tiffany Sprague at tsprague@azgfd.gov or 623-236-7222.

Sincerely,

Luke Thompson
Habitat, Evaluation, and Lands Branch Chief

Attachment: Agua Fria Solar ERT report_HGIS-09119

cc: Ginger Ritter – Project Evaluation Program Supervisor
Karen Klima – Regional Supervisor, Region III
Dee Kephart – Habitat, Evaluation, and Lands Program Manager, Region III
Joshua Hurst – Regional Supervisor, Region VI
Kelly Wolff – Habitat, Evaluation, and Lands Program Manager, Region VI

AZGFD #M23-06215941

[13] https://www.aplic.org/uploads/files/2643/SuggestedPractices2006(LR-2).pdf
[14] https://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf
[15] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3657119

February 07, 2025

Ms. Ashley Groeneveld
Environmental Manager
Longroad Energy
220 Montgomery Street
Suite 860
San Francisco, CA 94104

Electronically submitted to: aguafria@longroadenergy.com and to:
ashley.groeneveld@longroadenergy.com

RE: Longroad Energy Agua Fria Gen-Tie Project

Dear Ms. Groeneveld:

The Arizona Game and Fish Department (Department) appreciates the opportunity to review the proposed Agua Fria Gen-Tie project. The Department understands that Longroad Energy proposes to construct a 1.8 mile 500kV transmission line and associated infrastructure that would interconnect the proposed Agua Fria Solar and Storage Project to the regional grid at the existing Arizona Public Service (APS) Dugas Substation. The Gen-Tie Project would deliver electricity produced from the applicant's Solar Project, an up to 450-megawatt (MW) nameplate capacity solar photovoltaic power plant, that would be paired with a battery energy storage system.The project is located on Arizona State Land Department (ASLD) northwest of Interstate 17 near Arcosanti, Yavapai County, Arizona. The Department further understands that Longroad Energy is beginning the permitting process and anticipates filing an application with Yavapai County for a Solar Facility Use Permit as well as with the Arizona Corporation Commission (ACC) for a Certificate of Environmental Compatibility (CEC). Once this process is completed, a formal notice for the solar project comments and public involvement will be initiated. The Department notes that this letter references the Gen-Tie transmission line portion of the project, and future comments will be forthcoming for the Agua Fria Solar and Storage Facility as applications, permits, and designs are finalized.

Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission, has jurisdictional authority and public trust responsibilities to conserve and protect the state fish and wildlife resources. In addition, the Department manages threatened and endangered species through authorities of Section 6 of the Endangered Species Act and the Department's Section 10(a)(1)(A) permit. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

GOVERNOR: KATIE HOBBS **COMMISSIONERS:** CHAIRMAN CLAY HERNANDEZ, TUCSON | MARSHA PETRIE SUE, SCOTTSDALE | JEFF BUCHANAN, PATAGONIA
JAMES E. GOUGHNOUR, PAYSON | TODD G. GEILER, PRESCOTT **DIRECTOR:** TOM P. FINLEY **DEPUTY DIRECTOR:** JOSHUA W. HURST

The Department recognizes the importance of planning efforts to develop energy locations that contribute to regional and state economic growth needs and would like to work closely with Longroad Energy during the planning and development of this facility. With appropriate coordination, proper planning, and voluntary implementation of best management practices projects can avoid, minimize, and offset potential impacts to wildlife and recreational access during development and operation of renewable facilities. For your consideration, the Department provides the following comments for the Gen-Tie portion of the project, based on the agency's statutory authorities, public trust responsibilities, and special expertise related to wildlife resources and recreation:

- The Department recommends following the Avian Power Line Interaction Committee (APLIC) guidelines for new power lines, which can be found in *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*[1] and *Reduced Avian Collisions with Power Lines: The State of the Art in 2012*[2]. Large bodied birds such as hawks, owls, vultures, and eagles, may be vulnerable to line strikes and electrocution during construction and operation of power lines and substations; power poles can also serve as perches for large bodied birds. These potential impacts can be avoided or minimized by following the APLIC guidelines which include designing the power lines with enough space between energized components to reduce the likelihood of a bird electrocution or installing bird flight diverters in sections of line where elevated bird strikes are anticipated (e.g. lines over water bodies or in the path of colonial roosting locations). The Department's Raptor Coordinator can provide further information on specific design features and best management practices, which can be contacted at raptors@azgfd.gov or 623-236-7575.
- The Department recommends conducting surveys for nesting birds prior to vegetation and/or construction activities that occur during the breeding season, generally March through late August, depending on species in the local area. The vegetation within the project area may provide nesting opportunities for avian species regulated under the MBTA. If it is anticipated the project will not be in compliance with the MBTA, the Department recommends contacting the U.S. Fish and Wildlife Service[3] for technical assistance and compliance options. Additionally, if any nesting raptors are detected, the Department recommends planning construction activities for the non-breeding season or coordinating with the Department's Raptor Coordinator on appropriate set-backs from active raptor nests. Raptors breed in early February through May.
- If other wildlife are encountered during construction activities, the Department recommends moving them out of harm's way, no more than 0.25 mile outside the project boundary within similar habitat.
- To help minimize the disturbance to pronghorn and reduce impacts on pronghorn recruitment, the Department recommends that construction activities occur outside the fawning season (mid-May to mid-June).

[1] https://www.aplic.org/uploads/files/2643/SuggestedPractices2006(LR-2).pdf
[2] https://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf
[3] https://www.fws.gov/office/arizona-ecological-services/contact-us

- If trenching and/or digging of large holes is necessary, the Department recommends trenching/digging and backfilling crews work close together to minimize the amount of open trenches/holes at any given time. Where trenches or holes cannot be back-filled immediately, the Department recommends escape ramps be constructed at least every 90 meters. Escape ramps can be short lateral trenches or wooden planks sloping to the surface. The Department recommends that slopes be less than 45 degrees (1:1) and trenches and holes that have been left open be inspected to remove animals prior to backfilling.Trenching should occur during the cooler months (October – March) when wildlife is less active.
- Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations (Davies et. al. 2013[4]). The Department recommends using only the minimum amount of light needed for safety. If feasible, "warmer" narrow spectrum lighting (amber, orange, red) is wildlife-friendly and should be used as often as possible to minimize the number of species affected by lighting. It is also beneficial that all lighting is shielded, canted, or cut to minimize the amount of upward shining light.
- To minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects, and pathogens, the Department encourages taking precautions to wash and/or decontaminate equipment before entering and leaving the site. See the Arizona Department of Agriculture's website[5] for a list of prohibited and restricted noxious weeds and the Arizona Native Plant Society[6] for recommendations on how to control them. To view a list of documented invasive species or to report invasive species in or near your project area, visit iMapInvasives[7], which is a national cloud-based application for tracking and managing invasive species.
- The Department recommends revegetating disturbed areas with native drought-tolerant species that represent the natural surrounding landscape. Landscaping with native plants can help support wildlife and pollinator species in the area while reducing dust and erosion. In addition, the applicable land management agencies should be consulted regarding guidelines for revegetation efforts.
- For any areas that would be fenced as part of this project, please refer to the Department's *Wildlife Compatible Fencing Guidelines*[8] for information on how fencing impacts wildlife, ways to design fencing to prevent wildlife entanglement and impalement, and to ensure wildlife movement is not restricted. Department personnel are available as resources to help determine appropriate fencing design and layout that will achieve its objective while reducing impact to wildlife.

The Department appreciates the proactive involvement and coordination for this project. If you have any questions regarding this letter, or questions concerning the attached information please feel free to contact our Energy Lead Project Specialist, Jessica Potter at 623-236-7618,

[4] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3657119
[5] https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds
[6] https://aznps.com/invas
[7] https://imap.natureserve.org/imap/services/page/map.html
[8] https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/110125_AGFD_fencing_guidelines.pdf

jpotter@azgfd.gov; or the Region 3 Habitat Evaluation and Lands Program Manager, Dee Kephart at 928-715-3676, dkephart@azgfd.gov.

Sincerely,

Karen Klima
Regional Supervisor, Region III, Kingman

cc: Callie Calvacant, Habitat Branch Chief

AZGFD #M24-12120226

February 26, 2025

Mr. Clay Crowder
Assistant Director
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85086-5000

Re: Request for data sharing for the Agua Fria Solar Project

Dear Mr. Crowder,

Longroad Energy (Longroad) is embarking on a project that will develop a commercial scale solar generating facility, the Agua Fria Solar Project, in Yavapai County, Arizona. Longroad is currently gathering existing information and biological data to support the design of the project, especially considerations around wildlife movement and corridors.

I am requesting the following wildlife data:

1. Existing information the Department may have on the movement of pronghorn in the project region (e.g., GPS data, camera station data (if any), and any other information the Department has that may be useful to assess, discuss, and consider wildlife corridor design for the solar project).

I understand that the requested data are the property of the Department and, as such, are confidential. I, therefore, understand and accept the following conditions:

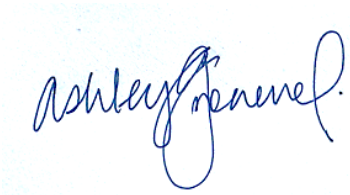
- The above described data provided by the Department will be used solely for the purpose of biological evaluation and design of the Agua Fria Solar Project, **and no other project**, and will be used solely by me and collaborators listed below:
  - (*Brad Schafer, ICF- Environmental Consultant to Longroad*)
- Data provided are for display purposes only. Any interpretation, determination of management action for wildlife species, or other decisions/actions that would describe intent of the requested data within the geographic boundaries of these areas shall only be made in consultation with and approval by the Department.
- Any depiction of the requested data on a map product shall include reference to the Department and include description indicating that no interpretation of the data be made without consultation with the Department.
- Data provided by the Department will not be distributed to other organizations, individuals, or the public or put on the internet.
- Data will not be sold or used for commercial gains.
- Department data are added to, corrected, and updated frequently. Also, the status of species can change. As a result, the data are not intended to be used indefinitely, and further coordination with the Department is encouraged for additional planning.
- Site locality data will not be included in or as part of any product released to the public. Any exact site data maps created will be used solely for internal research analyses. Only

correlation or statistics and interpretations will be made public. Any maps or tables of locations included in any product for external use will be at such a scale as to cover a minimum scale of the quadrangle level.

- All third-party requests for access to these data will be referred to the appropriate Department Assistant Director.
- The Department will retain ownership of all data provided.
- Longroad will provide the Department with electronic copies of any reports, publications, or other deliverables that result from this project and acknowledge the Department's contribution in all presentations and publications involving this project. The Department will provide additional information on funding sources that need to be acknowledged.
- Department personnel who may serve as co-authors should be included/involved in the interpretation of results, preparation of manuscripts, and final review of manuscripts prior to publication.

I am requesting that the data be provided by March 26, 2025 in either shapefile or kmz format (or other format deemed appropriate by the Department).

Sincerely,



Ashley Groeneveld
Longroad Energy
220 Montgomery Street, Suite 860
San Francisco, CA 94104
707-601-9217
Ashley.groeneveld@longroadenergy.com

From: Hogan, Maeve
To: Jessica Potter
Cc: Schafer, Brad; Deron Lawrence; Lindsey Kester; Arianna Hartsock; Dee Kephart; Jeff Gagnon; Colin Beach; Bobby Lamoureux
Subject: Re: Longroad Agua Fria Solar Project
Date: Tuesday, July 8, 2025 4:23:03 PM
Attachments: Outlook-A picture
Outlook-A picture
Outlook-A picture .png
6.12.25 AZGFD Meeting Record.pdf

Hi Jessica,

A big thanks to you and your team, once again, for taking the time to meet with us on June 12. I have attached meeting notes summarizing our discussion.

We would like to set up a time with your team for the week of July 28 to continue our discussion on wildlife monitoring. Here are some times (in PT) that we are available. Let us know if any of these work for you.

Tues: 12-1p
Wed: 12:30-1:30p
Thurs: 2:30-4p

We do really appreciate your team's feedback and look forward to working together on this project going forward.

Thanks!

MAEVE HOGAN, Environmental Planner (she/her/hers)
+1.503.412.0414 direct
Portland, Oregon, USA
icf.com/environment
My working hours may not fully align with yours, feel no pressure to respond outside of your designated working hours.

From: Jessica Potter <jpotter@azgfd.gov>
Sent: Thursday, May 29, 2025 11:52 AM
To: Swanson, Megan <Megan.Swanson@icf.com>
Cc: Schafer, Brad <Brad.Schafer@icf.com>; Ashley Groeneveld <ashley.groeneveld@longroadenergy.com>; Arianna Hartsock <ahartsock@azgfd.gov>; Dee Kephart <dkephart@azgfd.gov>; Jeff Gagnon <JGagnon@azgfd.gov>; Colin Beach <cbeach@azgfd.gov>; Bobby Lamoureux <rlamoureux@azgfd.gov>; Hogan, Maeve <Maeve.Hogan@icf.com>
Subject: Re: Longroad Agua Fria Solar Project

Hi Megan,

Thank you! It was a pleasure coordinating with you on this project and I wish you the best on your future endeavors!

Best,

Jessica Potter
PROJECT EVALUATION PROGRAM SPECIALIST
ARIZONA GAME AND FISH DEPARTMENT

5000 W. Carefree Highway
Phoenix, AZ 85086
OFFICE: (623)236-7618
CELL: (602)819-9196
azgfd.gov

On Thu, May 29, 2025 at 9:37 AM Swanson, Megan <Megan.Swanson@icf.com> wrote:

> Hey Jessica,
>
> Thanks for your patience as we checked calendars. The ICF and Longroad teams are available on **June 12 from 3:00 - 4:00 PM.**
>
> **I also wanted to share that my last day at ICF is tomorrow. Maeve Hogan, cc'd here, will be stepping in on this project and will send out a calendar invite to everyone shortly.**
>
> **Thanks!**
> **Megan**
>
> **Megan Swanson**, Senior Environmental Planner
> +1.213.312.1790 direct | Megan.Swanson@icf.com
> icf.com | LinkedIn
>
> ---
>
> **From:** Jessica Potter <jpotter@azgfd.gov>
> **Sent:** Tuesday, May 27, 2025 10:22 AM
> **To:** Swanson, Megan <Megan.Swanson@icf.com>
> **Cc:** Schafer, Brad <Brad.Schafer@icf.com>; Ashley Groeneveld <ashley.groeneveld@longroadenergy.com>; Arianna Hartsock <ahartsock@azgfd.gov>; Dee Kephart <dkephart@azgfd.gov>; Jeff Gagnon <JGagnon@azgfd.gov>; Colin Beach <cbeach@azgfd.gov>; Bobby Lamoureux <rlamoureux@azgfd.gov>
> **Subject:** Re: Longroad Agua Fria Solar Project
>
> Good morning Megan,
>
> I will be on leave starting next week through June 9th. Would your team be available June 10th 1-3 pm, June 11th 2:30 - 3:30 pm, or June 12th from 3:30 - 5:00 pm to meet?
>
> Thank you,
>
> **Jessica Potter**
> PROJECT EVALUATION PROGRAM SPECIALIST

ARIZONA GAME AND FISH DEPARTMENT

5000 W. Carefree Highway
Phoenix, AZ 85086
OFFICE: (623)236-7618
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On Tue, May 27, 2025 at 9:03 AM Swanson, Megan <Megan.Swanson@icf.com> wrote:

Hi Jessica,

Hope you had a great holiday weekend! We are still waiting on an updated site plan that we want to share on the call. Would you be able to share your availability for the second half of next week? Apologies for the change.

Thanks!
Megan

Megan Swanson, Senior Environmental Planner
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Subject: Re: Longroad Agua Fria Solar Project

Hi Megan,

Thank you for reaching out! Our team is available on May 29th from 8-9 am (preferred) and 4-5pm. Would either of these times work for you?

Best,

Jessica Potter
PROJECT EVALUATION PROGRAM SPECIALIST
ARIZONA GAME AND FISH DEPARTMENT

5000 W. Carefree Highway

Phoenix, AZ 85086
OFFICE: (623)236-7618
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azgfd.gov

On Thu, May 22, 2025 at 10:37 AM Swanson, Megan <Megan.Swanson@icf.com> wrote:

> Hi Jessica,
>
> I hope your week is going well! I wanted to reach out to see if you have any availability next Thursday or Friday to discuss the Agua Fria Solar Project. We're hoping to share some updates following our meeting last month.
>
> Thanks,
> Megan
>
> **Megan Swanson**, Senior Environmental Planner
> +1.213.312.1790 direct | Megan.Swanson@icf.com
> icf.com | LinkedIn

From:	Hogan, Maeve
To:	Jessica Potter
Cc:	Schafer, Brad; Deron Lawrence; Lindsey Kester; Arianna Hartsock; Dee Kephart; Jeff Gagnon; Colin Beach; Bobby Lamoureux; Hunter Watson
Subject:	Re: Longroad Agua Fria Solar Project
Date:	Friday, August 1, 2025 10:10:01 AM
Attachments:	Outlook-A picture Outlook-A picture .png Outlook-A picture 4_Wildlife_20250731.pdf Agua Fria_Post-Construction Wildlife Monitoring Plan.pdf

Hi Jessica,

Thanks again for your review of our fencing design and post-construction wildlife monitoring plan.

In response to your feedback from our June 12 meeting on fencing design modifications to improve wildlife movement opportunities, we made additional changes to our Development Plan and Wildlife Protection Plan Open Space Map to be submitted to Yavapai County with our permit application. The following changes were made based on your feedback as presented in yesterday's meeting and as reflected in the attached map. We will follow up with the final Development Plan once we have submitted it to the County.

- The fence design was adjusted to eliminate 3 potential "dead end" areas.
- The fence design was adjusted to create 2 new fence gaps for wildlife passage.
- A substantial amount of additional acreage in the Project Area will remain unfenced creating additional open space areas for wildlife movement across the Project Area.

In response to your feedback from our meeting today on the post-construction wildlife monitoring plan, we have made the following changes as reflected in the attached Plan document:

- We increased the monitoring timeline to 2 years.
- We added additional detail about the placement of cameras and timing of monitoring to be most biologically valuable.
- A final monitoring report will be shared with AZGFD.

Attached you will find:

- The revised Post-construction Wildlife Monitoring Plan that incorporates your requested changes
- The Open Space Map

We are looking forward to continuing to work with you all, thanks again for your time yesterday!

Best,
Maeve

From: Jessica Potter <jpotter@azgfd.gov>
Sent: Wednesday, July 9, 2025 11:35 AM
To: Hogan, Maeve <Maeve.Hogan@icf.com>
Cc: Schafer, Brad <Brad.Schafer@icf.com>; Deron Lawrence <deron.lawrence@longroadenergy.com>; Lindsey Kester <lindsey.kester@longroadenergy.com>; Arianna Hartsock <ahartsock@azgfd.gov>; Dee Kephart <dkephart@azgfd.gov>; Jeff Gagnon <JGagnon@azgfd.gov>; Colin Beach <cbeach@azgfd.gov>; Bobby Lamoureux <rlamoureux@azgfd.gov>; Hunter Watson <hwatson@azgfd.gov>
Subject: Re: Longroad Agua Fria Solar Project

Hi Maeve,

Thank you for providing these meeting notes. The Thursday times would work best for our team. We look forward to continuing our discussion regarding potential wildlife monitoring at the site.

Have a great rest of your week,

Jessica Potter
PROJECT EVALUATION PROGRAM SPECIALIST
ARIZONA GAME AND FISH DEPARTMENT

5000 W. Carefree Highway
Phoenix, AZ 85086

OFFICE: (623)236-7618
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> Hi Jessica,
>
> I hope your week is going well! I wanted to reach out to see if you have any availability next Thursday or Friday to discuss the Agua Fria Solar Project. We're hoping to share some updates following our meeting last month.
>
> Thanks,
> Megan
>
> **Megan Swanson**, Senior Environmental Planner
> +1.213.312.1790 direct | Megan.Swanson@icf.com
> icf.com | LinkedIn

August 28, 2025

Ms. Lindsey Kester
Longroad Energy

Electronically submitted to: lindsey.kester@longroadenergy.com

RE: Agua Fria Solar Project and Post-Construction Wildlife Monitoring Plan

Dear Ms. Kester:

The Arizona Game and Fish Department (Department) appreciates the opportunity to review the Agua Fria Solar Project and Post-Construction Wildlife Monitoring Plan. The Department understands that Longroad Energy (Longroad) proposes to construct an up to 450 MW photovoltaic (PV) solar facility with a battery energy storage system (BESS) and associated infrastructure on approximately 4,215 acres of Arizona State Land Department (ASLD) lands near Arcosanti in Yavapai County, Arizona. The facility will be located east of the Agua Fria River in semi-desert grassland. An approximately 1.8-mile 500 kV generation intertie (gen-tie) transmission line would connect the facility to the Dugas Substation. Agua Fria Solar will be the first project submitted to Yavapai County following the adoption of the Section 608 *Solar Facilities* Ordinance Amendment.

Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission (Commission), has jurisdictional authority and public trust responsibilities to conserve and protect the state fish and wildlife resources. In addition, the Department manages threatened and endangered species through authorities of Section 6 of the Endangered Species Act and the Department's Section 10(a)(1)(A) permit. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department recognizes that appropriate coordination, proper planning, and voluntary implementation of best management practices allow projects to be developed that avoid, minimize, or offset potential impacts to wildlife and recreational access during development and operation of the facilities. Longroad has coordinated with the Department on the Agua Fria project since January 2025, and multiple meetings have been held to discuss measures to maintain wildlife movement in the area, incorporate wildlife-compatible fencing designs, conduct wildlife monitoring, and address other conservation measures. The Department appreciates Longroad's coordination and looks forward to continued collaboration during project planning, development, and monitoring. For your consideration, the Department provides the

GOVERNOR: KATIE HOBBS **COMMISSIONERS:** CHAIR MARSHA PETRIE SUE, SCOTTSDALE | JEFF BUCHANAN, PATAGONIA | JAMES E. GOUGHNOUR, PAYSON
KURT KERR, PINETOP | CLAY HERNANDEZ, TUCSON **DIRECTOR:** TOM P. FINLEY **DEPUTY DIRECTOR:** JOSHUA W. HURST

following comments based on the agency's statutory authorities, public trust responsibilities, and special expertise related to wildlife resources and recreation.

Maintaining habitat connectivity is a priority for the Department, and wildlife movement corridors are important for wildlife to respond to changing environmental conditions. Longroad requested pronghorn telemetry data within the project area and worked with the Department to interpret this data and determine the placement of wildlife corridors, with varying widths up to over 1,300 feet, to facilitate movement through the facility. The Department appreciates Longroad's flexibility in incorporating both north-south and east-west corridors into the design and eliminating "dead ends" that could trap wildlife. The Department also appreciates Longroad's decision to increase the planned duration of post-construction wildlife camera monitoring from one to two years to gather more robust data. It is recommended that camera monitoring occurs at least one year after construction to evaluate wildlife use patterns after site conditions have stabilized. Monitoring wildlife use of varying corridor sizes will help assess effectiveness and inform the design of future solar facilities. The Department looks forward to continued coordination with Longroad on post-construction movement monitoring at the facility and the opportunity to review the final monitoring report.

Based on discussions with Longroad, the following measures are also planned to reduce potential impacts to wildlife and habitat:

- The Department understands that Longroad plans to continue to work with species experts to discuss potential impacts to Yellow-billed Cuckoo, a federally Threatened species with designated critical habitat adjacent to the project. The Department appreciates that the project will be set back from suitable riparian habitat surrounding Ash Creek and the Agua Fria River.
- The Department understands that Longroad plans to implement wildlife-compatible fencing designs to allow for smaller wildlife species to move freely through the area and make use of any habitat within the project boundary.
- The Department understands that Longroad will ensure that new power lines follow the Avian Power Line Interaction Committee's current version of the *Suggested Practices for Avian Protection on Power Lines and Reduced Avian Collisions with Power Lines*.
- The Department understands that Longroad plans to conduct surveys for nesting birds prior to vegetation removal and/or construction activities that occur during the breeding season, as per the Migratory Bird Treaty Act, as well as conduct surveys for burrowing species prior to construction.

Finally, the Department offers the following general recommendations to reduce potential impacts to wildlife and habitat:

- The Department recommends conducting minimal grading in the project area and, to the extent possible, retaining habitat features underneath the panels, including vegetation and soils. Keeping the existing soil and root structures intact would serve to minimize erosional run-off and help reduce biodiversity loss within the site (Grodsky and Hernandez 2020[1]).

[1] https://www.nature.com/articles/s41893-020-0574-x

- To help minimize the disturbance to pronghorn and reduce impacts on pronghorn recruitment, the Department recommends that construction activities occur outside the fawning season (mid-May to mid-June) to the extent feasible.
- A variety of Arizona Species of Greatest Conservation Need (SGCN) have the potential to occur within the project area. If wildlife are encountered during project activities, the Department recommends moving them out of harm's way, no more than 0.25 mile outside the project boundary within similar habitat. Please note that the Department has an interactive website, Arizona Wildlife Conservation Strategy[2], that includes the most recent list of SGCN to help navigate and identify conservation opportunities.
- If trenching or digging of large holes will occur, the Department recommends that trenching/digging and backfilling crews work together to minimize the number of open holes/trenches at any given time. Where trenches/holes cannot be backfilled immediately, the Department recommends escape ramps be constructed in each hole and at least every 300 feet in trenches. Escape ramps can be short lateral trenches or wooden planks sloping to the surface, ramp slopes should be less than 45 degrees (1:1). Trenches or holes that have been left open should be inspected for animals and animals removed prior to backfilling.
- Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations (Davies et. al. 2013[3]). The Department recommends using only the minimum amount of light needed for safety. If feasible, "warmer" narrow spectrum lighting (amber, orange, red) is wildlife-friendly and should be used as often as possible to minimize the number of species affected by lighting. It is also beneficial that all lighting is shielded, canted, or cut to minimize the amount of upward shining light.
- Please ensure the project complies with Arizona Native Plant Law[4] regulations. A Native Plant Inventory may need to be conducted to identify, record, and coordinate plant salvage efforts for species that are Protected under the Arizona Native Plant Law.
- To minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects, and pathogens, the Department encourages taking precautions to wash and/or decontaminate equipment before entering and leaving the site. See the Arizona Department of Agriculture website[5] for a list of prohibited and restricted noxious weeds and the Arizona Native Plant Society[6] for recommendations on control methods. To view a list of documented invasive species or to report invasive species in or near the project area, visit iMapInvasives[7], which is a national cloud-based application for tracking and managing invasive species.
- The Department recommends revegetating disturbed areas with native drought-tolerant species that represent the natural surrounding landscape. Landscaping with native plants can help support wildlife and pollinator species in the area while reducing dust and

[2] https://awcs.azgfd.com
[3] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3657119
[4] https://agriculture.az.gov/plantsproduce/native-plants
[5] https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds
[6] https://aznps.com/invas
[7] https://imap.natureserve.org/imap/services/page/map.html

erosion. In addition, the applicable land management agencies should be consulted regarding guidelines for revegetation efforts.

Thank you for the opportunity to provide input on the Agua Fria Solar Project and Post-Construction Wildlife Monitoring Plan. The Department appreciates Longroad's partnership on this project and looks forward to continued collaboration. For further coordination, please contact Jessica Potter at jpotter@azgfd.gov or 623-236-7618.

Sincerely,

Callie Cavalcant

Callie Cavalcant
Habitat, Evaluation, and Lands Branch Chief

cc: Kriselle Colvin – Regional Supervisor, Mesa
Karen Klima – Regional Supervisor, Kingman

AZGFD #M25-08041738

Appendix B
USFWS and AGFD Species Lists

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arizona Ecological Services Field Office
9828 North 31st Ave
#c3
Phoenix, AZ 85051-2517
Phone: (602) 242-0210 Fax: (602) 242-2513

In Reply Refer To: 02/27/2025 21:28:32 UTC
Project Code: 2025-0062058
Project Name: Agua Fria Solar Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The Fish and Wildlife Service (Service) is providing this list under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). The list you have generated identifies threatened, endangered, proposed, and candidate species, and designated and proposed critical habitat, that *may* occur within the One-Range that has been delineated for the species (candidate, proposed, or listed) and it's critical habitat (designated or proposed) with which your project polygon intersects. These range delineations are based on biological metrics, and do not necessarily represent exactly where the species is located. Please refer to the species information found on ECOS to determine if suitable habitat for the species on your list occurs in your project area.

The purpose of the Act is to provide a means whereby threatened and endangered species and the habitats upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of Federal trust resources and to determine whether projects may affect federally listed species and/or designated critical habitat. A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.
If the Federal action agency determines that listed species or critical habitat *may be affected* by a federally funded, permitted or authorized activity, the agency must consult with us pursuant to 50 CFR 402. Note that a "may affect" determination includes effects that may not be adverse and that may be beneficial, insignificant, or discountable. An effect exists even if only one individual

or habitat segment may be affected. The effects analysis should include the entire action area, which often extends well outside the project boundary or "footprint." For example, projects that involve streams and river systems should consider downstream affects. If the Federal action agency determines that the action may jeopardize a *proposed* species or may adversely modify *proposed* critical habitat, the agency must enter into a section 7 conference. The agency may choose to confer with us on an action that may affect proposed species or critical habitat.

Candidate species are those for which there is sufficient information to support a proposal for listing. Although candidate species have no legal protection under the Act, we recommend that they be considered in the planning process in the event they become proposed or listed prior to project completion. More information on the regulations (50 CFR 402) and procedures for section 7 consultation, including the role of permit or license applicants, can be found in our Endangered Species Consultation Handbook at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf.

We also advise you to consider species protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) and the Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668 *et seq.*). The MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when authorized by the Service. The Eagle Act prohibits anyone, without a permit, from taking (including disturbing) eagles, and their parts, nests, or eggs. Currently 1,026 species of birds are protected by the MBTA, including the western burrowing owl (*Athene cunicularia hypugaea*). Protected western burrowing owls can be found in urban areas and may use their nest/burrows year-round; destruction of the burrow may result in the unpermitted take of the owl or their eggs.

If a bald eagle or golden eagle nest occurs in or near the proposed project area, our office should be contacted for Technical Assistance. An evaluation must be performed to determine whether the project is likely to disturb or harm eagles. The National Bald Eagle Management Guidelines provide recommendations to minimize potential project impacts to bald eagles (see https://www.fws.gov/law/bald-and-golden-eagle-protection-act and https://www.fws.gov/program/eagle-management).

The Division of Migratory Birds (505/248-7882) administers and issues permits under the MBTA and Eagle Act, while our office can provide guidance and Technical Assistance. For more information regarding the MBTA, BGEPA, and permitting processes, please visit the following web site: https://www.fws.gov/program/migratory-bird-permit. Guidance for minimizing impacts to migratory birds for communication tower projects (e.g. cellular, digital television, radio, and emergency broadcast) can be found at https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation.

The U.S. Army Corps of Engineers (Corps) may regulate activities that involve streams (including some intermittent streams) and/or wetlands. We recommend that you contact the Corps to determine their interest in proposed projects in these areas. For activities within a National Wildlife Refuge, we recommend that you contact refuge staff for specific information about refuge resources, please visit this link or visit https://www.fws.gov/program/national-

wildlife-refuge-system to locate the refuge you would be working in or around.

If your action is on tribal land or has implications for off-reservation tribal interests, we encourage you to contact the tribe(s) and the Bureau of Indian Affairs (BIA) to discuss potential tribal concerns, and to invite any affected tribe and the BIA to participate in the section 7 consultation. In keeping with our tribal trust responsibility, we will notify tribes that may be affected by proposed actions when section 7 consultation is initiated. For more information, please contact our Tribal Coordinator, John Nystedt, at 928/556-2160 or John_Nystedt@fws.gov.

We also recommend you seek additional information and coordinate your project with the Arizona Game and Fish Department. Information on known species detections, special status species, and Arizona species of greatest conservation need, such as the western burrowing owl and the Sonoran desert tortoise (*Gopherus morafkai*) can be found by using their Online Environmental Review Tool, administered through the Heritage Data Management System and Project Evaluation Program (https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/project-evaluation-program/).

We appreciate your concern for threatened and endangered species. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. If we may be of further assistance, please contact our Flagstaff office at 928/556-2118 for projects in northern Arizona, our general Phoenix number 602/242-0210 for central Arizona, or 520/670-6144 for projects in southern Arizona.

Sincerely,
/s/

Heather Whitlaw
Field Supervisor
Attachment

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arizona Ecological Services Field Office
9828 North 31st Ave
#c3
Phoenix, AZ 85051-2517
(602) 242-0210

PROJECT SUMMARY

Project Code: 2025-0062058
Project Name: Agua Fria Solar Project
Project Type: Power Gen - Solar
Project Description: The project is located in Yavapai County, AZ and is bisected by Interstate 17. The project applicant proposes to develop a solar project consisting of solar arrays, a gen-tie line, and other associated infrastructure.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@34.382926100000006,-112.10168257979308,14z



Counties: Yavapai County, Arizona

ENDANGERED SPECIES ACT SPECIES

There is a total of 10 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Mexican Wolf *Canis lupus baileyi* Population: U.S.A. (portions of AZ and NM)see 17.84(k) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3916	Experimental Population, Non-Essential

BIRDS

NAME	STATUS
Mexican Spotted Owl *Strix occidentalis lucida* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8196	Threatened
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

REPTILES

NAME	STATUS
Northern Mexican Gartersnake *Thamnophis eques megalops* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7655	Threatened

FISHES

NAME	STATUS
Gila Chub *Gila intermedia* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/51	Endangered
Gila Topminnow (incl. Yaqui) *Poeciliopsis occidentalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1116	Endangered
Gila Trout *Oncorhynchus gilae* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/781	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Suckley's Cuckoo Bumble Bee *Bombus suckleyi* Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10885	Proposed Endangered

CRITICAL HABITATS

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Yellow-billed Cuckoo *Coccyzus americanus* https://ecos.fws.gov/ecp/species/3911#crithab	Final

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

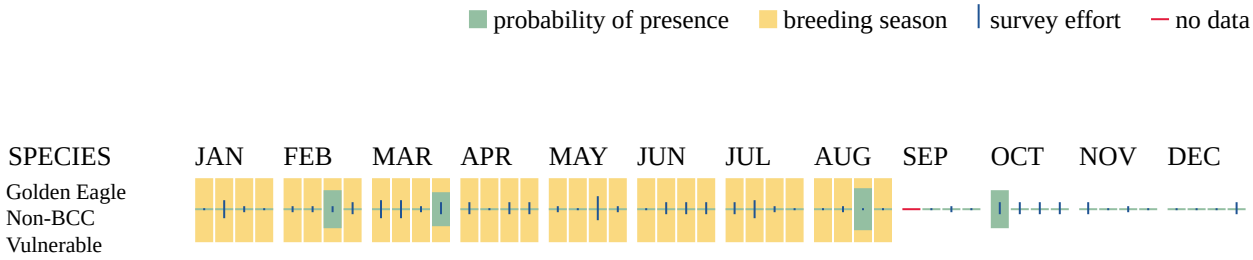
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (▪)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Black-chinned Sparrow *Spizella atrogularis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9447	Breeds Apr 15 to Jul 31
Black-throated Gray Warbler *Setophaga nigrescens* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9584	Breeds May 1 to Jul 20
Broad-tailed Hummingbird *Selasphorus platycercus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/11935	Breeds May 25 to Aug 21
Cordilleran Flycatcher *Empidonax occidentalis* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11949	Breeds Apr 25 to Jul 25
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Grace's Warbler *Setophaga graciae* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9514	Breeds May 20 to Jul 20
Lewis's Woodpecker *Melanerpes lewis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30
Long-eared Owl *asio otus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3631	Breeds Mar 1 to Jul 15
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31

NAME	BREEDING SEASON
Phainopepla *Phainopepla nitens lepida* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11973	Breeds Mar 1 to Aug 20
Pinyon Jay *Gymnorhinus cyanocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9420	Breeds Feb 15 to Jul 15
Plumbeous Vireo *Vireo plumbeus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11933	Breeds May 10 to Aug 5
Red-faced Warbler *Cardellina rubrifrons* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9578	Breeds May 10 to Jul 15
Scott's Oriole *Icterus parisorum* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11968	Breeds May 21 to Aug 15
Virginia's Warbler *Leiothlypis virginiae* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9441	Breeds May 1 to Jul 31
Western Grebe *aechmophorus occidentalis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

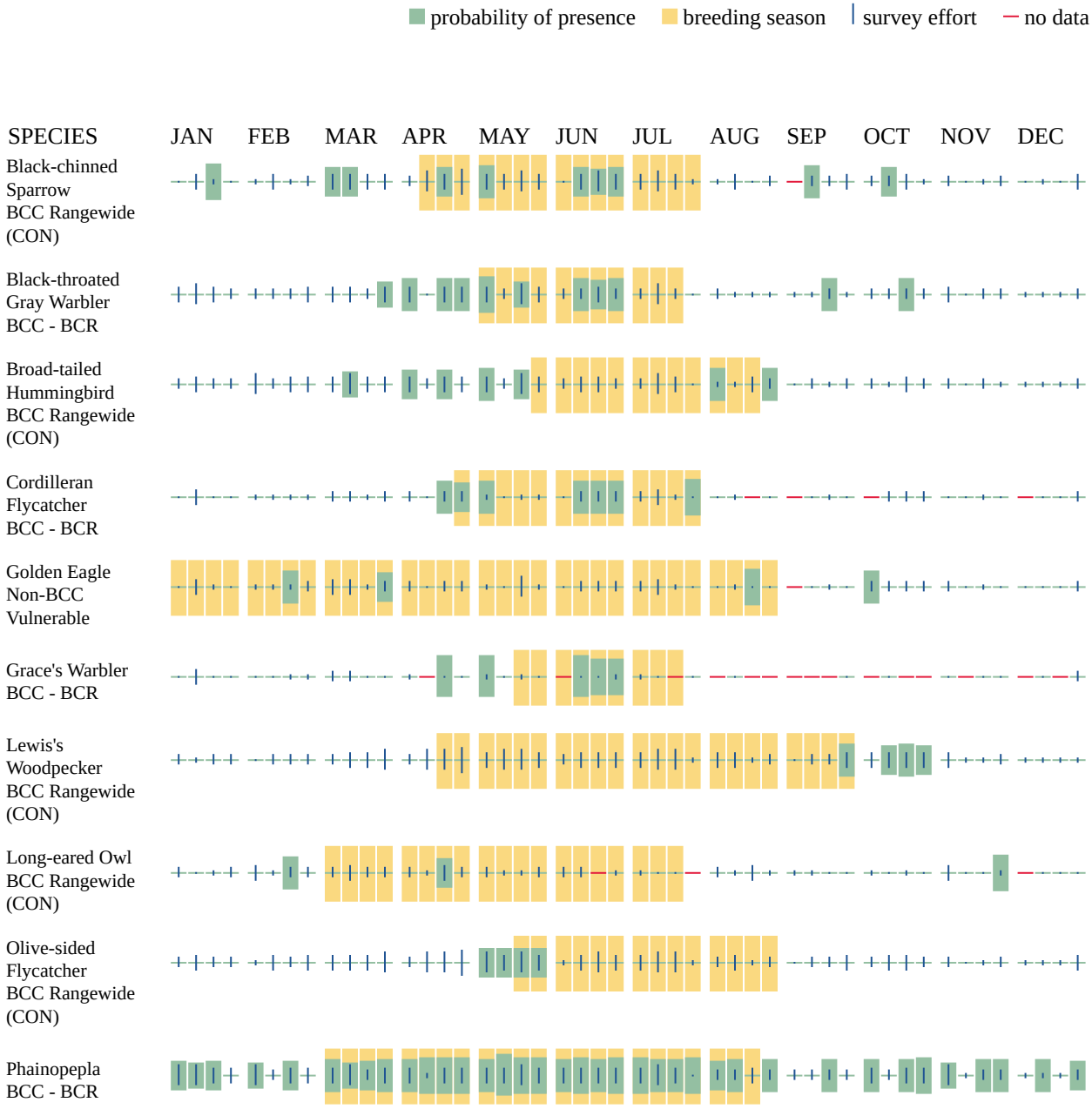
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER POND

- PUSKx
- PUSK
- PUBHh

- PAB4Hh
- PAB4Ch
- PUSAh
- PAB4K
- PUBF
- PUSCx
- PUSAx
- PUSJh
- PUSCh

RIVERINE

- R5UBFx
- R4SBJ
- R2USC
- R5UBH
- R2UBH
- R4SBA
- R4SBCx
- R4SBC

FRESHWATER FORESTED/SHRUB WETLAND

- PSS1A
- PSS1J
- PSSC
- PFO1A
- PFOC
- PSS1Ah

FRESHWATER EMERGENT WETLAND

- PEM1Ah

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Kaitlin Kozlowski
Address: 980 9th Street, Suite 1200
City: Sacramento
State: CA
Zip: 95814
Email kaitlin.kozlowski@icf.com
Phone: 9167373000

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department requests further coordination to provide project/species specific recommendations. Please use the Project Evaluation Form to submit your project to the Project Evaluation Program at PEP@azgfd.gov.

Project Name:
Agua Fria Solar

Project Type:
Energy Production/Storage/Transfer, Energy Production (generation), photovoltaic solar facility (new/expansion)

Project ID:
HGIS-24415

Project Description:
The project is located in Yavapai County, AZ and is bisected by Interstate 17. The project applicant proposes to develop a solar project consisting of solar arrays, a gen-tie line, and other associated infrastructure.

Contact Person:
Kaitlin Kozlowski

Organization:
ICF

On Behalf Of:
PRIVATE

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. Arizona Wildlife Conservation Strategy (AWCS), specifically Species of Greatest Conservation Need (SGCN), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

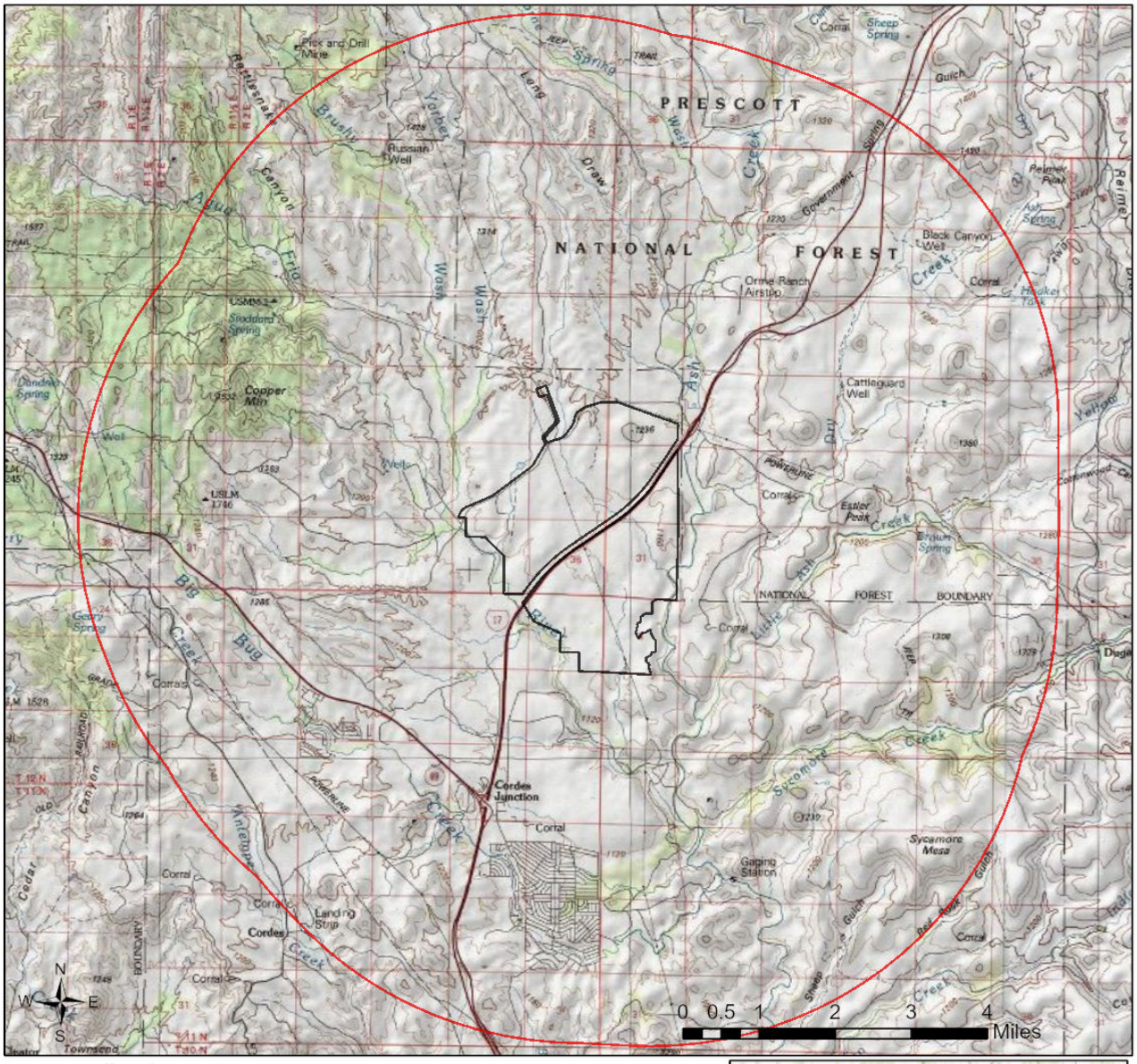
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.

Agua Fria Solar

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 4,211.68

Lat/Long (DD): 34.3912 / -112.1011

County(s): Yavapai

AGFD Region(s): Kingman; Mesa

Township/Range(s): T11N, R2E; T11N, R3E; T12N, R2E +

USGS Quad(s): CORDES JUNCTION; ESTLER PEAK +



County of Yavapai, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Copyright:© 2013 National Geographic Society, i-cubed
Esri, USGS

Agua Fria Solar

Web Map As Submitted By User



Buffered Project Boundary

Project Boundary

Project Size (acres): 4,211.68

Lat/Long (DD): 34.3912 / -112.1011

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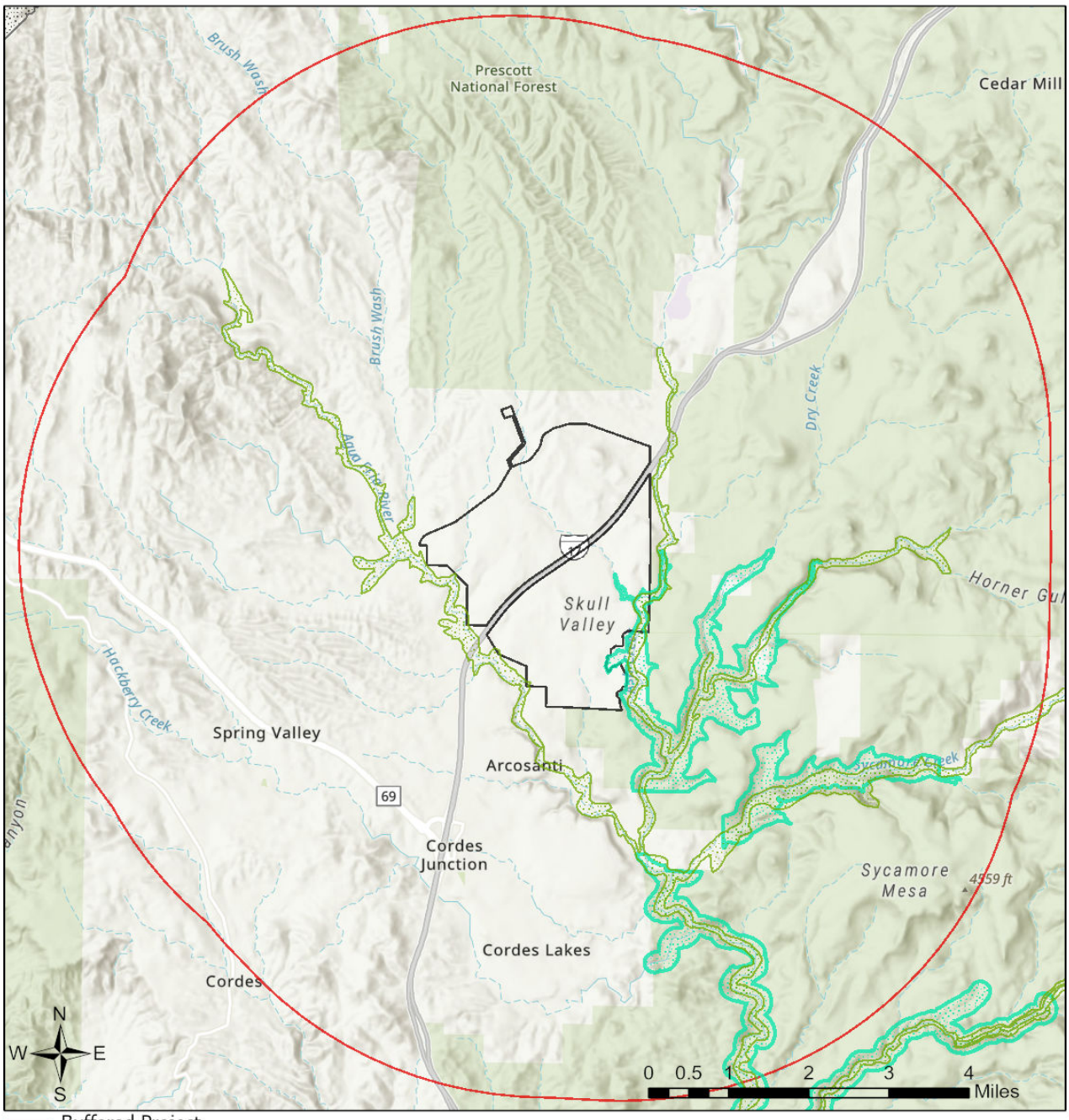
Township/Range(s): T11N, R2E; T11N, R3E; T12N, R2E +

USGS Quad(s): CORDES JUNCTION; ESTLER PEAK +

Esri, NASA, NGA, USGS

Agua Fria Solar

Important Areas



- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Wildlife Connectivity

Project Size (acres): 4,211.68

Lat/Long (DD): 34.3912 / -112.1011

County(s): Yavapai

AGFD Region(s): Kingman; Mesa

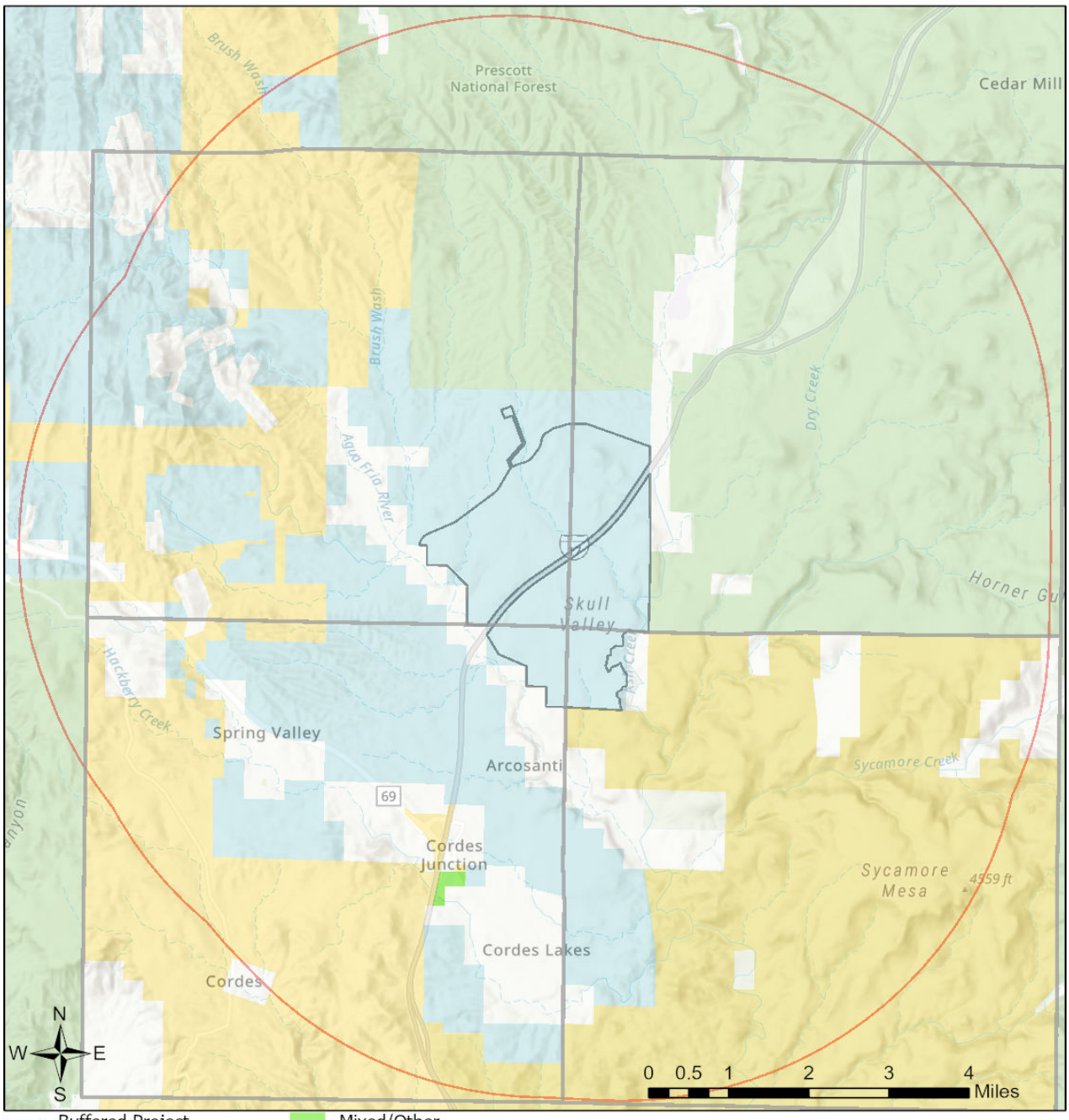
Township/Range(s): T11N, R2E; T11N, R3E; T12N, R2E +

USGS Quad(s): CORDES JUNCTION; ESTLER PEAK +

County of Yavapai, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS
Esri, NASA, NGA, USGS

Agua Fria Solar

Township/Ranges and Land Ownership



- Buffered Project Boundary
- Project Boundary
- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge
- Township/Ranges

Project Size (acres): 4,211.68

Lat/Long (DD): 34.3912 / -112.1011

County(s): Yavapai

AGFD Region(s): Kingman; Mesa

Township/Range(s): T11N, R2E; T11N, R3E; T12N, R2E +

USGS Quad(s): CORDES JUNCTION; ESTLER PEAK +

County of Yavapai, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS
Esri, NASA, NGA, USGS

Special Status Species Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Accipiter atricapillus	American Goshawk		S	S		2
Agave toumeyana var. bella	Toumey Agave				SR	
Agosia chrysogaster chrysogaster	Gila Longfin Dace			S		2
Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC		S		2
Anaxyrus microscaphus	Arizona Toad			S		2
Anaxyrus microscaphus	Arizona Toad	SC		S		2
Aphelocoma woodhouseii	Woodhouse's Scrub-Jay					2
Aquila chrysaetos	Golden Eagle			S		2
Aspidoscelis sonorae	Sonoran Spotted Whiptail					2
Auriparus flaviceps	Verdin					2
Bombus sonorus	American Bumble Bee	UR				
Buteo swainsoni	Swainson's Hawk					2
Buteogallus anthracinus	Common Black Hawk					2
Calypte costae	Costa's Hummingbird					2
Campylorhynchus brunneicapillus	Cactus Wren					2
Cardinalis sinuatus	Pyrrhuloxia					2
Catharus guttatus	Hermit Thrush					2
Catostomus clarkii	Desert Sucker		S	S		2
Catostomus clarkii	Desert Sucker	SC	S	S		2
Charadrius vociferus	Killdeer					2
Cicindela oregona maricopa	Maricopa Tiger Beetle	SC				
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Columbina inca	Inca Dove					2
Contopus sordidulus	Western Wood-Pewee					2
Danaus plexippus	Monarch	C, PT		S		
Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		S		1
Empidonax wrightii	Gray Flycatcher					2
Eremophila alpestris	Horned Lark					2
Geothlypis tolmiei	MacGillivray's Warbler					2
Gila intermedia	Gila Chub	LE		S		1
Haemorhous cassinii	Cassin's Finch					2
Heloderma suspectum	Gila Monster					1
Icterus bullockii	Bullock's Oriole					2
Icterus cucullatus	Hooded Oriole					2
Icterus parisorum	Scott's Oriole					2
Junco phaeonotus	Yellow-eyed Junco		S			2
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		2
Lanius ludovicianus	Loggerhead Shrike					2
Melanerpes uropygialis	Gila Woodpecker					2

Special Status Species Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Melospiza lincolnii	Lincoln's Sparrow					2
Melozone aberti	Abert's Towhee		S			2
Melozone fusca	Canyon Towhee					2
Micruroides euryxanthus	Sonoran Coralsnake					2
Myadestes townsendi	Townsend's Solitaire					2
Parabuteo unicinctus	Harris's Hawk					2
Patagioenas fasciata	Band-tailed Pigeon					2
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE		S		1
Rana yavapaiensis	Lowland Leopard Frog		S	S		1
Rana yavapaiensis	Lowland Leopard Frog	SC	S	S		1
Rhinichthys osculus	Speckled Dace	SC		S		
Selasphorus platycercus	Broad-tailed Hummingbird					2
Setophaga graciae	Grace's Warbler					2
Setophaga nigrescens	Black-throated Gray Warbler					2
Spizella breweri	Brewer's Sparrow					2
Strix occidentalis lucida	Mexican Spotted Owl	LT		S		1
Thamnophis eques megalops	Northern Mexican Gartersnake	LT	S	S		1
Vireo vicinior	Gray Vireo		S			2

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Agua Fria NM Riparian Corridors IBA	Important Bird Area					
Agua Fria Riparian Corridor	Conservation Opportunity Area					
CH for Coccyzus americanus	Yellow-billed Cuckoo Designated Critical Habitat					
Central Yavapai County	Conservation Opportunity Area					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Accipiter atricapillus	American Goshawk		S	S		2
Agosia chrysogaster	Longfin Dace			S		2
Ammodramus savannarum perpallidus	Western Grasshopper Sparrow					2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Anaxyrus microscaphus	Arizona Toad			S		2
Anthus spragueii	Sprague's Pipit					2
Antilocapra americana americana	American Pronghorn					2
Aquila chrysaetos	Golden Eagle	BGA		S		2
Artemisiospiza nevadensis	Sagebrush Sparrow					3
Asio otus	Long-eared Owl					2
Aspidoscelis sonorae	Sonoran Spotted Whiptail					2
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Auriparus flaviceps	Verdin					2
Baeolophus ridgwayi	Juniper Titmouse					3
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Buteogallus anthracinus	Common Black Hawk					2
Calcarius ornatus	Chestnut-collared Longspur					2
Calypte costae	Costa's Hummingbird					2
Campylorhynchus brunneicapillus	Cactus Wren					2
Catharus ustulatus	Swainson's Thrush					2
Catostomus clarkii	Desert Sucker		S	S		2
Chaetodipus baileyi	Bailey's Pocket Mouse					2
Chordeiles minor	Common Nighthawk					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Colaptes chrysoides	Gilded Flicker			S		2
Coluber bilineatus	Sonoran Whipsnake					2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Crotalus cerberus	Arizona Black Rattlesnake					2
Elgaria kingii	Madrean Alligator Lizard					2
Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		S		1
Empidonax wrightii	Gray Flycatcher					2
Eumops perotis californicus	Greater Western Bonneted Bat			S		2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1
Falco sparverius	American Kestrel					2
Gila intermedia	Gila Chub	LE		S		1
Glaucidium gnoma californicum	Northern Pygmy-owl					2
Gymnorhinus cyanocephalus	Pinyon Jay	UR		S		2
Haemorhous cassinii	Cassin's Finch					2
Heloderma suspectum	Gila Monster					1
Icterus bullockii	Bullock's Oriole					2
Icterus cucullatus	Hooded Oriole					2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Icterus parisorum	Scott's Oriole					2
Idionycteris phyllotis	Allen's Lappet-browed Bat		S	S		2
Incilius alvarius	Sonoran Desert Toad					2
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		2
Lanius ludovicianus	Loggerhead Shrike					2
Lasiurus cinereus	Hoary Bat					2
Lasiurus frantzii	Desert Red Bat		S			2
Lasiurus xanthinus	Western Yellow Bat		S			2
Megascops kennicottii	Western Screech-owl					2
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Melozone aberti	Abert's Towhee		S			2
Micrathene whitneyi	Elf Owl					3
Micruroides euryxanthus	Sonoran Coralsnake					2
Mustela nigripes	Black-footed Ferret	LE,XN				1
Myadestes townsendi	Townsend's Solitaire					2
Myotis thysanodes	Fringed Myotis					2
Myotis velifer	Cave Myotis			S		2
Myotis yumanensis	Yuma Myotis					2
Neotamias cinereicollis	Gray-collared Chipmunk					2
Neotamias minimus	Least Chipmunk		S			2
Neotoma stephensi	Stephen's Woodrat					2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Nyctinomops macrotis	Big Free-tailed Bat					2
Parabuteo unicinctus	Harris's Hawk					2
Passerculus sandwichensis	Savannah Sparrow					2
Patagioenas fasciata	Band-tailed Pigeon					2
Phrynosoma solare	Regal Horned Lizard					2
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE,UR		S		1
Pooecetes gramineus	Vesper Sparrow					2
Psiloscops flammeolus	Flammulated Owl					2
Rana pipiens	Northern Leopard Frog		S	S		1
Rana yavapaiensis	Lowland Leopard Frog		S	S		1
Sciurus arizonensis	Arizona Gray Squirrel					2
Setophaga nigrescens	Black-throated Gray Warbler					2
Sonorella ashmuni	Richinbar Talussnail					2
Spizella breweri	Brewer's Sparrow					2
Strix occidentalis lucida	Mexican Spotted Owl	LT		S		1

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Thamnophis eques	Mexican Gartersnake	PS				1
Troglodytes pacificus	Pacific Wren					2
Vireo vicinior	Gray Vireo		S			2

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Antilocapra americana americana	America Pronghorn					
Callipepla gambelii	Gambel's Quail					
Odocoileus hemionus	Mule Deer					
Patagioenas fasciata	Band-tailed Pigeon					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Energy Production/Storage/Transfer, Energy Production (generation), photovoltaic solar facility (new/expansion)

Project Type Recommendations:
During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/unitedstates/az.shtml and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

For any powerlines built, proper design and construction of the transmission line is necessary to prevent or minimize risk of electrocution of raptors, owls, vultures, and golden or bald eagles, which are protected under state and federal laws. Limit project activities during the breeding season for birds, generally March through late August, depending on species in the local area (raptors breed in early February through May). Conduct avian surveys to determine bird species that may be utilizing the area and develop a plan to avoid disturbance during the nesting season. For underground powerlines, trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herpetofauna (snakes, lizards, tortoise) from entering ditches. In addition, indirect affects to wildlife due to construction (timing of activity, clearing of rights-of-way, associated bridges and culverts, affects to wetlands, fences) should also be considered and mitigated.

Based on the project type entered, coordination with U.S. Fish and Wildlife Service (Migratory Bird Treaty Act) may be required (https://www.fws.gov/office/arizona-ecological-services).

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

Project Location and/or Species Recommendations:
HDMS records indicate that one or more native plants listed on the **Arizona Native Plant Law and Antiquities Act** have been documented within the vicinity of your project area. Please contact:
Arizona Department of Agriculture
1688 W Adams St.
Phoenix, AZ 85007
Phone: 602.542.4373
https://agriculture.az.gov/sites/default/files/Native%20Plant%20Rules%20-%20AZ%20Dept%20of%20Ag.pdf starts on page 44

Analysis indicates that your project is located in the vicinity of an identified **Conservation Opportunity Area (COA)**. While there are many areas in Arizona that present abundant conservation opportunities, COAs are specific areas on the landscape that the Department identified as having the greatest potential for conservation efforts. COAs were identified using species and habitat data, the presence of unique landscape features, and Departmental expertise. COAs range in size, scope, and focal species and/or habitats and are strictly a non-regulatory conservation tool for the public and our conservation partners to consider. For more information regarding this particular COA near your project area and the Department's suggestions for potential conservation efforts, please visit the COA profile at https://awcs.azgfd.com/conservation-opportunity-areas.

The analysis has detected one or more **Important Bird Areas** within your project vicinity. Please see http://aziba.org/?page_id=38 for details about the Important Bird Area(s) identified in the report.

HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at https://www.fws.gov/office/arizona-ecological-services or:

Phoenix Main Office
9828 North 31st Avenue #C3
Phoenix, AZ 85051-2517
Phone: 602-242-0210
Fax: 602-242-2513

Tucson Sub-Office
201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

Appendix C

Special-Status Wildlife with a Moderate to High Potential to Occur

Appendix C. Special-Status Wildlife with a Moderate to High Potential to Occur

Species		Protection Status[1]		Potential to Occur in Project Area (Justification)
Common Name	Scientific Name	ESA[2, 3]	Arizona SGCN[3]	
Invertebrates				
Monarch butterfly	*Danaus plexippus*	PT	--	High. Mesquite scrub and semi-desert grassland provide potential suitable habitat for foraging and breeding, provided suitable host (milkweed) and nectaring plants are present. Species has been documented along the Agua Fria River (Williams pers. comm.), and elsewhere within 5 miles (iNaturalist 2025).
Amphibians				
Arizona toad	*Anaxyrus microscaphus*	SC	2	High. Suitable aquatic breeding habitat present along Ash Creek and Agua Fria River, and suitable upland habitat in vicinity. Two occurrences present within the Project area (iNaturalist 2025) and elsewhere within 5 miles (AGFD 2025a).
Lowland leopard frog	*Rana yavapaiensis*	SC	1	High. Suitable aquatic breeding habitat present along Ash Creek and Agua Fria River, and suitable upland habitat in vicinity. Species documented within 5 miles (AGFD 2025a).
Northern leopard frog	*Rana pipiens*		1	Moderate. Suitable aquatic breeding habitat present along Ash Creek and Agua Fria River, and suitable upland habitat in vicinity. No iNaturalist occurrences within 5 miles.
Sonoran desert toad	*Incilius alvarius*		2	Moderate. Suitable aquatic breeding habitat present along Ash Creek and Agua Fria River, and suitable upland habitat in vicinity. No iNaturalist occurrences within 5 miles.
Reptiles				
Arizona black rattlesnake	*Crotalus cerberus*		2	High. Suitable habitat (rocky outcrops, canyons, desert slopes) present. Two occurrences within 5 miles (iNaturalist 2025).
Desert mud turtle	*Kinosternon sonoriense sonoriense*		2	High. Suitable aquatic breeding habitat present along Ash Creek and Agua Fria River, and suitable upland habitat in vicinity. Species documented within 5 miles (AGFD 2025a).

Species		Protection Status[1]		Potential to Occur in Project Area (Justification)
Common Name	Scientific Name	ESA[2, 3]	Arizona SGCN[3]	
Gila monster	*Heloderma suspectum*		1	High. Suitable habitat (rock outcrops, small mammal burrows, and other cover elements in scrubland) present. One occurrence in Project area (iNaturalist 2025).
Madrean alligator lizard	*Elgaria kingii*		2	High. Suitable habitat (grassland, chaparral, woodland) present. Nine iNaturalist occurrences within 5 miles (iNaturalist 2025).
Regal horned lizard	*Phrynosoma solare*		2	Moderate. Limited suitable habitat (grassland, shrubland, and rocky habitats in valleys, rocky bajadas, and low foothills) present. One occurrence within 5 miles (iNaturalist 2025).
Sonoran coralsnake	*Micruroides euryxanthus*		2	High. Suitable habitat (rocky or gravelly drainages, mesquite lined washes, and canyons) present. Species documented within 5 miles (AGFD 2025a).
Sonoran whipsnake	*Coluber bilineatus*		2	High. Suitable habitat (rocky canyons, riparian areas, foothills and mountains) present. One occurrence within 5 miles (iNaturalist 2025).
Sonoran spotted whiptail	*Aspidoscelis sonorae*		2	High. Suitable habitat (relatively flat, open, low valleys) present. Multiple occurrences within 5 miles (AGFD 2025a; iNaturalist 2025).
Birds				
Abert's towhee	*Melozone aberti*		2	High. Suitable breeding and foraging habitat present along Ash Creek and Agua Fria River. Multiple occurrence within 5 miles (AGFD 2025a; eBird 2025).
American goshawk	*Accipiter atricapillus*		2	Low. No suitable nesting and foraging habitat (forests) present. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025).
American kestrel	*Falco sparverius*		2	High. Suitable nesting habitat (trees) and foraging habitat present. Observed during reconnaissance surveys. Multiple occurrences within Project area (eBird 2025).
American peregrine falcon	*Falco peregrinus anatum*	SC	1	Moderate. Large cliff suitable nesting habitat absent, but artificial structures (transmission towers) present along with foraging habitat.

Species		Protection Status[1]		Potential to Occur in Project Area (Justification)
Common Name	Scientific Name	ESA[2, 3]	Arizona SGCN[3]	
				One occurrence of peregrine, potentially nesting on transmission tower, present within 5 miles (iNaturalist 2025).
Black-throated gray warbler	*Setophaga nigrescens*		2	High. Suitable nesting habitat (woodland, scrub) present along with foraging habitat. Occurrences within 5 miles (AGFD 2025a; eBird 2025).
Brewer's sparrow	*Spizella breweri*		2	High (wintering). Outside of breeding range. Suitable wintering habitat (shrubland, juniper woodland) present along with foraging habitat. Observed during reconnaissance surveys. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025; iNaturalist 2025).
Broad-tailed hummingbird	*Selasphorus platycercus*		2	High. Suitable nesting habitat (riparian woodland) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025; iNaturalist 2025).
Bullock's oriole	*Icterus bullockii*		2	High. Suitable nesting habitat (riparian woodland, mesquite scrub) present. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025; iNaturalist 2025).
Cactus wren	*Campylorhynchus brunneicapillus*		2	High. Suitable nesting habitat (Mesquite scrub, grassland) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025).
Canyon towhee	*Melozone fusca*		2	High. Suitable breeding habitat (riparian woodland, mesquite scrub, semi-desert grassland) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025; iNaturalist 2025).
Cassin's finch	*Haemorhous cassinii*		2	Moderate (wintering). Outside of breeding range. Suitable wintering habitat (shrubland, juniper woodland) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025).

Species		Protection Status[1]		Potential to Occur in Project Area (Justification)
Common Name	Scientific Name	ESA[2, 3]	Arizona SGCN[3]	
Chestnut-collared longspur	*Calcarius ornatus*		2	Moderate (wintering). Outside of breeding range. Suitable wintering habitat (semi-desert grassland) present along with foraging habitat. No iNaturalist or eBird occurrences within 5 miles.
Common black hawk	*Buteogallus anthracinus*		2	High. Suitable nesting habitat (riparian woodland) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025; iNaturalist 2025).
Common nighthawk	*Chordeiles minor*		2	Moderate. Suitable nesting habitat (juniper woodland, semi-desert grassland) and foraging habitat present. Occurrences within 5 miles (eBird 2025).
Costa's hummingbird	*Calypte costae*		2	High. Suitable nesting habitat (desert wash, scrub) and foraging habitat present. Occurrences within 5 miles (AGFD 2025a; eBird 2025).
Elf owl	*Micrathene whitneyi*		3	Moderate. Marginal suitable nesting habitat (riparian forest) and foraging habitat. Four occurrences within 5 miles (eBird 2025).
Ferruginous hawk	*Buteo regalis*	SC	2	Moderate (wintering). Outside of breeding range. Suitable wintering habitat (semi-desert grassland) and foraging habitat present. Multiple occurrences within 5 miles (eBird 2025).
Gila woodpecker	*Melanerpes uropygialis*		2	High. Suitable nesting habitat (riparian woodland) present along with foraging habitat. Multiple occurrences within the Project area (eBird 2025), and numerous additional occurrences within 5 miles (AGFD 2025a; iNaturalist 2025).
Golden eagle	*Aquila chrysaetos*	BGEPA	2	Moderate. No suitable nesting habitat (large trees in grassland and chaparral) present (may nest on the ground but unlikely), but foraging habitat present. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025).

Species		Protection Status[1]		Potential to Occur in Project Area (Justification)
Common Name	Scientific Name	ESA[2, 3]	Arizona SGCN[3]	
Gray flycatcher	*Empidonax wrightii*		2	High (migration). Outside of breeding range. Suitable migrating habitat (riparian woodland, mesquite scrub, desert wash) present. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025; iNaturalist 2025).
Gray vireo	*Vireo vicinior*		2	Moderate. Limited suitable nesting habitat (juniper woodland) and foraging habitat present. Occurrence within 5 miles (AGFD 2025a; eBird 2025).
Harris's hawk	*Parabuteo unicinctus*		2	Moderate. No suitable nesting habitat (desert scrub, grassland with mature trees) present but foraging habitat present. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025).
Hermit thrush	*Catharus guttatus*		2	High. Suitable nesting habitat (riparian woodland) and foraging habitat present. Occurrences within Project area (eBird 2025) and elsewhere within 5 miles (AGFD 2025a).
Hooded oriole	*Icterus cucullatus*		2	High. Suitable nesting habitat (riparian woodland) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025).
Horned lark	*Eremophila alpestris*		2	High. Suitable nesting habitat (semi-desert grassland) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025).
Inca dove	*Columbina inca*		2	High. Suitable habitat (developed areas, other open areas) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025).
Juniper titmouse	*Baeolophus ridgwayi*		3	High. Suitable nesting habitat (juniper woodland) present along with foraging habitat. Multiple occurrences within 5 miles (eBird 2025; iNaturalist 2025).
Killdeer	*Charadrius vociferus*		2	High. Suitable nesting habitat (open areas) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025).
Lincoln's sparrow	*Melospiza lincolnii*		2	High. Near isolated breeding range and suitable nesting habitat (riparian woodland) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025).

Species		Protection Status[1]		Potential to Occur in Project Area (Justification)
Common Name	Scientific Name	ESA[2, 3]	Arizona SGCN[3]	
Loggerhead shrike	*Lanius ludovicianus*		2	High. Suitable nesting habitat (open habitat with short vegetation) present along with foraging habitat. Multiple occurrences within 5 miles, including two eBird sightings within the Project area (AGFD 2025a; eBird 2025; iNaturalist 2025).
MacGillivray's warbler	*Geothlypis tolmiei*		2	High (migration). Outside of breeding range. Suitable migrating habitat (dense vegetation, riparian woodland) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025).
Pacific wren	*Troglodytes pacificus*		2	Moderate. Suitable habitat (riparian woodland) present along with foraging habitat. One occurrence within 5 miles, but auditory detection only (eBird 2025).
Pinyon jay	*Gymnorhinus cyanocephalus*		2	Moderate. Limited suitable nesting habitat (pinyon-juniper woodland, may also use sagebrush, scrub oak, and chaparral) present along with foraging habitat. Two occurrences within 5 miles (eBird 2025).
Prairie falcon	*Falco mexicanus*		2	Moderate. Suitable nesting habitat (desert grassland, chaparral, and creosote bush-bur sage) present along with foraging habitat, although cliffs and bluffs absent. Multiple occurrences within 5 miles, including two within the Project area (eBird 2025).
Pyrrhuloxia	*Cardinalis sinuatus*		2	High. Suitable nesting habitat (riparian woodland) present along with foraging habitat. Occurrence within 5 miles (AGFD 2025a).
Sagebrush sparrow	*Artemisiospiza nevadensis*		3	High (wintering). Outside of breeding range. Suitable wintering habitat (scrub) present along with foraging habitat. Observed during reconnaissance surveys. Additional observations within the Project area and elsewhere within 5 miles (eBird 2025).
Savannah sparrow	*Passerculus sandwichensis*		2	High (wintering).

Species		Protection Status[1]		Potential to Occur in Project Area (Justification)
Common Name	Scientific Name	ESA[2, 3]	Arizona SGCN[3]	
				Outside of breeding range. Suitable wintering habitat (open areas) present along with foraging habitat. Observed during reconnaissance surveys. Additional observations within the Project area and elsewhere within 5 miles (eBird 2025).
Southwestern willow flycatcher	*Empidonax traillii extimus*	E	1	High. Suitable nesting habitat (riparian woodland) present along with foraging habitat. Documented along the Agua Fria River (Williams pers. comm.) and elsewhere within 5 miles (AGFD 2025a).
Sprague's pipit	*Anthus spragueii*		2	Moderate (wintering). Outside of breeding range. Suitable wintering habitat (grassland) present along with foraging habitat. No eBird or iNaturalist occurrences within 5 miles.
Swainson's hawk	*Buteo swainsoni*		2	Moderate. Scattered trees in grassland and shrubland suitable nesting habitat absent, but artificial structures (transmission towers) present along with foraging habitat. Multiple occurrences present within 5 miles (AGFD 2025a; iNaturalist 2025) including two occurrences within the Project area (eBird 2025).
Swainson's thrush	*Catharus ustulatus*		2	Moderate (migration). Outside of breeding range. Suitable migration habitat (habitats with dense undergrowth including chaparral, desert, riparian) present along with foraging habitat. No eBird or iNaturalist occurrences within 5 miles.
Townsend's solitaire	*Myadestes townsendi*		2	High (migration). Outside of breeding range. Suitable migration habitat (riparian woodland) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025), including one within the Project area (eBird 2025).
Verdin	*Auriparus flaviceps*		2	High. Suitable nesting habitat (scrub, riparian woodland) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025; iNaturalist 2025), including one within the Project area (eBird 2025).

Species		Protection Status[1]		Potential to Occur in Project Area (Justification)
Common Name	Scientific Name	ESA[2, 3]	Arizona SGCN[3]	
Vesper sparrow	*Pooecetes gramineus*		2	High (wintering). Outside of breeding range. Suitable wintering habitat (shrublands, grasslands, scrub) present along with foraging habitat. Observed during reconnaissance surveys. Multiple occurrences within 5 miles, including two within the Project area (eBird 2025).
Western burrowing owl	*Athene cunicularia hypugaea*	SC	2	High. Suitable breeding habitat (open, treeless areas within grassland, steppe, and desert and small mammal burrows) present along with foraging habitat. Observed during reconnaissance surveys. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025), including two within the Project area (eBird 2025).
Western screech-owl	*Megascops kennicottii*		2	High. Suitable nesting habitat (mesquite scrub, riparian woodland) present along with foraging habitat. Multiple occurrences within 5 miles (eBird 2025; iNaturalist 2025).
Western wood-pewee	*Contopus sordidulus*		2	High. Suitable nesting habitat (riparian woodland) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025; iNaturalist 2025).
Woodhouse's scrub-jay	*Aphelocoma woodhouseii*		2	High. Suitable breeding habitat (woodland and scrub) present along with foraging habitat. Multiple occurrences within 5 miles (AGFD 2025a; eBird 2025; iNaturalist 2025), including two within the Project area (eBird 2025).
Yellow-billed Cuckoo (Western DPS)	*Coccyzus americanus*	T	1	High. Suitable nesting habitat (Agua Fria River and Ash Creek provide suitable dense riparian habitat) present along with and foraging habitat. Species has been documented on Ash Creek during a local project's protocol surveys (Western Biology, LLC 2023). Multiple additional occurrences within 5 miles (AGFD 2025a; eBird 2025; iNaturalist 2025).
Mammals				
American pronghorn	*Antilocapra americana americana*		2	High. Suitable habitat (grassland, scrub, wash) present. One occurrence within 5 miles (iNaturalist 2025).

Species		Protection Status[1]		Potential to Occur in Project Area (Justification)
Common Name	Scientific Name	ESA[2, 3]	Arizona SGCN[3]	
Bailey's pocket mouse	*Chaetodipus baileyi*		2	Moderate. Suitable habitat (desert scrub) present. No iNaturalist occurrences within 5 miles.
Desert red bat	*Lasiurus frantzii*		2	Moderate. Limited/marginal potential suitable roost habitat (dense vegetation in desert scrublands) present, although species could forage within the Project area. More suitable habitat (tree crevices or dense vegetation in desert scrublands, thorn forests, or pine-oak forests) absent. No iNaturalist occurrences within 5 miles.
Mexican gray wolf	*Canis lupus baileyi*	E, XN	1	Moderate. Suitable habitat (grasslands, scrublands) present. No iNaturalist occurrences within 5 miles.
Western yellow bat	*Lasiurus xanthinus*		2	Moderate. Suitable roost habitat (riparian woodland) and foraging habitat present. No iNaturalist occurrences within 5 miles.

[1] E=Endangered, T=Threatened, PE=Proposed Endangered, PT=Proposed Threatened, C=Candidate, PS=Partial Status (E/T in part of range), SC=Species of Concern, BCC=Bird of Conservation Concern, BGEPA=Bald and Golden Eagle Protection Act, WSC=Wildlife Species of Concern, XN=Experimental non-essential Population

[2] USFWS 2025

[3] AGFD 2025a, 2025b

Additional abbreviations: ESA=Endangered Species Act, SGCN=Species of Greatest Conservation Need

Cultural Resources Management Plan for the Agua Fria Solar and Storage Project, Yavapai County, Arizona

Prepared for: Agua Fria, LLC

Prepared by: WestLand Resources, Inc., d/b/a WestLand Engineering & Environmental Services in Arizona

Date: December 4, 2025

Project Number: 13113; 2025-178

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CONFIDENTIAL APPENDIX A (removed and submitted separately for confidentiality)
- Record of Cultural Resources Consultation for the Project Gen-tie Line
- Figure 1. Agua Fria Solar Preliminary Study: Preliminary Potential Cultural Site Locations

EXECUTIVE SUMMARY

Per Section 608 of the Yavapai County Zoning Ordinance, this Cultural Resources Management Plan (CRMP) has been prepared in compliance with solar facility use permit application requirements. The CRMP is based on a preliminary Class I cultural resources study, and has been prepared by a qualified professional (credentials listed below). The purpose of the CRMP is to protect and mitigate impacts to any known or discovered archaeological, cultural, or historic sites or artifacts found in the Project Development Area.

The Project Development Area is located on Arizona State Trust Land managed by the Arizona State Land Department (ASLD; ASLD Land), which is mandated by legislation to comply with provisions of the Arizona State Historic Preservation Act (A.R.S. 41-861, et seq.) and the Arizona Antiquities Act (A.R.S. 15-1631 and 41-841, et seq.). ASLD is responsible for managing cultural resources on ASLD land. The ASLD process complies with state laws for the protection of cultural resources and is conducted in consultation with the Arizona State Historic Preservation Office (SHPO), Tribes, and the Arizona State Museum (ASM). The Applicant is required to follow the established ASLD process to identify, evaluate, and avoid, minimize or mitigate potential adverse impacts to significant sites. ASLD determines site significance, and appropriate avoidance, minimization or mitigation measures to avoid potential adverse impacts to significant sites on ASLD land.

The Applicant has sponsored a Class III cultural resources survey to identify potentially significant sites for the Project Development Area on ASLD land, to be completed by WestLand Resources, Inc. A report will be drafted and submitted to the ASLD for review, who, in consultation with the SHPO, Tribes, and ASM, will make determinations of site significance and potential for adverse impacts. Once ASLD determines site significance and potential adverse impacts, they will approve a plan to avoid, minimize, and mitigate any potential adverse impacts in consultation with the SHPO, Tribes, and ASM. Implementation of the plan and all work associated with the plan will be approved by the ASLD prior to Project construction. The Applicant will have a final approved Class III survey, plan, and determination that any potential adverse impacts have been avoided, minimized and/or mitigated prior to construction.

The U.S. Bureau of Reclamation (Reclamation) has made a determination of No Adverse Effect to Historic Properties for the interconnection of the Project's generation tie (gen-tie) component (a federal undertaking subject to Section 106 of the National Historic Preservation Act). Reclamation conducted consultation and received concurrence from the SHPO on July 8, 2025. Consultation letters were mailed to 17 Tribes that claim ancestral affiliation with the Project Area. Respondent Tribes did not identify any comments, questions, or concerns with the federal undertaking. Consultation was completed by August 1, 2025, and no further archaeological work will be required for the federal undertaking gen-tie component.

The Arizona Corporation Commission (ACC) also conducted cultural resources consultation on the Project's gen-tie component pursuant to Arizona State Historic Preservation Act (A.R.S. §41-861, et seq.) for the Project's Certificate of Environmental Compatibility (CEC) which was granted to the Applicant on March 24, 2025. SHPO, and federally recognized Tribes that claim ancestral affiliation with the Project Area were consulted as part of the CEC process. The Salt River Pima-Maricopa Indian Community and the White Mountain Apache Tribe concurred with a No Adverse Effect to Historic Properties for the gen-tie portion of the project. No other responses were received from Tribes. A record of CEC and Reclamation cultural resources consultation for the Project gen-tie line is provided in **Confidential Appendix A**.

This CRMP also provides protocols in case of the inadvertent discovery of cultural materials or human remains during project activities outside of the known archaeological sites. The discovery plan provides clear directives on protection and notification protocols for construction personal who may inadvertently uncover buried cultural materials.

Qualified Professional Archaeologist Credentials

Becky Caroli, M.S. - Arizona Antiquities Act-permitted Project Director; Qualified Archaeologist under Secretary of the Interior and Arizona State requirements

Jocelyn Bernatchez, PhD - Arizona Antiquities Act-permitted Principal Investigator; Qualified Archaeologist under Secretary of the Interior and Arizona State requirements

WestLand Resources, Inc. - Arizona Antiquities Act Blanket Permit 2025-072bl

INTRODUCTION AND PROJECT BACKGROUND

Project Location

The Agua Fria Solar and Storage Project (Project) is located in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project vicinity including several existing high-voltage transmission lines, the existing Dugas Substation, as well as Interstate 17 (I-17), which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott.

Project Components

The Project is an up to 450-megawatt nameplate capacity solar photovoltaic (PV) power plant. The Project components consist of a solar field of PV modules (solar field), battery energy storage system (BESS), project substation, operations and maintenance building, and ancillary facilities. The Project would be located on Arizona State Trust Land managed by the Arizona State Land Department (ASLD; ASLD Land) and controlled by Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC, in Arizona (Applicant) via a solar lease. The Applicant is a subsidiary of Longroad Development Company, LLC (Longroad).

In addition, there will be a generation tie (gen-tie) line associated with the Project to connect the power generated from the solar facilities to the grid at Dugas Substation. The gen-tie would be approximately 1.8 miles in length and sited within a corridor located north of I-17, south and east of the existing Dugas Substation, and directly east of the existing 500 kilovolt (kV) transmission line corridor.

Project Development Area

The Project Area is defined as the 4,215-acre ASLD lease area (Commercial Lease No. 03120951) controlled by the Applicant. The Project Area is located within Section 01 of Township 11 North, Range 02 East, Section 06 of Township 11 North, Range 03 East, Sections 24–26, and 35–36 of Township 12 North, Range 02 East, and Sections 19–20, and 29–31 of Township 12 North, Range 03 East, Gila and Salt River Baseline and Meridian (U.S. Geological Survey [USGS] Estler Peak, Arizona; Cordes Junction, Arizona; and Mayer, Arizona 7.5-minute quadrangles).

The Project Development Area is defined as the construction footprint for the proposed Agua Fria solar field, BESS, operations and maintenance building, project substation, and gen-tie line, which totals approximately 1,930 acres of ASLD Land within the Project on the south and north sides of I-17.

Access to the Project will be via existing roads and private easements. Primary access is anticipated to be provided via I-17 and Exit 268 onto Orme Road then to Old Sycamore Road. The southern portion of the site will be accessed via the existing Dugas Road and a private access easement.

Regulatory Context for Cultural Resources

Federal

The U.S. Bureau of Reclamation (Reclamation), a federal agency, is required to provide approval of the interconnection of the Project's gen-tie component to the Navajo Southern Transmission System at Dugas Substation. As a result, Reclamations' interconnection approval for the gen-tie component represents a federal undertaking and is thus subject to Section 106 of the National Historic Preservation Act (NHPA). No Arizona or National Registers of Historic Places (A/NRHP)-eligible historic properties were identified within the Area of Potential Effect (APE) of the federal undertaking. Consequently, Reclamation has made a determination of No Adverse Effect to Historic Properties for the federal undertaking, which received concurrence from the Arizona State Historic Preservation Office (SHPO) on July 8, 2025. Consultation letters were mailed to stakeholders and to the 17 Tribes that claim ancestral affiliation with the Project Area. Respondent Tribes and stakeholders have not identified any comments, questions, or concerns with the federal undertaking, and no further archaeological work will be required.

State

The Project's gen-tie component also requires the issuance of a Certificate of Environmental Compatibility (CEC) by the Arizona Corporation Commission (ACC), which is considered a state action pursuant to Arizona State Historic Preservation Act (A.R.S. §41-861, et seq.) and subject to review by the Arizona SHPO. As a state agency, the ACC remains the responsible entity for compliance with the state act for the CEC gen-tie component. SHPO review was completed on March 12, 2025. The ACC granted a CEC to the Applicant on March 24, 2025, under the condition of unanticipated discovery requirements for archaeological, paleontological, or historical sites. Fifteen federally recognized Tribes that claim ancestral affiliation with the Project Area were also consulted as part of the CEC process, and no tribal comments, questions, or concerns were identified.

The Project would be located on land administered by the ASLD, which is mandated by legislation to comply with provisions of the Arizona State Historic Preservation Act (A.R.S. 41-861, *et seq.*) and the Arizona Antiquities Act (A.R.S. 15-1631 and 41-841, *et seq.*). The Arizona State Historic Preservation Act and Arizona Antiquities Act require the ASLD to evaluate how the proposed Project could affect historic properties. As outlined in National Park Service (NPS) Bulletin 38, historic properties may include cultural districts, sites, buildings, structures, objects, or landscape features (NPS 2022; Parker and King 1990:9) that are listed or are eligible for listing in the NRHP if they meet the criteria for significance specified in the

National Register's Criteria for Evaluation (36 CFR §60.4). The Arizona SHPO applies the same terms to cultural resources eligible or listed in the ARHP (SHPO 2016).

Prior to Project implementation, the ASLD requires the identification of any historic properties that could be impacted by the Project. This may be achieved through background research (Class I inventory) if the entire Project has been previously inventoried to current agency standards or through new field survey (Class II and Class III survey). The ASLD will evaluate resources that have the potential to be impacted by the Project in consultation with the SHPO and consulting parties and make determinations for A/NRHP eligibility. Permits for archaeological excavation and the recovery of unmarked human burials are administered by the Arizona State Museum (ASM).

The ASM and Arizona SHPO define a Class I cultural resources inventory as background research consisting of a literature review and site files check that is sufficient to identify past survey coverage and generate expectations about the types and frequencies of cultural resources that might be expected during field survey (SHPO 2016). This research should include a one-mile buffer zone surrounding the study area for block parcels (a half-mile in highly urbanized areas), and a half-mile-buffer on either side of a linear project corridor (measured from the center line). The Class I inventory helps determine whether further, more intensive surveys (like Class II or Class III) are needed.

A Class II cultural resources survey is defined as a statistically based sample survey designed to assess the potential distribution and density of cultural sites within a defined area. It involves background research and a field survey that uses a sampling strategy agreed upon by the lead agency and the SHPO prior to fieldwork (SHPO 2016). This type of survey helps characterize the types of sites present, develop predictive models, and answer research questions about the area's cultural landscape.

A Class III cultural resources survey, also known as an intensive survey, is a systematic and thorough field survey conducted by professionals to current ASM (or lead agency) standards (SHPO 2016). The intent of this intensive survey is to locate and record all historic properties within a defined area. Per the ASM's new policy regarding the use of previous archaeological survey data (approved March 11, 2024), areas subject to survey on city, county, or state lands that were last surveyed more than 10 years ago must be resurveyed.

All historic properties identified during background research and field survey are evaluated for their eligibility to be listed in the A/NRHP. Potential Project impacts will be assessed for all National and State Register-eligible properties. If the ASLD, in consultation with the Arizona SHPO and consulting parties, determines the Project may have an adverse effect on eligible properties, a Mitigation Plan that outlines management recommendations to mitigate adverse effects will be developed.

Pursuant to A.R.S. §41-844, if any cultural resources or human remains are inadvertently discovered during Project ground-disturbing activities, all activity shall cease in the area of the discovery and the Director of the ASM shall be immediately notified. The cessation of all ground-disturbing activities in the immediate vicinity of the discovery shall continue until a qualified archaeologist assesses the significance of the remains; work in and around the area shall not resume until so directed by the ASM.

Pursuant to A.R.S. §41-841 and A.R.S. §41-842, if any paleontological resources are inadvertently discovered during Project ground-disturbing activities, the excavation of vertebrate paleontological sites, including fossilized footprints and paleontological features will be restricted to qualified institutions, organizations, and corporations permitted by the ASM to conduct these activities for scientific, research, or land use purposes.

Tribal Consultation for State Agencies

The Arizona SHPO, in coordination with the Salt River Pima-Maricopa Indian Community (SRP-MIC) and other Tribes, developed the Government-to-Government Toolkit (G2G Toolkit) to facilitate the consultation process for and among Tribes and state and federal agencies meeting the requirements of the NHPA or State Preservation Act, as well as other pertinent federal and state statutes (G2G Toolkit 2025).

For projects involving state agencies, A.R.S. §41-2051 (https://gotr.azgovernor.gov/gotr/statutes) defines Arizona's Tribal Consultation Policy, and in part, this law requires that each agency shall:

- Develop and implement tribal consultation policies to guide work and interaction with the tribal nations of the state.
- To the extent practicable and permitted by law, seek input from appropriate elected or appointed tribal officials before undertaking any action or policy that will, or is reasonably believed to, have the potential to affect a tribal community or its members.
- To the fullest extent possible and to the best of the agency's ability, integrate the input generated from tribal consultation into the agency's decision-making processes to achieve mutually acceptable solutions.
- Designate staff to tribal liaison position.
- Annually review tribal consultation policies and submit report to Governor's Office on Tribal Relations.

The Arizona SHPO further recommends that state agencies consult with Tribes on all projects/plans that have the potential to affect historic properties, including traditional cultural places (G2G Toolkit 2025). State agencies are therefore obligated to consult with Native American Tribes during the regulatory process.

Local

Effective December 4, 2024, Yavapai County has established new local planning and zoning ordinances for the permitting of solar facilities (Section 608, Yavapai County Zoning Ordinance), including the following requirements for Pre-application and Application submittals related to cultural resources.

Sec. 608, D.1.c.2(c) states:

> *Preliminary study (Class I and Class II cultural resource surveys) of archaeological, cultural, and historic sites, which shall include identification of these resources as well as an evaluation of any potential negative impacts to them. This study must be conducted by a qualified professional and include an on-site survey of the site. In addition, a summary of communication and collaboration efforts, such as a pre-cultural on-site survey with any potentially affected Native American tribes to evaluate cultural and historic resources or sites, heritage areas, or cultural landscapes must be submitted with the application. If any areas or objects of archeological, paleontological, or historic significance are discovered on the site during the course of the Class I and Class II surveys, or during the construction of an approved Solar Facility, the applicant shall be required to have a qualified professional conduct a Class III survey encompassing the discovery area, and any other locations within the Project Area as recommended by the survey professionals, the State Historic Preservation Office (SHPO), or by any qualified third party professionals retained by the County.*

Sec. 608, D.2.d. states:

> *Cultural Resources Management Plan: This plan shall be based on the preliminary study of archaeological, cultural, and historic resources and must be prepared by a qualified professional to protect and mitigate impacts to any known or discovered archaeological, cultural, or historic sites or artifacts found in the Project Area. Instructions notifying operators how to proceed in the event such cultural resources are encountered during construction or grading must be included on construction documents.*

These County requirements are met or exceeded by the provisions of the Arizona State Historic Preservation Act (A.R.S. 41-861, *et seq.*) and the Arizona Antiquities Act (A.R.S. 15-1631 and 41-841, *et seq.*) for the

Project on ASLD Land. This following cultural resources management plan (CRMP) for the Project is in full compliance with all federal, state, and local requirements.

CULTURAL RESOURCES MANAGEMENT PLAN

In fulfilment of local and state regulatory requirements, the Applicant has contracted WestLand Resources, Inc. (WestLand) to prepare a CRMP for the proposed Project. The CRMP outlines compliance with the robust processes that local, and state agencies manage to ensure avoidance, minimization, and mitigation of any potential adverse effects to cultural resources, including Section 608 of the Yavapai County Zoning Ordinance.

Preliminary Study Results

In compliance with federal, state and local requirements, the Applicant sponsored a preliminary Class I cultural resources assessment to identify archaeological, cultural, and historic sites in a 1 mile buffer study area, to identify areas that have been previously surveyed for cultural resources to current state standards, and to determine any deficits in survey coverage where new or updated inventory may be necessary (WestLand 2025).

[redacted]

Class II inventories are statistically based sample surveys designed to aid in characterizing the probable density, diversity, and distribution of cultural and historic properties in an area. These types of inventories are used to develop and test predictive models and answer research questions. While less intensive than Class III inventories, survey aims, methods, and intensity within sample units are the same as those applied to Class III surveys. Based on the Class I inventory, most of the Project Area has been previously subject to Class III survey under current agency standards, and a Class III inventory will be completed for any unsurveyed portions of the Project Development Area per this CRMP. As such, a Class II survey is redundant and unnecessary for the evaluation of historic properties and assessments of potential Project impacts.

Class III Survey

Most of the Project Development Area has been previously subject to Class III survey under current agency standards. The Applicant has sponsored a Class III cultural resources inventory of the remaining unsurveyed areas, to be completed by WestLand. Pending the results of these field investigations, a cultural resources inventory report will be drafted, documenting all identified sites and providing recommendations of eligibility for the A/NRHP. The field crew for this survey includes tribal members from the Hopi Tribe and Tohono O'odham Nation, whose perspectives on the potential for tribally significant cultural and environmental resources within the survey area will be incorporated into the final cultural resources inventory report. This report will be submitted to the ASLD for review, who, in consultation with the Arizona SHPO, Tribes, the ASM, and other consulting parties as deemed necessary, will make determinations of site eligibility and Project effect.

Avoidance, Minimization, and Mitigation Plan

Any potential adverse impacts to historic properties must be avoided, minimized, or mitigated through the development, approval, and implementation of a mitigation plan. Once ASLD determinations have been made, a plan will be developed and implemented to avoid, minimize, and mitigate any potential adverse impacts that the Project will have on the sites that are determined eligible for listing in the A/NRHP. This plan will be prepared in accordance with ASLD, SHPO, and ASM standards and will present the archaeological background, research design, and data recovery methods for resolving any impacts to A/NRHP-eligible sites. The ASLD will approve the plan in consultation with the SHPO, Tribes, the ASM, and other consulting parties as deemed necessary. Work associated with the plan must be approved by the ASLD prior to Project construction. The plan will also include protocols for discovery of any unanticipated cultural resources or human remains during construction and operations.

A preliminary research design, methods, and discovery protocols that may be used in the final data recovery plan are provided in the following sections.

Preliminary Research Design

The archaeological sites previously identified in the preliminary study results represent both Native American and Historic period American settlement and activities spanning potentially more than 8,000 years and provide an opportunity to explore how Native American and historic-era Euroamerican peoples utilized, adapted to, and manipulated the environment using their respective technologies and

strategies. Based on the preliminary study results, three primary site types are expected: (1) Prehistoric habitation sites; (2) Prehistoric resource procurement and processing sites; and (3) Prehistoric rock art sites. The following preliminary research themes are expected for a research design with these site types.

Research Theme 1 – Chronology

The question of chronology is always of interest to archaeologists. To address nearly any other research question, it is crucial to know as accurately as possible to what period the archaeological remains being studied date. One goal of a potential mitigation plan is to aid in the refining of a general chronology for the study area.

- What was the period of occupation or use of sites in the study area?
- Projectile point types dating to the Archaic period were found in the study area. Several of the Native American sites in the study area lacked ceramics altogether, supporting an assumption that the sites may date to the Archaic period. Is there further evidence to support this assumption? Does this absence of (ceramic) evidence constitute evidence of absence (during the Formative period)?
- Where multiple rock features (particularly thermal pits) are present at a site, are they contemporaneous or do they represent repeated use of the site over time?
- Is there a seasonality to the resource processing sites? Is there evidence of use of sites or features during any one season? Is it possible to determine during what season the site was in use?

The data requirements to answer these research questions include the discovery of temporally diagnostic artifacts, annual plant remains from macrobotanical samples that can be subjected to radiocarbon dating, and archaeomagnetic samples from thermal features. In addition, the superpositioning of features can be used to determine their relative dates.

Research Theme 2 – Settlement and Regional Movement

One assumption is that resource procurement frequently occurred at locations within a short distance of permanent settlements; however, campsites represent areas located some distance from the permanent settlements. Further, previous researchers have assumed that all the Native American sites in the study area represent short-term or seasonal occupations. Thus far, previous researchers have identified few, if any, evidence of trade or interaction outside of the local area at the Native American sites in the study area.

- Do the Native American sites in the study area represent limited-activity locations where small logistical groups gathered and prepared resources to take back to the larger habitation sites or were they residential locations where larger communities would visit on a seasonal basis to harvest foods as they became available?
- If the Native American sites in the study area represent seasonal or short-term occupations, is there evidence of where the permanent settlements might be? Are there trade goods, raw materials, or other lines of evidence to suggest where the site occupants lived during the rest of the year?
- Can cultural affiliation of the site inhabitants be determined from the artifacts or features found at the sites in the study area?
- Is there evidence of outside influence or interaction, such as Hohokam trade wares?
- If chronological data are available to indicate that a site was reused or revisited through time, how do the uses of the site differ with each occupation? For example, resource processing during one period and habitation during another.

Data requirements for this research topic include a robust collection of artifacts from surface collections and excavations, the discovery of trade goods, culturally diagnostic artifacts, or non-local materials or manuports. The X-ray fluorescence of obsidian artifacts to determine their origin, the discovery of marine shell or other non-local items would provide some information as to where the site occupants had been or with whom they did commerce.

Research Theme 3 – Rock Art

Rock art sites may have considerable research potential to address questions of social functions and symbolism, ritual, ethnicity, land use, and chronology in the Archaic, Formative, and possibly Historic periods. Landscape context and portrayal of game animals can be used to determine whether the rock art is associated with hunting strategies, in the form of hunting ritual, and/or to educate young hunters. Domestic archaeology and evidence of the daily routines of hunter-forager life occurring in association or close proximity to rock art sites could indicate that it was used in community-wide social practices. Additionally, qualitative and quantitative analysis of themes and styles of rock art imagery could address the expression of prehistoric ethnicities.

- What themes are represented in the rock art?
- Are associated diagnostic features or artifacts present to assign a cultural and/or temporal affiliation?
- Is there stylistic evidence of outside influence or interaction?

- What do the aspect and orientation of the rock art indicate? Are there any traditional cultural properties or place names in the region?
- What is the physiographic context of the rock art (e.g., along waterways, associated with natural springs, etc.)

Scientific (or direct) dating techniques usually require intrusive extraction methods, even if only microscopic quantities are required for analysis. Therefore, their application usually requires consultation with Native American Tribes. These techniques are expensive and only pinpoint maximum and minimum dates for the rock art design tested, rather than the assemblage as a whole. In contrast, relative dating techniques are non-intrusive and relatively cheap to perform. Data requirements include a visual inspection of repatination, documentation of themes, and collection of chronometric data from associated artifacts and features.

Preliminary Data Recovery Methods

Data recovery at each of the sites may consist of four main tasks: 1) Site assessment and mapping; 2) surface artifact collections; 3) test pit excavations; and 4) feature excavations.

During site assessment and mapping, permitted archaeologists would reassess each site in comparison with previous recordings and relocate features and diagnostic artifacts, note changes to sites and features, and ensure that site boundaries are accurate. During the assessment, up-to-date maps of each site should be prepared using a handheld Global Positioning System unit with submeter post-processing accuracy. All features, temporally and functionally diagnostic artifacts (tools), site boundaries, sources of disturbance, and landscape reference points (roads, fences, survey monuments, etc.) should be plotted and mapped, as well as the locations of all collection and excavation units, elevation datum stakes, and mapping nails.

If rock art panels are identified, they should be treated as features, and each panel should be assigned a unique identifying field number. A permitted archaeologist should prepare a Feature Summary Form for each panel that includes the type (i.e., bedrock, boulder), angle of the surface on which the panel is located, the cardinal orientation of the panel, the material type of the parent stone, and the extent of patination/repatination of the parent stone. Detailed measurements of all elements should be recorded, as well as the nature and extent of any damage or vandalism to the panel. Each panel should be photographed. Faint petroglyph elements visible to the naked eye may not be apparent on film, and so detailed scale drawings should be made of each panel.

Post-field analysis of the rock art panels may include the digital enhancement of photographs with Adobe Photoshop™, ImageJ, DStretch, or similar photography software, although the original unaltered field

photographs should be retained for curation. Field-scale drawings or photographs may be digitized and redrawn to incorporate all elements from the original drawings, photographs, and digitally enhanced photographs.

Surface artifact collections should be conducted at the Native American and Historic period Euroamerican sites in a similar fashion. All temporally and functionally diagnostic artifacts and tools within the area should be point-located and collected at each site; those falling outside of the Project Area should be point-located and documented in the field and left in place at each site. All other artifacts should be collected at each site; to maintain spatial control, the permitted archaeologist should establish a grid of square collection units (20-by-20 m in size) across each site. Artifacts found within discrete feature boundaries should be collected separately, under collection units assigned to each feature. The field director may opt to establish sample observation units on ASLD Land outside of the study area at each site if the collected artifact sample from the study area seems too low to provide adequate data to address the research questions presented.

A series of randomly placed 1-by-1 m test pits should be excavated at each site. Additional excavation units may be placed at the discretion of the field director. Where previously recorded features or features newly discovered during the site assessment intersect the Project Area, sample units should be excavated. Where subsurface cultural deposits or discrete feature edges are discernable, additional units may be placed within features. No mechanical equipment (backhoes, excavators, augers) is proposed for use during the data recovery excavations; all excavations may be done by hand.

The data and information gathered during these efforts should be evaluated to determine if the chronological and functional characterizations made during the survey are supported by the excavation data. Sites may be reclassified into different type and function categories depending on the findings.

Field Methods

Permits

Prior to fieldwork, all the necessary permits and agreements, including a Project-specific Arizona Antiquities Act permit and a Burial Discovery Agreement (BDA) must be obtained by a professional archaeologist from the ASM. A repository agreement will also be issued by the ASM. The designated archaeologist must secure the permit and agreements prior to the start of data recovery fieldwork. A prepared Data Recovery Plan will be reviewed by the ASLD and the SHPO, as well as the ASM, as part of the permit-application process.

Utility Marking

Prior to the commencement of fieldwork, Arizona Blue Stake must be notified, and all utilities marked for avoidance in accordance with A.R.S. Chapter 2, Article 6.3, Sections 40 360.21 through 40 360.32. The field director should examine each site area to make sure that Blue Stake has marked the utilities and that the markings remain clear and visible for the duration of the fieldwork. Each crew member should be notified of the locations of underground utilities by their supervisors at the commencement of excavation. Because data recovery efforts will result in less than 1 acre of disturbance, a Stormwater Pollution Prevention Plan will not be necessary.

Provenience and Data Control

Archaeological explorations must be treated as serious scientifically valuable undertakings. At all times, control must be maintained over the excavation procedures to ensure the validity of the findings. To this end, integrated provenience, inventory, and quality assurance systems should be used throughout the course of a Project. All excavation and study units should be considered unique recovery locations and assigned unique provenience numbers. The number assigned to a recovery provenience must be transcribed on all notes, photographs, maps, artifacts, specimens, and any other record or item recovered from that provenience to ensure that all the information can be efficiently and accurately linked back to the recovery location. This is required to make useful and meaningful analyses of the spatial associations of the objects and features and the data and recorded characteristics of these objects and features that derive from subsequent analytical study. All field bags and containers of artifacts, specimens, sediments, and samples removed from the provenience must be assigned inventory numbers. Inventory numbers are unique to the individual bags for the lifetime of that bag. These inventory numbers are a way of tracking the location and status of all bags and materials through analysis and curation. Throughout the provenience and inventory process, an integrated quality assurance system should check and double-check the provenience and inventory information. These systems ensure that the results are accurate and that the inventory is complete.

Spatial Control of the Archaeological Record

The designated permitted archaeologist should use Geographic Information System programs to maintain maps of the sites, features, excavation units, and points of interest identified during the Project. Horizontal coordinates should be measured relative to the Universal Transverse Mercator grid. Excavated features should be hand-mapped. Each map should have at least two control points. The horizontal and vertical positions of these control points should be mapped using a handheld GPS unit with submeter post-

processing accuracy. The hand-drawn maps should be digitized and integrated into the overall site maps. The resultant computer-generated maps should be field-checked for completeness and accuracy and later professionally produced for use in the final report.

Surface Collections

The designated permitted archaeologist should conduct collections of all artifacts found within the site boundaries intersected by the Project Area, regardless of size, as detailed in the data recovery plan prepared in consultation with the ASLD. The artifacts from the surface collections should be analyzed by a qualified specialist, as well as any artifacts recovered from the excavations, and summaries of the findings for the data recovery results report should be prepared for submission to the ASLD and SHPO.

Feature Recording

If features are identified during surface collection or excavation of the test pit units, each feature should be assigned a unique identifying field feature number from a master log maintained by the field director. Strict control of the numbers and types of features discovered is vital to ensure that sampling and excavation strategies are correctly executed. The feature number should be written on a semi-permanent tag that will be anchored to the feature. The boundary of each feature should be defined and marked and its location mapped. Basic information should be recorded for each feature at the point of discovery. This information should be recorded in a master feature log and include feature type, estimated age, dimensions, shape, orientation, associated artifacts, evidence of heating, fill characteristics, and association with the alluvial stratum from which it originates. The purpose of this log is to keep a record of every cultural feature encountered.

Features should be documented using Provenience Record and Feature Summary forms. The Provenience Record form may be a standardized form that is used to document all excavations. A Feature Summary form is designed to synthesize the excavation’s findings and provide a final summation.

Archaeologists should use these forms to document their observations and to infer the nature of each excavated feature, from its creation, through its use-life, to its abandonment and post-occupational re use, preservation, and deterioration. Detailed plan view maps and profiles or cross-sections should be drawn for each feature excavated.

Additional excavation units may be necessary to fully expose features in plan view prior to feature excavation; such excavation shall be at the discretion of the field director. The locations of all excavation units and any discovered features should be mapped and point-located using GPS technology.

Extramural Feature Excavations

Types of extramural features may include thermal pits, non-thermal pits, artifact concentrations, and masonry field houses. After the initial discovery and documentation of an extramural feature (see **Feature Recording** above), the excavator should photograph the feature. Excavation would then commence with the selection of an appropriate excavation method, such as bisecting of the feature into two roughly equal sections, establishing 1-by-1 m or 1-by-2 m test pit units, or other method. A portion of the feature should be excavated in stratigraphic or natural levels, if possible. All feature fill should be screened through ¼-inch mesh, and all artifacts and specimens should be collected. Four-liter sediment samples should be collected from the profile walls of the unexcavated halves of extramural thermal features that contain abundant visible charcoal, ash, or other deposits appropriate for macrobotanical analysis. For very small features where the feature fill may consist of four liters or less, the entirety of the fill may be collected as a sample.

Smaller sediment samples should be collected, where possible, from undisturbed contexts within the features for palynological or phytolith analysis. The contexts preferentially targeted for palynological samples will be the lowermost fill and the bottom surfaces of the features (see **Paleobotanical and Palynological Analysis** below). Palynological samples should be collected from the profile walls of the unexcavated halves of pit features to ensure that the samples are derived from uncontaminated contexts at the interface between feature fill and substrate. Feature excavations should be thoroughly documented on standardized recording forms. Scaled plan view and profile or cross-section drawings should be completed for all excavated features. Features should be photographed at the completion of the excavation. The remaining portion of the feature should be excavated at the discretion of the field director, based on an evaluation of the feature's potential information return. Unusual or rare deposits such as caches should be completely excavated. Extramural features that are not formally excavated should be probed or excavated without screening or documentation to ensure that no human remains are present.

Mortuary Features

A good faith effort must be made to locate and identify all human remains and to recover the human remains in accordance with the terms of the BDA to be obtained from the ASM. At all times, the permitted archaeologist and their representatives must treat human remains and funerary objects with care, respect, and dignity. All human remains and funerary objects should be treated according to the stipulations, requirements, and limitations set out in the BDA. Upon disturbance, human remains and funerary objects should be secured and protected in place until recovery can commence. Protection should include measures to ensure that no other damage, vandalism, or desecration occurs. Protection should also include measures to prevent unauthorized viewing of the remains, which may include covering the remains with

unbleached cotton muslin and dirt and barricading the area around the remains. The permitted archaeologist and their representatives should avoid unnecessary disturbance, handling, or escort of human remains and funerary objects. Photography of human remains and funerary objects is prohibited, as is sample collection and destructive analysis. Individuals should not be separated from their funerary objects at any point during recovery, escorting, housing, or documentation. Recoveries should be documented on osteological forms provided by the ASM, and a drawing should be made before and during recovery. The drawing needs to include, at a minimum, details showing the position and orientation of the remains and the location of all funerary objects. All funerary objects must be inventoried and documented. Documentation may include field or laboratory hand-drawn sketches or illustrations of the objects. All feature fill should be collected when practicable or screened through ⅛-inch mesh; however, cremated remains should be recovered with the sedimentary matrix in which they were deposited; only surrounding sediment should be screened through ⅛-inch mesh. Vessel contents should not be removed. Once recovered, the remains and funerary objects should be escorted and housed in packaging made from natural materials and housed in a designated secure area until they can be documented by a qualified osteologist and repatriated to the appropriate claimant group(s) in a timely, respectful, and efficient manner.

Laboratory Methods

All artifacts, samples, photographs, maps, and field notes should be housed in a secure area during the analysis and report-writing phases of the Project. Artifacts should be cleaned and processed at an appropriate and secure laboratory area. Artifact provenience data should be entered into an electronic database and verified for accuracy before any analysis begins. Some diagnostic artifacts and samples may be temporarily transferred to professional consultants for analysis. Once the materials have been analyzed, they should be prepared for curation at the ASM. A summary of the artifact analyses must be included in the final data recovery report. The analytic methods to be employed are described below.

Flaked Stone Analysis

Flaked stone artifacts should be subjected to a detailed attribute analysis. Material type, breakage patterns, the amount of weathered rind or cortex evident on the dorsal surface, evidence of use wear or retouching along the edges, and evidence of burning should be documented. The maximum length, width, and thickness of each artifact should be recorded to the nearest tenth of a millimeter. The assemblage should be separated into tools and debitage. All tools should be analyzed. This analysis should include the identification and recording of the tool's morphological attributes, raw material type, and typological attributes.

In the unlikely event that data recovery excavations yield more than 400 pieces of flaked stone debitage at any one site, a minimum 50 percent sample should be analyzed. Larger sample sizes may be chosen at the discretion of the analyst to ensure that the analyzed samples are representative of the debitage as a whole. The focus of the tool analysis should be functional interpretation; the focus of the debitage analysis should be to characterize reduction and tool-production strategies. To better understand resource exploitation patterns and land use, obsidian artifacts may be subjected to a source study using x-ray fluorescence analysis.

Ground Stone Analysis

Ground and carved stone artifacts include milling implements, hafted percussion tools, jewelry, containers, palettes, and sundry other items shaped from stone through pecking, grinding, or carving. WestLand's analysis of the utilitarian ground stone should focus on tool use, grinding technology, subsistence practices in general, milling implement form (trough, basin, slab, mortar), and degree of formal shaping.

Utilitarian ground stone items not related to the milling of foodstuffs (abraders, awls, pottery anvils) can also contribute to our understanding of stone working and exchange; non-utilitarian and rare ground stone items such as censers, bowls, and other esoteric shaped items inform on prehistoric ritual activities. The study of non-utilitarian items should concentrate on comparisons of discovery contexts, as well as comparisons to similar items found at other excavated sites. The analytical sample should consist of all ground stone artifacts recovered during data recovery, and the analysis should be based on Adams' (2002) analytical and interpretive framework. Nonmetric attributes recorded for each ground stone item should include (at a minimum) artifact type (mano, metate); subtype (trough, slab, basin); plan view shape; raw material type; texture; condition; presence of burning; presence of pigment; manufacturing or design technique (expedient vs. strategic); use-type (single or multiple); and number of use-surfaces. The metric attributes recorded for each ground stone item should be (at a minimum) length, width, and thickness (in centimeters).

Ceramic Analysis

Ceramic artifacts include both pottery containers and other more esoteric objects such as beads and figurines. The ceramics should first be separated into "pottery" and "non-pottery." Non-pottery artifacts should typically be assigned to categories based on the qualities of manufacture, decoration, and inferred function. Pottery artifacts should be classified according to prevailing taxonomic conventions. Initially, the artifacts should be sorted and tabulated into categories defined by the generic ceramic ware (painted, red, plain) and artifact form (rim, neck, shoulder, handle, body, vessel [whole or incomplete]). They should then be sorted into five size classes: (1) less than or equal to 5 cm^2, (2) greater than 5 cm^2 and less than or

equal to 10 cm^2, (3) greater than 10 cm^2 and less than 16 cm^2, (4) greater than 16 cm^2, and (5) vessels. These size classes inform on the integrity of the archaeological deposits and also provide a means of sorting the pottery assemblage into categories for subsequent analysis. At this point, the pottery assemblage should be divided into four analytical categories for typological analysis: (1) plain ware body sherds; (2) plain ware rim sherds, vessels, and worked sherds; (3) painted body sherds, rim sherds, vessels, and worked sherds; and (4) red ware body sherds, rim sherds, vessels, and worked sherds. No further classification or analysis should be done on pottery sherds less than the size of a U.S. quarter (approximately 5 cm^2), except in specific cases where clear diagnostic qualities are present. All painted and red ware pottery larger than a U.S. quarter should be typologically classified according to prevailing pottery typologies and descriptive categories. All plain ware sherds larger than a U.S. quarter should be classified into typological categories based on the characteristics of paste, temper, and surface finish, up to an assemblage size of 200 sherds. If the data recovery yields sherd frequencies in excess of 200, A qualified analyst should analyze all plain ware rim sherds, vessels, and worked sherds and a sample (per site) of the plain ware body sherds larger than a U.S. quarter: 200 to 500 sherds—50 percent sample; 500 to 1,000 sherds—20 percent sample; more than 1,000 sherds—10 percent sample. Temper characteristics should be recorded for all analyzed ceramics and should be used to infer pottery styles and production sources. Vessel form information should be recorded for all painted, red, and plain ware rim sherds larger than a U.S. quarter and for all vessels (whole or partial). Vessel form information should include classification into formal categories defined by prevailing taxonomic conventions and the recording of metric data where possible.

Shell Analysis

Possible shell artifacts include specimens of freshwater and marine shell. These artifacts may be the remnants of food items, specimens that were acquired and worked into objects of personal adornment or status emblems, or freshwater specimens recovered from aquatic contexts such as canals and reservoirs. Shell artifacts from food items or personal adornment have the potential to yield important information on subsistence, ethnicity and social differentiation, exchange and commerce, and craft production and distribution. These items should be analyzed by a specialist familiar with the taxonomic identification of freshwater and marine shell, as well as the variety of artifact classes typical of the shell industries of prehistoric Arizona. Prehistoric shell artifact terminology, classification, and typology should be based on those developed by Haury for the materials recovered from Snaketown and Los Muertos (Haury 1945, 1976). Comparative collections in Jernigan's *Jewelry of the Prehistoric Southwest* (1978) should also be used during analysis.

Historic Artifact Analysis

Multiple functional categories are used in the analysis of historical artifacts, including Activities, Architecture, Clothing, Firearms, Kitchen, Medical and Hygiene, Recreation, Furniture, Mining, Personal, and Transportation, as well as other categories as dictated by the range of artifacts from a given site. These categories are based on the functional categories developed by Sprague (1981), which were adapted from a system originally proposed by South (1977). The historical artifacts should be analyzed by a qualified analyst in a suitable laboratory. The analysis may consist of an initial sorting into material classes (e.g., glass, metal, and ceramic) and then classifying them by function (e.g., kitchen, recreation, and clothing). Diagnostic artifacts are given priority in the analysis. Generally, diagnostic artifacts are those that possess attributes that indicate the manufacturing method, date, and location or provide information about intended purpose or function.

Archival Research

If Historic sites are identified within the Project Area, data recovery may require a combined effort of artifact collection, excavation, and archival research to determine the age of the Historic property. Many archival sources are available online, but others may require in-person visits to libraries, historical societies, or other repositories. A professional archaeologist should review historical maps, previous archaeological reports, and archived documents to determine the age and association of any Historic property.

Faunal Remains Analysis

Faunal remains collected in the field should be carefully and appropriately packaged, handled, and cleaned prior to analysis to ensure that no damage occurs. Analysis of the faunal remains should be conducted in a secure laboratory. The materials should first be “rough-sorted” and assigned to a taxon prior to conducting a more detailed study of the remains. Any signs of cultural modification should be noted. Bone and antler tools such as awls and billets should be analyzed in detail and may be illustrated. Number of Identified Specimens and Minimum Number of Individuals should be the basic measures of abundance used to quantify the faunal assemblage.

Paleobotanical and Palynological Analysis

Paleobotanical and pollen remains are typically recovered from special subsurface archaeological contexts. Soil samples should be collected during testing and excavation; in particular, 4-liter flotation soil samples should be collected from feature contexts. Pollen samples should be collected from sealed or otherwise reliable contexts. Excavators should collect 100 to 250 ml (a ½ cup) of sediment for pollen samples, or if

sediments consist of coarse sands, 500 to 1,000 ml (1 to 4 cups) of sediment. Following the fieldwork, samples believed to have the potential to contain paleobotanical and pollen remains should be processed to recover these materials. Prior to selection for analysis, soil samples should be ranked in the field according to criteria such as context, burning, and integrity. The highest-ranked samples should be given priority amongst those selected for analysis by specialists. When available, pollen and macrobotanical samples recovered from the same context should be examined to obtain as complete a record as possible of subsistence activities and past environmental conditions. Some artifacts may be subjected to a pollen wash depending on their context. In other cases, an artifact with in situ pollen-laden soil may be packaged intact for later analysis.

Human Remains

If encountered during data recovery field efforts, human remains must be treated with the utmost care, respect, and professionalism. All pertinent laws, guidelines, and regulations must be rigorously followed. Prior to fieldwork, the permitted archaeologist shall obtain a BDA from the ASM. The recovery of human remains must proceed in accordance with the terms of this agreement. All potential human remains encountered during fieldwork should undergo an initial in-field examination to determine whether they are human or potentially human. The ASM's Bioarchaeology Services may be used for human remains recovery and/or osteological inventory and documentation. If the ASM is not retained for these services, osteological documentation should be comparable to the services provided by the ASM. Documentation should be non-destructive and include (at a minimum) metric measurements; determinations of age, sex, and stature; and the recording of any pathologies. All documentation should be performed under the basic guidance and standards specified by Buikstra and Ubelaker (1994) and using the ASM Human Remains Documentation Packet.

Reporting

At the conclusion of fieldwork, a professional archaeologist must prepare an end-of-fieldwork report. This report should document how the data recovery plan was implemented and what deviations from the approved plan were made (if any), as well as describe the features documented and the work that was accomplished. The archaeologist must submit the end-of-fieldwork report to the ASLD and the SHPO for review.

After review and acceptance of the end-of-fieldwork report by the ASLD and the SHPO, the archaeologist must prepare a draft final report documenting the findings of the archaeological studies and submit it for review to the ASLD, the Arizona SHPO, and the ASM. Any necessary revisions based on reviewer comments must be made and a revised draft produced. At a minimum, the final report must contain the following:

- An abstract page listing the title of the report, the author(s), the dates of fieldwork, the firm responsible for the report, the date submitted, the contract number under which the work was performed, the Project number, the permit number, and the sponsor.
- A table of contents.
- A list of figures and tables.
- Personnel information identifying the staff, their job titles, and their individual duties.
- A general introduction discussing the purpose and background of the study.
- The research strategy and an overview of the regional prehistory of the area.
- A detailed discussion of the fieldwork and laboratory analysis procedures.
- An overview of the area's present and past natural environment.
- A thorough discussion and interpretation of the data recovery results. These findings will be examined from both a local and a regional perspective. Previous and current archaeological studies from the area will be assimilated into the report.
- A detailed description of how the analyzed data are related to the research goals outlined in the **Research Design** section of the data recovery plan; an interpretation of any perceived patterns; and an evaluation of the Project's effects on cultural resources.
- Professional-quality maps and photographs

Curation

Once all the artifacts, samples, photographs, maps, and field notes have been analyzed and incorporated into the final report, they must be transferred to the ASM, which will serve as the permanent repository for the collection. The collection should be completely inventoried, documented, and annotated according to ASM guidelines.

Preliminary Discovery Protocols and Identification Training

The following protocols address the requirements and procedures to be followed in the event of an unexpected discovery during construction or operations. Unexpected discoveries are defined as either (1) any human or potentially human remains, (2) subsurface cultural resources (e.g., prehistoric artifacts or

features) outside the known archaeological site boundary, or 3) paleontological resources. Any human remains or funerary objects must be treated pursuant to the provisions of A.R.S. §41-844.

Prior to the start of construction activities, all Project personnel will be trained in the identification of discoveries and the following discovery protocols.

1. The first person to identify a discovery will halt all activities within 50–200 feet of the discovery in coordination with any designated site foreman.
2. The foreman will notify the designated professional archaeologist or paleontologist, who will immediately notify the ASLD archaeologist, designated agency paleontologist, and/or Arizona SHPO, and/or ASM.
3. The designated professional will assess the nature of the find and consult with the relevant agencies to determine the treatment of the find.
4. In the event of the discovery of human remains and funerary objects, the ASM will be notified, as required by A.R.S. §41-844.
5. The ASM Repatriation Coordinator will then consult with the appropriate Native American group(s).
6. Treatment will follow in accordance with standard recovery practices.
7. All ground-disturbing activities within 50–200 feet of the discovery will not resume until the professional has confirmed that activities may resume based on agency consultation.
8. A full-time monitor may be required until it is determined that the likelihood of another discovery is negligible.

A cultural resources training will be prepared by a permitted archaeologist in collaboration with the ASLD and the consulting Tribes and may consist of a cultural resource awareness PowerPoint with voice over or a training video. The training will be a mandatory part of contractor and employee onboarding. In addition to the PowerPoint with voiceover or video, training may be augmented at touchpoints in the process with an in-person training for core construction staff. Finally, a “quick-guide” for all workers that provides an overview of the relevant laws, exact procedures to follow if a discovery is made (e.g., stop work, step back an appropriate instance, and contact monitor) may be prepared and distributed to all Project personnel.

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May 11, 2026

Susan Hebert
1015 Fair St
Prescott, Arizona 86305, US
Susan.Hebert@yavapaiaz.gov

RE: Review of the Cultural Resources Management Plan for the Agua Fria Solar and Storage Project, Yavapai County, Arizona

Dear Ms. Hebert,

On April 28, 2026, Harris Environmental Principal Investigators Richard Greene and Dr. Jonathan Damp reviewed the Cultural Resources Management Plan for the Agua Fria Solar and Storage Project, Yavapai County, Arizona (the Plan). We concluded that the Plan is acceptable as is, and no comments regarding any adverse issues or changes are required. The Plan demonstrates knowledge of the project, the regulatory context for cultural resources, the potential impacts to cultural resources, and how to mitigate said impacts through treatment or avoidance.

Sincerely,

Richard Greene, MA, RPA
Southwest Cultural Resources Director

Agua Fria Solar

Preliminary Stormwater Management Plan

Prepared for:

McCarthy Building Companies
6225 N 24th St.
Phoenix, AZ 85016

Location: Yavapai County, AZ
Date: July 29th, 2025

EVS ENGINEERING

EVS Project No.: 2024-167

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1.0 Introduction

The purpose of this report is to describe the proposed stormwater management design for the construction of the Agua Fria Solar photovoltaic generation facility ("the project") in Yavapai County, Arizona and document compliance with state and local stormwater requirements. The project will convert approximately 1,600 acres of undeveloped lightly vegetated desert into a power generation facility. Construction will include elevated solar modules mounted on driven steel piles, concrete inverter/transformer pads, aggregate access roads, substation, Battery Energy Storage System (BESS), operations and maintenance building, and an access bridge.

The goal of the stormwater management design is to meet or exceed the requirements of Yavapai County by retaining and treating the "First Flush" runoff volume, controlling pollutants and sedimentation from leaving the site during construction, and keeping the facility equipment safely above the predicted high-water levels.

2.0 Location

The Agua Fria Solar and Storage Project (Project) is located in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project area including several existing high voltage transmission lines, the existing Dugas Substation, as well as Interstate 17 (I-17) which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott.

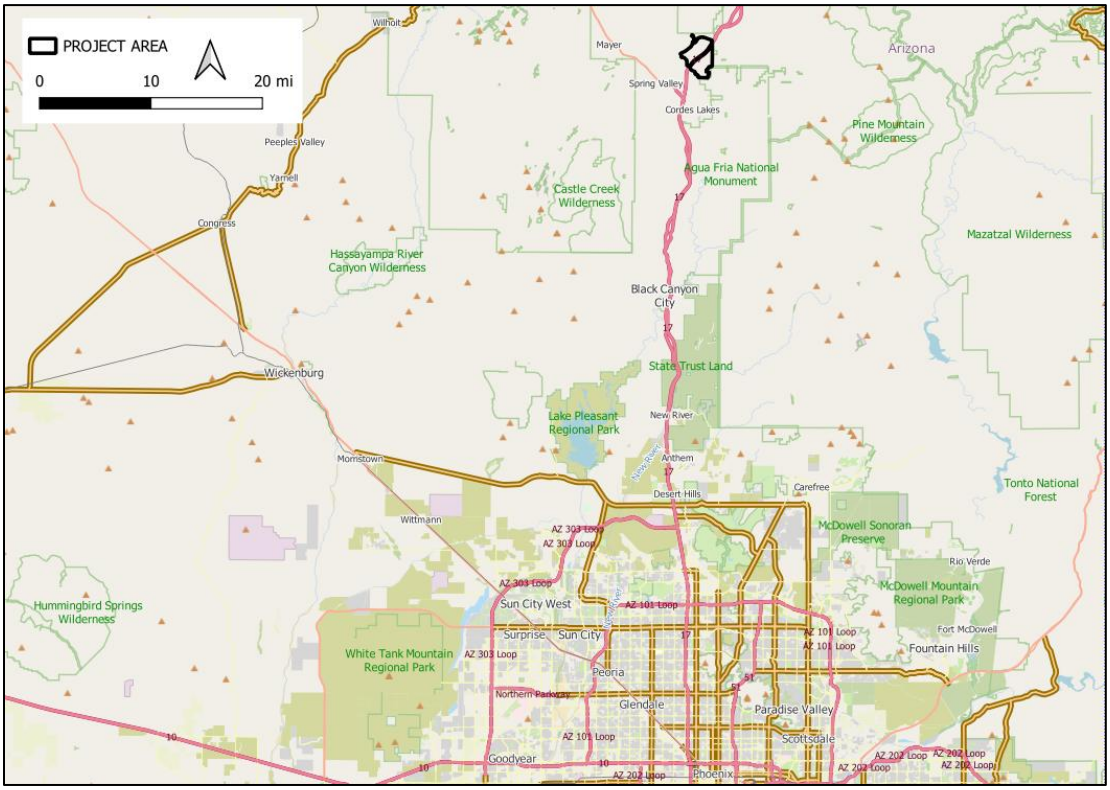


Figure 1 – Area Location Map

3.0 Site Description and Proposed Development

3.1. Site Description

The site contains significant grade with a total of 435 feet of elevation change throughout the site. However, due to County required setbacks, the project will avoid areas of steep grade changes. The majority of the site is sloping west toward Agua Fria River or east toward Ash Creek. Any other slopes will drain to existing washes or within the site and then outlet to one of these two watercourses. The subject property has several areas in a FEMA Zone A floodplain. Impact will be avoided where possible. The remainder of the property is designated as FEMA floodplain X.

See Appendix 'A' for the Existing Drainage Exhibit.

3.2. Proposed Development

The proposed development consists of 450 MW DC of total solar capacity. Solar modules are mounted on racking attached to steel piles driven directly into the ground. There are multiple centrally located concrete equipment pads for inverters and transformers. The north section of the project will have multiple road access points from E Old Sycamore Road and the south section will have road access from E Dugas Road. Onsite access roads are aggregate and are distributed throughout the site to provide access to the equipment pads. Grading in some portions of the Development Area may be done to accommodate racking and to promote effective drainage. In order to rehabilitate temporary impacts to vegetation during construction, ground cover below the solar modules will be treated with a certified weed free seed mix based on plants predominantly native to the site and Yavapai County. Areas that are temporarily disturbed during construction will be revegetated as prescribed in the landscaping plan for the project.

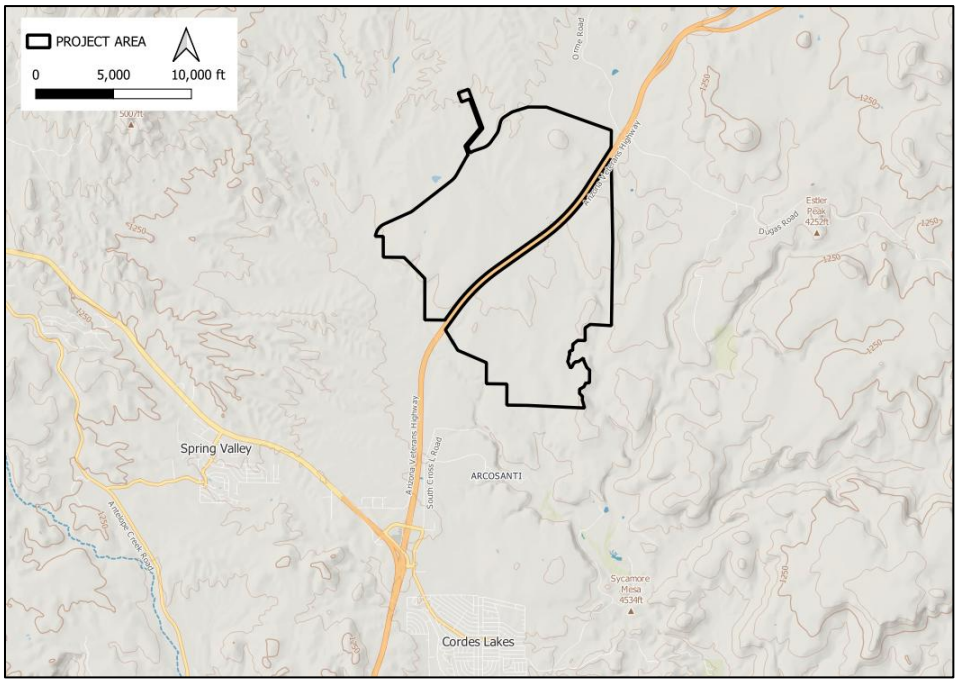


Figure 2 – Site Map

4.0 FEMA Floodplain Classification

Based on a review of the Federal Emergency Management Agency's Flood Insurance Rate Map (FIRM), community panel numbers 04025C2525G and 04025C2880H, the majority of the project site is located within FEMA Zone X (see Figure 3), which is an area of minimal flood hazard. Certain areas of the development overlay the floodplain and are in FEMA Zone A, which has a 1% annual chance of flooding (with no base flood elevations determined). Please refer to Appendix D for the full FIRM maps of the area.

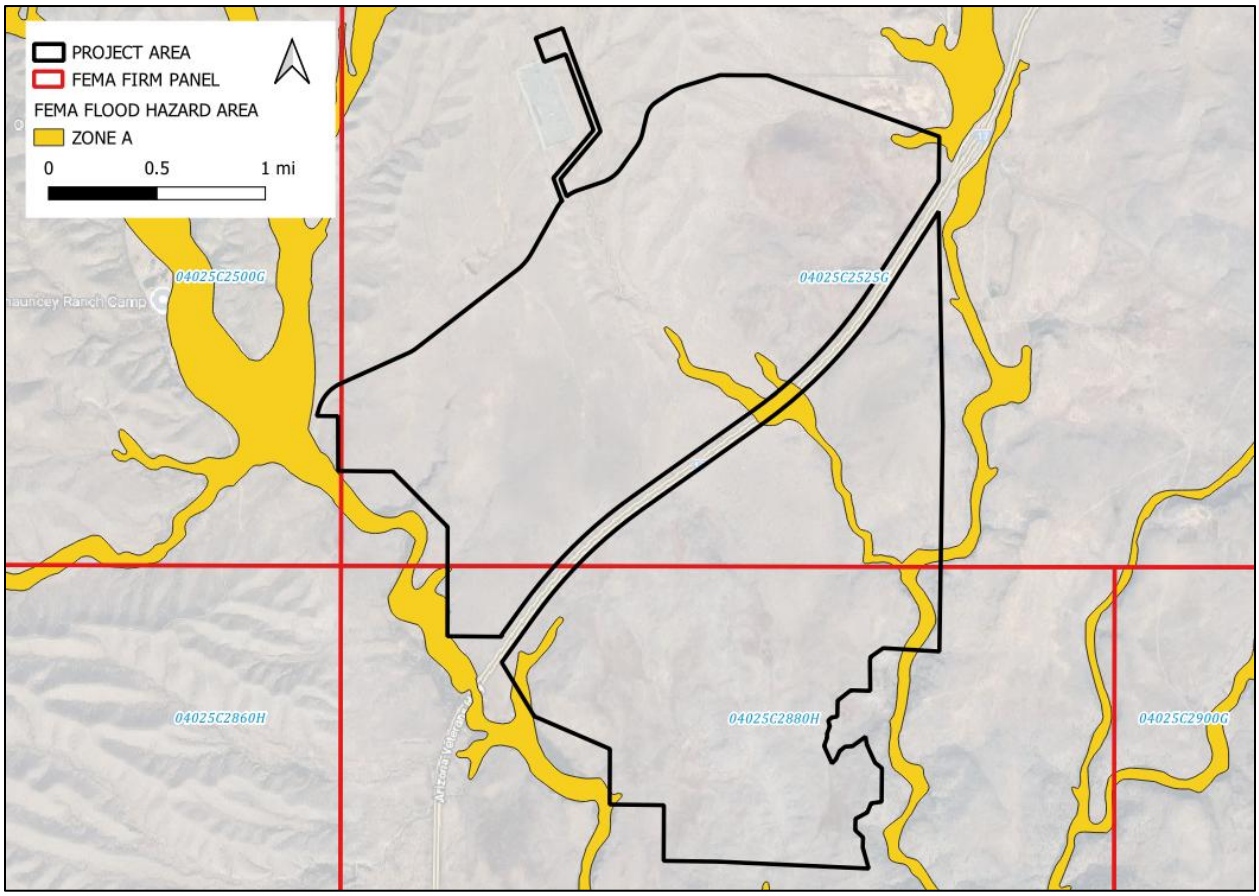


Figure 1 - FEMA FIRM Map Excerpt of Project Area

5.0 On-site Drainage

The project area lies upstream of the Agua Fria River. Proposed retention basins are located along the downslope boundaries of the project and have been sized to retain and infiltrate the runoff volume for the first flush in accordance with the Section 6 and 15 of the Yavapai County Drainage Manual. Grading will be done to ensure sheet flow under panels to avoid scour and erosion. Drainage ditches, berms, and basins will be used wherever possible to capture all runoff from the project site.

6.0 Off-site Drainage Design Description

6.1. Background

The historic drainage patterns to the Agua Fria River and Ash Creek will be maintained between the existing and proposed conditions. Agua Fria River runs west of the project and Ash Creek runs east of the project. The potential for run-on from contributing drainage areas to the north is minimal, as runoff from these areas is directed to washes then to either river that flows outside the project fence. The project proposes several ditches to divert areas of offsite flow around the project. The flows will continue to outflow to either Ash Creek or Agua Fria River.There is a 500' setback from FEMA zones applied to the project to keep downstream areas from encroaching upon project equipment.

6.2. New Offsite Flow Management

The management of offsite flow running onto or through the project is not necessary for this project. This is based on the FEMA mapping and berms / channels throughout the site that divert offsite flows around the proposed project area. The provided existing surface contours combined with HEC modeling confirm that these offsite flow paths route stormwater runoff around the project area.

7.0 Hydrology – HEC-RAS

7.1. Methodology

To determine the depths of flooding that may impact equipment on the project for the design storm, the version 6.4.1 of the 2D modeling software HEC-RAS was used. The HEC-RAS model is intended to model the overland flow characteristics of the project area and estimate the runoff depths and velocities on the project site for the design storm. The 100-year, 24-hour storm was run for depth and velocity in keeping with jurisdictional requirements.

7.2. Model Inputs

Elevation Data

Elevation information for the project area was derived from a topographic survey file provided by McCarthy. As the hydrologic boundaries of drainage areas extended beyond the data available for the project limits, 1- and 10- meter digital elevation models (DEMs) downloaded from the USGS was used for elevation information outside of the project area. (Source: https://viewer.nationalmap.gov/basic/)

Contributing drainage areas

Twelve-digit Hydrologic Unit (HUC12) spatial data was obtained from the USGS Hydrologic Unit Maps website, which identifies the drainage areas the project resides in. These boundaries were used to define the extent of the modeled area. (Source: https://water.usgs.gov/GIS/huc.html)

Land Cover

Existing Land Use Data was obtained from the National Land Cover Database (NLCD). Land uses and associated modeling parameters have been adapted for the model using industry standards. Exhibits and tables of the existing land uses can be found in **Appendix E**.

Soils Data

Soil data was obtained from the Arizona Department of Transportation (ADOT) website via the State Soil Geographic Database (STATSGO). ADOT has developed additional infiltration parameters used as a state standard based on the Natural Resources Conservation Service (NRCS) soil database. The NRCS soil surveys AZ637 and AZ639 overlapped the computational area and were used for this analysis. A map of the existing soil data is provided in **Appendix E.**

Rainfall Data

Rainfall depth information was obtained from the NOAA Atlas 14 Precipitation Frequency Data Server (PFDS) for the project location to determine rainfall depth-duration-frequency data for the design storms. The depth-duration-frequency data was used to create rainfall hyetographs for the design storms. See frequency table in **Appendix F**.
(Source: https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html)

7.3. Parameters

Infiltration

Infiltration losses were accounted for in the 2D HEC-RAS and HEC-HMS model using ADOT soils dataset and the Green-Ampt infiltration method. Infiltration parameters are provided in **Table 1** and are listed by MUSYM which is the naming convention for regions in the soil database. The MUSYM polygon labels can also be seen in **Appendix E**. Various levels of natural percent impervious are defined in the ADOT database due to rock or bedrock and are applied in the land cover data.

Table *1* – Infiltration Parameters

MUSYM	WILTING POINT (DRY)	FIELD CAPACITY (NORMAL)	SATURATION (VOLUME RATIO)	SUCTION (in)	CONDUCTIVITY (in/hr)	NATURAL IMPERVIOUS PERCENT	SOIL MOISTURE CONTENT DRY	SOIL MOISTURE CONTENT NORMAL
WcC	0.2	0.34	0.45	16.18	0.05	0	0.11	0.25
VsC	0.19	0.32	0.48	10.17	0.11	0	0.16	0.29
SnD	0.29	0.41	0.49	13.6	0.02	0	0.08	0.2
SlB	0.3	0.42	0.5	13.14	0.02	0	0.08	0.2
LrD	0.13	0.24	0.42	7.81	0.26	0	0.18	0.29
Go	0.12	0.24	0.41	10.74	0.23	0	0.17	0.29
BgD	0.18	0.28	0.42	8.91	0.11	0	0.14	0.24
VtE	0.18	0.32	0.47	11.14	0.12	0	0.15	0.29
CaD	0.28	0.41	0.49	14.03	0.02	0	0.08	0.21
NOTCOM	0.3	0.42	0.5	13.14	0.02	0	0.08	0.2

*NRCS soil textures are extracted from the NRCS soil database for conceptual refence only and represent the dominant soil condition at a 15cm depth. Model parameters are extracted from the ADOT database developed specifically for Green-Ampt infiltration in Arizona.

Calibration or Unique Conditions

Model parameters for the 2D HEC-RAS model have not been adjusted for the purposes of calibration to measured data. No unique conditions have been encountered in the project area that would warrant adjustment to these parameters from those discussed here and in supporting documentation.

7.4. Results

Results from the HEC-RAS model estimate runoff depths and velocities in solar panels areas. Depths of ponding in retention basins are discussed in other sections of this report. The results of the HEC-RAS overland flow model can be found in drainage exhibits in **Appendix B**. The model results indicate that the offsite drainage area flows to existing washes on either side of the project area, with some offsite flow running onto or through the project bounds.

8.0 Yavapai County Drainage Requirements

The Yavapai County Drainage Manual outlines the AHJ's drainage requirements for the project. The project uses retention basins, swales, and berms to meet the requirements.

8.1. Stormwater Retention and Detention Requirements

Section 6 of the Yavapai County Drainage Manual contains several stormwater runoff requirements for the project, the requirements and methods used to satisfy the requirement are shown below:

- All stormwater runoff from the project site must be retained and treated. Stormwater retention basins used for treatment must be sized for the "First Flush" requirement, defined as 0.5 inches of direct runoff from a storm event. This is calculated as a half inch over the development area.
    - The first flush requirement will be satisfied using retention basins sized to retain the first 0.5 inches of runoff from the development area.
- Retention requirement: Retention basins must be sized to hold the 100-year, 2-hour runoff volume over the added impervious area for the project.
    - The retention requirement is not applicable to the project as it does not contain individual lots that are part of a larger subdivision development. The requirement will likely be met anyways due to the limited added impervious area on site and the amount of retention basin storage provided for first flush.
- Detention requirement: Post-development discharge must not exceed the pre-development discharge for the 2-, 10-, and 100-year storm events with a duration of 24 hours.
    - A detention requirement waiver for reduced retention volume requirements for this project was granted by the Yavapai County Flood Control District on 04/18/2025 (see **Appendix H**). The waiver states the 100-year 2-hour retention requirements are waived due to the project site stormwater runoff discharging to a watercourse with a drainage area exceeding 80 square miles.
    - The pre-development versus post-development rates will still be checked in lieu of the waiver to ensure that no adverse effects occur downstream of the project.

The first flush volume can be computed by the following Rational Method equation (per Equation 6.1 of the Yavapai County Drainage Manual):

$$V = C\left({}^{P}/_{12}\right)A$$

Where: V = Volume Required (acre-feet)
C = Runoff Coefficient
P = First 0.5 inches of direct runoff (inches)
A = Project Area (acres)

Because of the minimally added impervious, permission has been granted by the County to use a composite runoff coefficient based on groundcover at the time of project completion. Based on the various land uses identified in the **Table 2** below, a composite runoff coefficient was calculated based on the standard rational coefficients provided in the Yavapai County Drainage Manuals. These values are shown below:

Table 2 – Runoff Coefficients

Area Type	Runoff Coefficient
EQUIPMENT AREA (SUBSTATION / BESS)	0.95
GRAVEL (ROADWAYS)	0.88
UNDEVELOPED AREA WITH VERY DENSE SOILS / BEDROCK	0.70
AREA WITH VERY DENSE SOILS / BEDROCK WITH SOLAR PANELS	0.75
UNDEVELOPED DESERT AREA	0.50
DESERT AREA WITH SOLAR PANELS	0.55

The runoff coefficients shown in **Table 2** above were increased by 0.05 in areas with panels to account for the raised impervious panels above the ground. Land cover determinations were based on the borings provided in the geotechnical report titled “Geotechnical Data Report” by Ninyo & Moore dated 12/05/2024.

8.2. Retention Basin Dewatering

Section 15.4.2.3 of the Yavapai County Drainage Manual requires a basin drawdown time of 24 to 36 hours after the end of the storm event. Due to the very dense soils and shallow bedrock located on site, infiltration is not expected to be adequate to drain the proposed retention basins in the required time. Infiltration trenches with draintile are proposed at the bottom of basins to achieve the drawdown requirements. See **Appendix J** for more information on the infiltration trench. All efforts will be made to place basins in areas with ground densities which will promote infiltration.

The first flush basin volumes provided in **Table 5** reflects storage below the emergency overflow elevation. The equation for determining the minimum first flush treatment discharge is as follows (Equation 6.2 of the Yavapai County Drainage Manual):

$$Q_{FF} = C\ I_{FF} A$$

Where: Q_{FF} = Minimum first flush discharge (cfs)
C = Runoff Coefficient
I_{FF} = Maximum first flush intensity (in/hr)
Where: $I_{FF} = P_{FF} / T_c$
P_{FF} = 0.5 inches
T_c = Time of concentration of the upstream watershed (hr)
A = Project Area (acres)

See **Appendix J** for Drawdown Calculations.

8.3. Rate Control and Water Quality

Rate Control

Yavapai County Drainage Manual Section 15.4.1.1 requires post-development peak discharges to not exceed pre-development peak discharges for the 2-, 10-, and 100-year, 24-hour storm events. The section also specifies requirements for detention volumes in the proposed basins throughout the project. Detention requirements have been waived for this project. However, the pre-development and post-development rate reduction will still be checked to ensure no adverse effects occur downstream of the project. For modeling purposes, we have assumed project areas will remain undeveloped desert post construction. Therefore, the addition of retention basins will reduce the overall runoff rates for the project site. Based on Section 7.9 of the Yavapai County Drainage Manual, the HEC-HMS Hydrologic Modeling System will be used for runoff rate modeling to ensure the rates requirements are being met for this project. HEC-HMS utilizes the Unit Hydrograph Method to perform stormwater modeling. HEC-HMS refers to subcatchments and retention basins as subbasins and reservoirs, respectively. See **Appendix C** for HEC-HMS reports.

Water Quality

Pollutants and sedimentation will be controlled from leaving the project area by installing retention basins that have been sized for “First Flush”, defined as the first 0.5 inch of runoff over the development area. All runoff from the project site, including access road and inverter pads will be caught by proposed stormwater design features prior to draining to wetlands or off the project area.

8.4. Retention Basin Design

Retention basins are the primary stormwater feature utilized to ensure all requirements are satisfied. The following design assumptions were used for retention basin design:

Design Assumptions

- Berms will be constructed perpendicular to the ground slope
- Existing soils, typically identified as very dense fat clays, are HSG Type D
- Composite runoff coefficients are displayed in **Table 5** below
- Seasonal high groundwater elevation is well below the elevation of any stormwater management area onsite
- Basins to have a maximum storage depth of 2'
- Basins to have a 16' maintenance clear area around its perimeter
- Basin sides slopes are to be 4:1

See **Appendix J** for retention basin design detail.

The site was broken into thirteen individual drainage areas for stormwater basin retention calculations. Each area will contain retention basins, sized for the volume required for its respective drainage area. To ensure the proper drawdown time, all basins will have a maximum storage depth of 2 feet, 1 foot preferred. Each basin will also utilize an infiltration trench with draintile that outlets from the basin in a singular outlet pipe. This allows the basin to treat the retention volume while still allowing the runoff to outflow from the basin. See **Table 5** for retention basin treatment volume calculations.

The retention basins were sized using the first flush requirement from the Yavapai County Drainage Manual. Due to the limited impervious area added from the project, a composite runoff coefficient was used for design in first flush calculations as approved by Yavapai County.

Constraints

According to the geotechnical report titled "Geotechnical Data Report Agua Fria Solar" by Ninyo & Moore dated December 5, 2024, there are very dense clay soils and shallow bedrock. Due to shallow bedrock and setback requirements outlined in Section 608 Solar Facilities located in the Yavapai County Planning & Zoning Ordinance, there are areas where runoff from the development area is not able to be retained in a retention basin. Drainage ditches or berms have been utilized where possible to direct water to a retention basin. If a retention basin or drainage ditch is not feasible, silt fence and/or rock check dams will be used to reduce erosion and sediment transport from the project site.

Retention basin emergency overflows and drainage ditches have not been sized at the time of this submittal. Ditches are assumed to have a 10' bottom width, 1' depth, and 4:1 side slopes. Basin emergency overflows are assumed to be 100' in length along the berm for the purposes of the HEC-RAS hydrology modeling. These items will be sized later in design in accordance with the Yavapai County Drainage Manual.

9.0 Calculations and Data

Rainfall Depths

Climate and Precipitation

- Rainfall Frequencies per NOAA Atlas-14

Table 3 - Rainfall Events	
Recurrence Interval (yrs)	24-hour Rainfall Depth (in)
2-year	2.05
10-year	2.98
100-year	4.47

Rate Control Calculations

The existing and proposed HEC-HMS output reports from the model of this system are attached in **Appendix C**. HEC-HMS implements the HEC-1 unit hydrograph simulation method which satisfies the requirements from the Yavapai County Drainage Manual for rate reduction calculations to be done using the Unit Hydrograph Method.

Table 4 below outlines the results from the HEC-HMS modeling, showing that the post-development rates were reduced for each design storm after the addition of several drainage ditches, berms, and retention basins.

Table 4 – Pre and Post Runoff Rates						
Outflow Location	Pre-development 2-year (cfs)	**Post-development 2-year (cfs)**	Pre-development 10-year (cfs)	**Post-development 10-year (cfs)**	Pre-development 100-year (cfs)	**Post-development 100-year (cfs)**
CP1	38	**38**	409	**409**	1093	**1093**
CP2	297	**300**	810	**806**	1654	**1654**
CP3	318	**325**	2321	**2268**	6789	**6696**
CP4	361	**363**	999	**1004**	2073	**2084**
CP5	191	**194**	620	**634**	1344	**1368**
CP6	484	**508**	1454	**1521**	3102	**3223**

Volume Reduction Calculations

According to the Yavapai County Drainage Manual, all stormwater runoff across the project area must be retained on site and meet the first flush volume retention requirement. To calculate the required first flush volume, the project area was broken up into 13 subcatchments. See **Appendix A** for the map depicting the subcatchment locations. **Table 5** states the required first flush volume based on composite runoff coefficient for the subcatchment and the subcatchment area draining to each basin.

Table 5 – Required First Flush Volume Calculations					
Subcatchment No.	Basin ID	Composite Runoff Coefficient C	Basin Subcatchment Area (ac)	Required Treatment Volume (cf)	Provided Treatment Volume (cf)
1	1-1	0.53	4.13	3,998	5,329
	1-2		4.80	4,645	5,516
	1-3		28.60	27,659	27,661
2	2-1	0.53	5.41	5,244	15,459
	2-2		6.28	6,085	6,488
	2-3		7.90	7,660	8,235
	2-4		3.39	3,287	4,173
	2-5		8.86	8,586	10,943
	2-6		42.38	41,072	46,245
	2-7		23.22	22,501	27,152
	2-8		1.84	1,786	4,521
	2-9a		22.50	21,805	37,514
	2-9b		6.34	6,146	12,314
	2-10		4.85	4,698	6,703
	2-11		27.94	27,079	27,473
	2-12		4.72	4,570	7,382
	2-13		9.89	9,582	9,901
3	No proposed development				
4	4-1	0.78	17.78	25,132	26,225
	4-2		20.96	29,625	30,015
	4-3		7.98	11,273	12,244
	4-4		17.36	24,529	25,211
5	5-1	0.58	6.44	6,804	6,862
	5-2		32.20	34,034	36,855
	5-3		17.76	18,771	18,888
	5-4		14.34	15,157	15,382
	5-5		4.04	4,267	6,880
	5-7		7.72	36,855	8,867
	5-8		29.44	18,888	32,113
	5-9		26.17	15,382	29,212
	5-10		11.74	6,880	13,489
	5-11		29.29	6,862	31,113
	5-12		19.09	36,855	21,659
	5-13		18.95	18,888	21,239
	5-14		13.44	15,382	16,431
	5-15		10.23	6,880	12,828

	5-16		7.48	6,862	9,593
	5-17		26.38	36,855	28,891
	5-18		15.60	18,888	17,635
	5-19		36.17	15,382	41,016
	5-20		39.90	6,880	43,215
	5-21		44.76	6,862	50,498
	5-22		5.81	36,855	8,541
	5-23		18.10	18,888	19,890
6	6-1	0.54	37.57	6,862	40,098
	6-2		14.89	36,855	15,068
	6-3		23.45	18,888	23,471
	6-4		22.07	15,382	24,609
7	7-1	0.51	13.41	12,445	13,563
	7-2		2.06	1,916	2,179
8	8-1	0.55	4.20	4,165	4,408
	8-2		12.30	12,201	14,512
	8-3		72.15	71,582	110,508
	8-4		12.95	12,847	22,222
	8-5		10.74	10,651	21,970
	8-6		6.74	6,691	8,062
	8-7		7.87	7,805	8,255
9	No proposed development				
10	10-1	0.62	66.33	74,575	74,942
	10-2		74.03	83,226	120,067
	10-3		21.52	24,194	24,382
	10-4		16.67	18,739	22,928
	10-5		9.35	10,517	12,627
	10-6		13.15	14,781	15,738
	10-7		48.35	54,360	80,177
	10-8		32.07	36,051	54,622
	10-9		45.71	51,385	51,400
	10-10		28.13	31,627	49,464
	10-11		18.03	20,271	24,178
	10-12		15.85	17,823	17,902
	10-13		2.42	2,720	3,187
11	11-1	0.61	8.97	9,930	21,336
	11-2		41.31	45,716	55,714
	11-3		10.44	11,555	13,715
	11-4		2.84	3,148	5,245
	11-6		5.08	5,617	12,796
	11-8		20.88	23,102	26,580

	11-9		54.14	59,916	58,902
	11-11		7.63	8,440	9,588
	11-12		12.43	13,753	19,131
	11-13		5.22	5,773	7,797
12	12-2	0.73	25.899	34,341	34,341
	12-4		11.241	14,905	16,349
13	13-2	0.74	11.58	15,502	44,000
	13-3		32.29	43,207	46,753

Table 6 – Treatment Volume Summary

Area No.	Total subcatchment area (ac)	Required Treatment Volume (cf)	Provided Treatment Volume (cf)
1	37.54	36,302	37,715
2	183.97	170,101	224,503
3	No proposed development		
4	64.08	90,559	93,695
5	510.55	462,063	491,560
6	108.74	98,009	103,657
7	15.48	14,360	15,742
8	126.94	125,942	189,937
9	No proposed development		
10	391.62	440,268	551,614
11	180.37	197,427	229,287
12	48.34	62,124	70,511
13	46.41	58,709	90,753
TOTAL	**1714.04**	**1,755,864**	**2,098,974**

Basin Drawdown Time

According to the Yavapai County Drainage Manual, all stormwater retention basins shall drawdown completely in 24 to 36 hours after the storm event has occurred. The geotechnical report and associated borings indicate the on-site soils to be very dense clay and bedrock with very little to no infiltration. Infiltration trenches will be utilized on proposed basins with sand trenches to be installed at the bottom of basins to allow water to be treated and infiltrate into a draintile system which can outflow from the basin from a singular outlet pipe. The infiltration trenches will allow the basins to retain the required treatment volume while ensuring the drawdown time requirements are also met. Drawdown and trench calculations can be found in **Appendix J**.

10.0 County Setbacks

The Yavapai County Board of Supervisors approved "Section 608 Solar Facilities" on November 6, 2024, taking effect on December 4, 2024. This document is located in the Yavapai County Planning & Zoning Ordinance, Section 608 Solar Facilities.

Due to the setbacks required in Section 608 and the stormwater runoff requirements for the project in the Yavapai County Drainage Manual, waivers will be requested from the County on specific setbacks and locations.

11.0 Federal Emergency Management Agency (FEMA)

There are several locations throughout the project site designated as FEMA Zone A floodplains. Most of these areas will not be impacted throughout construction. A 500' FEMA Zone setback has also been applied to these areas for design per the Yavapai County Planning & Zoning Ordinance – Section 608 Solar Facilities.

12.0 Scour & Erosion Potential

The computations for scour potential in the project area were based on an equation for local pier scour in non-cohesive taken from the Federal Highway Administration and U.S. Department of Transportation "Evaluating Scour at Bridges, Fifth Edition" manual found in **Appendix G** of this report.

$$\frac{y_s}{y_1} = 2.0K_1K_2K_3(\frac{a}{y_1})^{0.65} * Fr_1^{0.43}$$

y_s = Scour depth (ft)
y_1 = Flow depth directly upstream of pier (ft)
K_1 = Correction factor for pier nose shape
K_2 = Correction factor for angle of attack from flow
K_3 = Correction factor for bed condition
a = Pier width (ft)
Fr_1 = Froude number directly upstream of the pier

Total scour is typically calculated for bridge piers/abutments as general scour plus local scour. Pier scour is a type of local scour and is used for the pile scour depth analysis. Most local scour equations are simulated in a laboratory for piles located in stream channels. There hasn't been an analysis conducted/researched for a solar array situation. The HEC 18 equation is currently the most widely used and accepted equation for local pier scour. See assumptions below:

- Scour equation analysis was conducted in a laboratory simulating a streambed using non-cohesive soils
- HEC 18 calculated scour depth against field observed measurements indicate general overprediction for scour

Values for the K-value correction factors and pier dimensions are as follows:

Parameter	Value	Notes
a, Pier Width	0.5 ft	6.0-inch x 6.0-inch pile

L, Pier Length	0.5 ft	6.0-inch x 6.0-inch pile
K_1, Pier Nose Shape	1.0	Square Nose from Table 7.1, for $\theta > 5°$, K_2 dominates and K_1 is 1.0
K_2, Angle of Attack	1.3	From Eqn 7.4; (L/a) = 1, $\theta = 45°$
K_3, Bed Condition	1.1	Plane Bed and Anti-dune flow

Scour depth (y_s) is computed via the equation above in excel using output data from HEC-RAS 2D for each grid location that has an associated flow depth (y_1) and velocity (V_1). Froude numbers (Fr_1) are calculated from the flow velocity (V_1) and flow depths (y_1), where $Fr_1 = V_1/(gy_1)^{1/2}$. The pier/pile length (L) and width (a) used are standard pile sizes.

13.0 High Water Level

The 100-year high-water level for the overall site was analyzed using the HEC-RAS model and is shown in the high water level exhibit in **Appendix B.**

14.0 Drainage System Components and Maintenance

The stormwater design for the proposed Agua Fria project consists of drainage ditches, berms, and retention basins. The operations and maintenance of the primary drainage features are included below. The Landscaping Plan, submitted alongside this report, covers the Project's approach to preserving vegetation on-site, revegetating the site, managing weeds, and maintaining site vegetation during operations.

Maintenance Frequency

The owner shall perform an inspection at least once every four months and within 24 hours of each storm event of 0.5 inch or greater in 24 hours to ensure that control measures are functional. Non-storm event inspections must be at least three months apart. To determine the amount of rainfall from a storm event, the owner shall obtain rainfall information from either a properly maintained rain gauge on site, or a weather station that is representative of the site's location. Following a storm event, any trapped sediment shall be removed from rock stabilized areas around steep slopes and stormwater conveyance channels

Permanent Seeding

A native plant seeding mix s proposed as per the landscape plan for the project. Dust control measures have been implemented to meet ADEQ's CGP and Yavapai County's requirements.. If natural vegetation is established, routine mowing should be implemented to limit vegetation height to less than 1.0', or natural vegetation should be treated with herbicide to prevent growth.

Drainage Ditch Operation and Maintenance

Drainage ditches are used to ensure all runoff from the project site can be caught and treated in a retention basin. Maintenance will include the following:

- Repair areas where channelized flow occurs to restore flow through the structure.
- Repair areas with erosion and carefully remove accumulated sediments if needed to restore the function of the structure.

- Stabilize contributing areas to structures as needed to prevent erosion and sedimentation.
- Remove accumulated debris and/or excessive vegetation to restore the structure to its design function and routing capacity.
- Remove debris or other obstructions within the retention system and/or spillway as necessary.

The open channel design includes 4:1 side slopes for maintenance access.

Permanent Retention Basin Operations and Maintenance

Retention basins have been sized to hold and treat the first flush, defined as the first 0.5 inches of runoff from the project site. Maintenance will be the responsibility of the property owner after construction and will include the following:

- Repair areas where channelized flow occurs to restore flow through the structure.
- Repair areas with erosion and carefully remove accumulated sediments if needed to restore the function of the structure.
- Stabilize contributing areas to structures as needed to prevent erosion and sedimentation.
- Remove accumulated debris and/or excessive vegetation to restore the structure to its design function and routing capacity.
- Remove debris or other obstructions within the retention system and/or spillway as necessary.
- Ensure that berms are in working conditions, with no signs of failure.
- Clean out excess sediment on top of infiltration trenches to ensure infiltration rates are maintained.

Access Roads

When maintaining the all-weather access road, it is important to provide the following:

- A 1.0 to 2.0% cross slope is recommended for proper drainage.
- For all-weather access roads, it is recommended that vehicles do not exceed 10 miles per hour as to minimize dust control.
- Pay attention to the seasons. Some regions have certain times in the year when frequent and heavy rainfall can be expected. Try to avoid major reshape work during those time periods.
- Keep disturbed areas as small as possible. The more earth you disturb, the greater will be the risk of soil erosion. Set work boundaries and do not let work crews get outside of them. Consider stabilization of disturbed areas.
- Inspect recent work. It is vital to make sure channels or rills have not formed in ditch bottoms or on slopes near to roads, or around and under controls that were used. Be particularly vigilant after heavy rain events.

Rock Check Dam Operations and Maintenance

Rock check dams have been placed in drainage ditches to prevent erosion and sediment runoff into the retention basins. It is the responsibility of the owner to maintain the rock check dams. The rock check dams shall be inspected and repaired/reshaped as necessary. Trapped sediment will be removed following storm events.

15.0 Conclusion

In conclusion, the project was able to meet the requirements stated in the Yavapai County Drainage Manual while designing with the setback requirements put forth in the Yavapai County Planning & Zoning Ordinance – Section 608 Solar Facilities. The primary stormwater requirements were satisfied by the following:

- First Flush – Retain and treat the first 0.5” of runoff over the development area
    - Retention basins sized to retain this volume while infiltration trenches were added to the bottom of basins to treat the water
- 24 to 36 hour drawdown time requirement
    - Infiltration trenches at bottom of basins were designed to allow runoff to be treated but still outflow to drawdown the basin with the 36 hour requirement
- Post-development rates shall not exceed pre-development runoff rates
    - HEC-HMS was used to model the subcatchments and retention basins to ensure the runoff rates were reduced post-construction.

Construction phase stormwater requirements of this project are met by obtaining the ASPDES permit, which includes generating a SWPPP and implementing erosion control BMP’s sufficient to satisfy the permit requirements. Post construction phase stormwater requirements are met by installing stormwater berms, ditches, and retention basins with infiltration trenches. The requirement for retention basins to catch everything leaving the project site is the primary contributor to the overall runoff rate reduction from pre to post construction.

Agua Fria Solar

First Review (5/28/2026)

Reviewed Documents:

EVS Engineering, *Agua Fria Solar: Preliminary Stormwater Management Plan*, dated July 29th, 2025.

Please respond to the following review comments in an official response letter signed by the design engineer. In addition, we ask that any additional information provided in response to a review comment is incorporated into a revised report and/or document.

1. **(*PDF page 7, 6.2 New Offsite Flow Management*)**: According to the hydrology presented in this SMP, offsite flows do enter the Site; therefore, management of offsite flows is necessary for this project. Please discuss the general plan for capturing and conveying offsite flows through the Site where applicable.

2. **(*PDF page 11,8.2 Retention Basin Dewatering*):** While it is clear that the first flush basins are to be sized using equation 6.1, it is unclear what the first flush discharge will be used for. Please clarify this in the report.

3. ***(PDF page 12,8.2 Retention Basin Dewatering):*** Berms must have a minimum top width of 8 feet, per Section 15.4.3.3 of the Yavapai County Manual. Please list this in the design assumptions on this page.

4. **(PDF page 17, 10.0 County Setbacks):** Discuss the general approach to drainage setbacks for local water courses in locations where waivers will not be requested.

5. **(Appendix A, Proposed Drainage Exhibit):** Based on this exhibit, all stormwater runoff from the developed areas will be routed to the proposed first flush basin. Please note, for this design approach, the emergency overflow for the basin will need to be sized for all storm events up to the 100-year event.

6. **(Appendix B, Existing 100-Year 24-Hour HWL):** The existing condition model identifies an existing check dam within a wash on the northwest side of the property. How will this existing onsite check dam be treated? Will proposed flows drain into it? Please discuss this in the SMP.

7. **(Appendix B, Existing 100-Year 24-Hour HWL):** The 2D model reveals ponding upstream of Interstate 17, indicating some potentially low capacity crossings. Do these crossings accommodate post-development flows?

Agua Fria Solar

Preliminary Stormwater Management Plan

Prepared for:

McCarthy Building Companies
6225 N 24th St.
Phoenix, AZ 85016

Location: Yavapai County, AZ
Date: July 29th, 2025

EVS ENGINEERING

EVS Project No.: 2024-167

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Appendix I – Retention Basin Detail

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1.0 Introduction

The purpose of this report is to describe the proposed stormwater management design for the construction of the Agua Fria Solar photovoltaic generation facility ("the project") in Yavapai County, Arizona and document compliance with state and local stormwater requirements. The project will convert approximately 1,600 acres of undeveloped lightly vegetated desert into a power generation facility. Construction will include elevated solar modules mounted on driven steel piles, concrete inverter/transformer pads, aggregate access roads, substation, Battery Energy Storage System (BESS), operations and maintenance building, and an access bridge.

The goal of the stormwater management design is to meet or exceed the requirements of Yavapai County by retaining and treating the "First Flush" runoff volume, controlling pollutants and sedimentation from leaving the site during construction, and keeping the facility equipment safely above the predicted high-water levels.

2.0 Location

The Agua Fria Solar and Storage Project (Project) is located in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project area including several existing high voltage transmission lines, the existing Dugas Substation, as well as Interstate 17 (I-17) which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott.

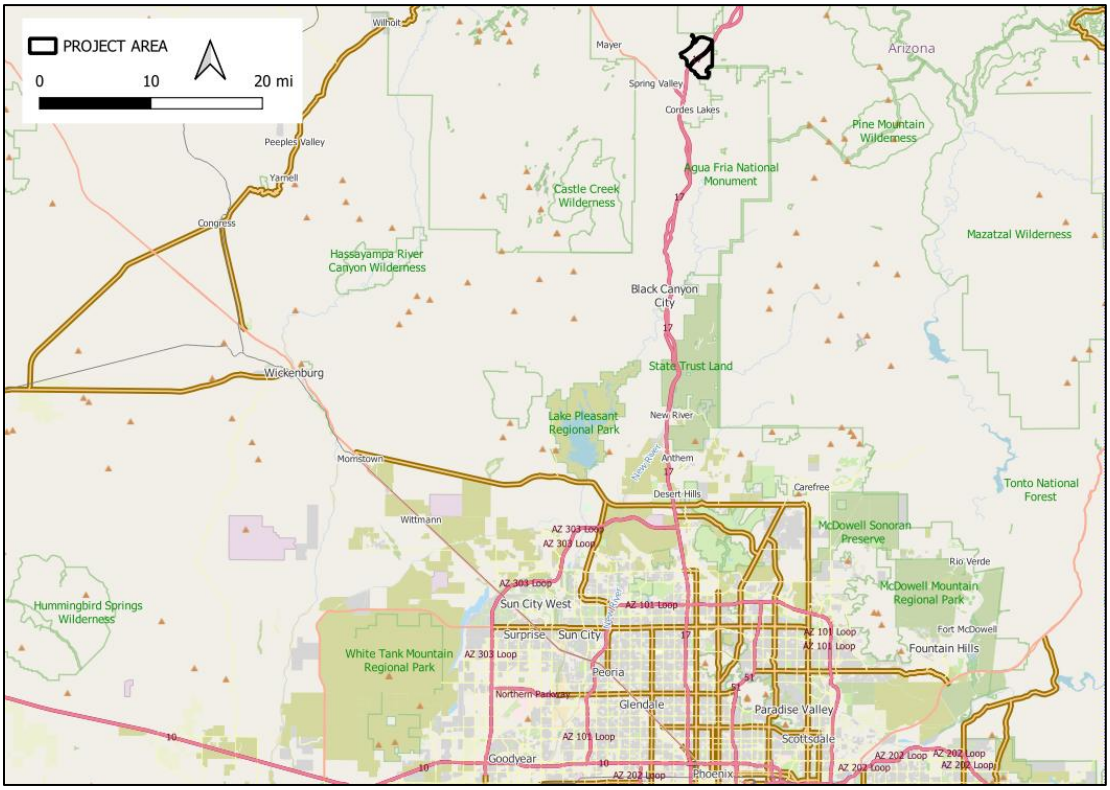


Figure 1 – Area Location Map

3.0 Site Description and Proposed Development

3.1. Site Description

The site contains significant grade with a total of 435 feet of elevation change throughout the site. However, due to County required setbacks, the project will avoid areas of steep grade changes. The majority of the site is sloping west toward Agua Fria River or east toward Ash Creek. Any other slopes will drain to existing washes or within the site and then outlet to one of these two watercourses. The subject property has several areas in a FEMA Zone A floodplain. Impact will be avoided where possible. The remainder of the property is designated as FEMA floodplain X.

See Appendix 'A' for the Existing Drainage Exhibit.

3.2. Proposed Development

The proposed development consists of 450 MW DC of total solar capacity. Solar modules are mounted on racking attached to steel piles driven directly into the ground. There are multiple centrally located concrete equipment pads for inverters and transformers. The north section of the project will have multiple road access points from E Old Sycamore Road and the south section will have road access from E Dugas Road. Onsite access roads are aggregate and are distributed throughout the site to provide access to the equipment pads. Grading in some portions of the Development Area may be done to accommodate racking and to promote effective drainage. In order to rehabilitate temporary impacts to vegetation during construction, ground cover below the solar modules will be treated with a certified weed free seed mix based on plants predominantly native to the site and Yavapai County. Areas that are temporarily disturbed during construction will be revegetated as prescribed in the landscaping plan for the project.

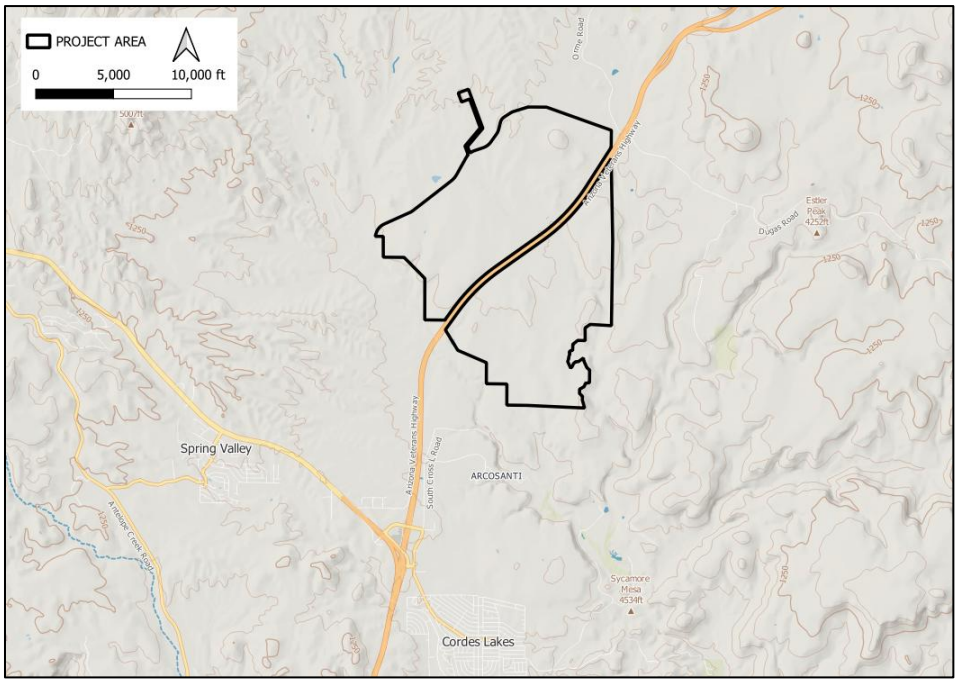


Figure 2 – Site Map

4.0 FEMA Floodplain Classification

Based on a review of the Federal Emergency Management Agency's Flood Insurance Rate Map (FIRM), community panel numbers 04025C2525G and 04025C2880H, the majority of the project site is located within FEMA Zone X (see Figure 3), which is an area of minimal flood hazard. Certain areas of the development overlay the floodplain and are in FEMA Zone A, which has a 1% annual chance of flooding (with no base flood elevations determined). Please refer to Appendix D for the full FIRM maps of the area.

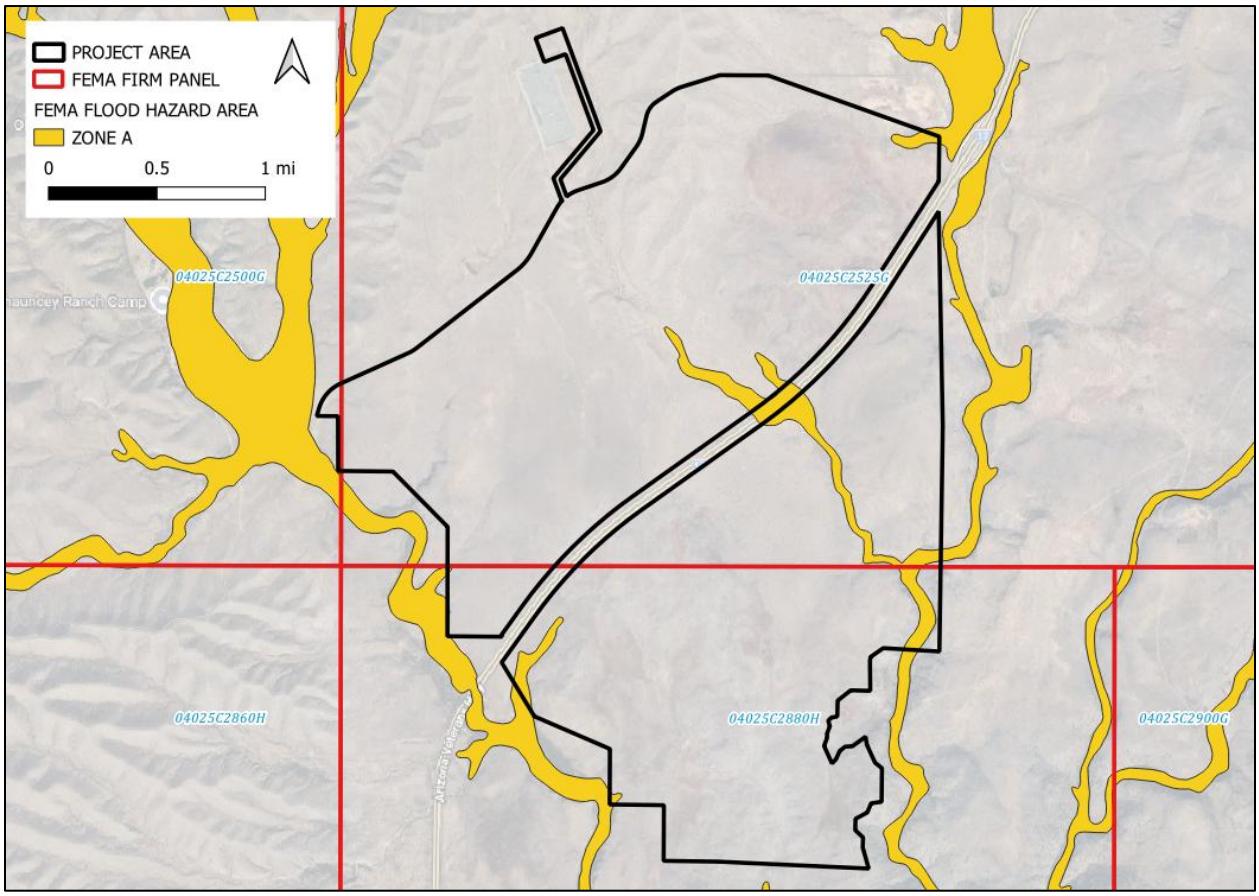


Figure 1 - FEMA FIRM Map Excerpt of Project Area

5.0 On-site Drainage

The project area lies upstream of the Agua Fria River. Proposed retention basins are located along the downslope boundaries of the project and have been sized to retain and infiltrate the runoff volume for the first flush in accordance with the Section 6 and 15 of the Yavapai County Drainage Manual. Grading will be done to ensure sheet flow under panels to avoid scour and erosion. Drainage ditches, berms, and basins will be used wherever possible to capture all runoff from the project site.

6.0 Off-site Drainage Design Description

6.1. Background

The historic drainage patterns to the Agua Fria River and Ash Creek will be maintained between the existing and proposed conditions. Agua Fria River runs west of the project and Ash Creek runs east of the project. The potential for run-on from contributing drainage areas to the north is minimal, as runoff from these areas is directed to washes then to either river that flows outside the project fence. The project proposes several ditches to divert areas of offsite flow around the project. The flows will continue to outflow to either Ash Creek or Agua Fria River.There is a 500' setback from FEMA zones applied to the project to keep downstream areas from encroaching upon project equipment.

proposed berms and channels are part of offsite flow management. This first sentence is not correct per the proposed project.

6.2. New Offsite Flow Management

~~The management of offsite flow running onto or through the project is not necessary for this project.~~ This is based on the FEMA mapping and berms / channels throughout the site that divert offsite flows around the proposed project area. The provided existing surface contours combined with HEC modeling confirm that these offsite flow paths route stormwater runoff around the project area.

7.0 Hydrology – HEC-RAS

7.1. Methodology

To determine the depths of flooding that may impact equipment on the project for the design storm, the version 6.4.1 of the 2D modeling software HEC-RAS was used. The HEC-RAS model is intended to model the overland flow characteristics of the project area and estimate the runoff depths and velocities on the project site for the design storm. The 100-year, 24-hour storm was run for depth and velocity in keeping with jurisdictional requirements.

7.2. Model Inputs

Elevation Data

Elevation information for the project area was derived from a topographic survey file provided by McCarthy. As the hydrologic boundaries of drainage areas extended beyond the data available for the project limits, 1- and 10- meter digital elevation models (DEMs) downloaded from the USGS was used for elevation information outside of the project area. (Source: https://viewer.nationalmap.gov/basic/)

Contributing drainage areas

Twelve-digit Hydrologic Unit (HUC12) spatial data was obtained from the USGS Hydrologic Unit Maps website, which identifies the drainage areas the project resides in. These boundaries were used to define the extent of the modeled area. (Source: https://water.usgs.gov/GIS/huc.html)

Land Cover

Existing Land Use Data was obtained from the National Land Cover Database (NLCD). Land uses and associated modeling parameters have been adapted for the model using industry standards. Exhibits and tables of the existing land uses can be found in **Appendix E**.

Soils Data

Soil data was obtained from the Arizona Department of Transportation (ADOT) website via the State Soil Geographic Database (STATSGO). ADOT has developed additional infiltration parameters used as a state standard based on the Natural Resources Conservation Service (NRCS) soil database. The NRCS soil surveys AZ637 and AZ639 overlapped the computational area and were used for this analysis. A map of the existing soil data is provided in **Appendix E.**

Rainfall Data

Rainfall depth information was obtained from the NOAA Atlas 14 Precipitation Frequency Data Server (PFDS) for the project location to determine rainfall depth-duration-frequency data for the design storms. The depth-duration-frequency data was used to create rainfall hyetographs for the design storms. See frequency table in **Appendix F**.
(Source: https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html)

7.3. Parameters

Infiltration

Infiltration losses were accounted for in the 2D HEC-RAS and HEC-HMS model using ADOT soils dataset and the Green-Ampt infiltration method. Infiltration parameters are provided in **Table 1** and are listed by MUSYM which is the naming convention for regions in the soil database. The MUSYM polygon labels can also be seen in **Appendix E**. Various levels of natural percent impervious are defined in the ADOT database due to rock or bedrock and are applied in the land cover data.

Table *1* – Infiltration Parameters

MUSYM	WILTING POINT (DRY)	FIELD CAPACITY (NORMAL)	SATURATION (VOLUME RATIO)	SUCTION (in)	CONDUCTIVITY (in/hr)	NATURAL IMPERVIOUS PERCENT	SOIL MOISTURE CONTENT DRY	SOIL MOISTURE CONTENT NORMAL
WcC	0.2	0.34	0.45	16.18	0.05	0	0.11	0.25
VsC	0.19	0.32	0.48	10.17	0.11	0	0.16	0.29
SnD	0.29	0.41	0.49	13.6	0.02	0	0.08	0.2
SlB	0.3	0.42	0.5	13.14	0.02	0	0.08	0.2
LrD	0.13	0.24	0.42	7.81	0.26	0	0.18	0.29
Go	0.12	0.24	0.41	10.74	0.23	0	0.17	0.29
BgD	0.18	0.28	0.42	8.91	0.11	0	0.14	0.24
VtE	0.18	0.32	0.47	11.14	0.12	0	0.15	0.29
CaD	0.28	0.41	0.49	14.03	0.02	0	0.08	0.21
NOTCOM	0.3	0.42	0.5	13.14	0.02	0	0.08	0.2

*NRCS soil textures are extracted from the NRCS soil database for conceptual refence only and represent the dominant soil condition at a 15cm depth. Model parameters are extracted from the ADOT database developed specifically for Green-Ampt infiltration in Arizona.

Calibration or Unique Conditions

Model parameters for the 2D HEC-RAS model have not been adjusted for the purposes of calibration to measured data. No unique conditions have been encountered in the project area that would warrant adjustment to these parameters from those discussed here and in supporting documentation.

7.4. Results

Results from the HEC-RAS model estimate runoff depths and velocities in solar panels areas. Depths of ponding in retention basins are discussed in other sections of this report. The results of the HEC-RAS overland flow model can be found in drainage exhibits in **Appendix B**. The model results indicate that the offsite drainage area flows to existing washes on either side of the project area, with some offsite flow running onto or through the project bounds.

8.0 Yavapai County Drainage Requirements

The Yavapai County Drainage Manual outlines the AHJ's drainage requirements for the project. The project uses retention basins, swales, and berms to meet the requirements.

8.1. Stormwater Retention and Detention Requirements

Section 6 of the Yavapai County Drainage Manual contains several stormwater runoff requirements for the project, the requirements and methods used to satisfy the requirement are shown below:

- All stormwater runoff from the project site must be retained and treated. Stormwater retention basins used for treatment must be sized for the "First Flush" requirement, defined as 0.5 inches of direct runoff from a storm event. This is calculated as a half inch over the development area.
    - The first flush requirement will be satisfied using retention basins sized to retain the first 0.5 inches of runoff from the development area.
- Retention requirement: Retention basins must be sized to hold the 100-year, 2-hour runoff volume over the added impervious area for the project.
    - The retention requirement is not applicable to the project as it does not contain individual lots that are part of a larger subdivision development. The requirement will likely be met anyways due to the limited added impervious area on site and the amount of retention basin storage provided for first flush.
- Detention requirement: Post-development discharge must not exceed the pre-development discharge for the 2-, 10-, and 100-year storm events with a duration of 24 hours.
    - A detention requirement waiver for reduced retention volume requirements for this project was granted by the Yavapai County Flood Control District on 04/18/2025 (see **Appendix H**). The waiver states the 100-year 2-hour retention requirements are waived due to the project site stormwater runoff discharging to a watercourse with a drainage area exceeding 80 square miles.
    - The pre-development versus post-development rates will still be checked in lieu of the waiver to ensure that no adverse effects occur downstream of the project.

The first flush volume can be computed by the following Rational Method equation (per Equation 6.1 of the Yavapai County Drainage Manual):

$$V = C\,(P/12)A$$

Where: V = Volume Required (acre-feet)
C = Runoff Coefficient
P = First 0.5 inches of direct runoff (inches)
A = Project Area (acres)

Because of the minimally added impervious, permission has been granted by the County to use a composite runoff coefficient based on groundcover at the time of project completion. Based on the various land uses identified in the **Table 2** below, a composite runoff coefficient was calculated based on the standard rational coefficients provided in the Yavapai County Drainage Manuals. These values are shown below:

Table 2 – Runoff Coefficients

Area Type	Runoff Coefficient
EQUIPMENT AREA (SUBSTATION / BESS)	0.95
GRAVEL (ROADWAYS)	0.88
UNDEVELOPED AREA WITH VERY DENSE SOILS / BEDROCK	0.70
AREA WITH VERY DENSE SOILS / BEDROCK WITH SOLAR PANELS	0.75
UNDEVELOPED DESERT AREA	0.50
DESERT AREA WITH SOLAR PANELS	0.55

The runoff coefficients shown in **Table 2** above were increased by 0.05 in areas with panels to account for the raised impervious panels above the ground. Land cover determinations were based on the borings provided in the geotechnical report titled “Geotechnical Data Report” by Ninyo & Moore dated 12/05/2024.

8.2. Retention Basin Dewatering

Section 15.4.2.3 of the Yavapai County Drainage Manual requires a basin drawdown time of 24 to 36 hours after the end of the storm event. Due to the very dense soils and shallow bedrock located on site, infiltration is not expected to be adequate to drain the proposed retention basins in the required time. Infiltration trenches with draintile are proposed at the bottom of basins to achieve the drawdown requirements. See **Appendix J** for more information on the infiltration trench. All efforts will be made to place basins in areas with ground densities which will promote infiltration.

The first flush basin volumes provided in **Table 5** reflects storage below the emergency overflow elevation. The equation for determining the minimum first flush treatment discharge is as follows (Equation 6.2 of the Yavapai County Drainage Manual):

$$Q_{FF} = C\ I_{FF} A$$

Explain why first flush discharge is relevant. What design is it being used for?

Where: Q_{FF} = Minimum first flush discharge (cfs)
C = Runoff Coefficient
I_{FF} = Maximum first flush intensity (in/hr)
Where: $I_{FF} = P_{FF} / T_c$
P_{FF} = 0.5 inches
T_c = Time of concentration of the upstream watershed (hr)
A = Project Area (acres)

See **Appendix J** for Drawdown Calculations.

8.3. Rate Control and Water Quality

Rate Control

Yavapai County Drainage Manual Section 15.4.1.1 requires post-development peak discharges to not exceed pre-development peak discharges for the 2-, 10-, and 100-year, 24-hour storm events. The section also specifies requirements for detention volumes in the proposed basins throughout the project. Detention requirements have been waived for this project. However, the pre-development and post-development rate reduction will still be checked to ensure no adverse effects occur downstream of the project. For modeling purposes, we have assumed project areas will remain undeveloped desert post construction. Therefore, the addition of retention basins will reduce the overall runoff rates for the project site. Based on Section 7.9 of the Yavapai County Drainage Manual, the HEC-HMS Hydrologic Modeling System will be used for runoff rate modeling to ensure the rates requirements are being met for this project. HEC-HMS utilizes the Unit Hydrograph Method to perform stormwater modeling. HEC-HMS refers to subcatchments and retention basins as subbasins and reservoirs, respectively. See **Appendix C** for HEC-HMS reports.

Water Quality

Pollutants and sedimentation will be controlled from leaving the project area by installing retention basins that have been sized for “First Flush”, defined as the first 0.5 inch of runoff over the development area. All runoff from the project site, including access road and inverter pads will be caught by proposed stormwater design features prior to draining to wetlands or off the project area.

8.4. Retention Basin Design

Retention basins are the primary stormwater feature utilized to ensure all requirements are satisfied. The following design assumptions were used for retention basin design:

Design Assumptions

Are perched basins allowed by YC? If no, do they need a waiver?

- Berms will be constructed perpendicular to the ground slope
- Existing soils, typically identified as very dense fat clays, are HSG Type D
- Composite runoff coefficients are displayed in **Table 5** below
- Seasonal high groundwater elevation is well below the elevation of any stormwater management area onsite
- Basins to have a maximum storage depth of 2'
- Basins to have a 16' maintenance clear area around its perimeter
- Basin sides slopes are to be 4:1

See **Appendix J** for retention basin design detail.

The site was broken into thirteen individual drainage areas for stormwater basin retention calculations. Each area will contain retention basins, sized for the volume required for its respective drainage area. To ensure the proper drawdown time, all basins will have a maximum storage depth of 2 feet, 1 foot preferred. Each basin will also utilize an infiltration trench with draintile that outlets from the basin in a singular outlet pipe. This allows the basin to treat the retention volume while still allowing the runoff to outflow from the basin. See **Table 5** for retention basin treatment volume calculations.

The retention basins were sized using the first flush requirement from the Yavapai County Drainage Manual. Due to the limited impervious area added from the project, a composite runoff coefficient was used for design in first flush calculations as approved by Yavapai County.

Constraints

According to the geotechnical report titled "Geotechnical Data Report Agua Fria Solar" by Ninyo & Moore dated December 5, 2024, there are very dense clay soils and shallow bedrock. Due to shallow bedrock and setback requirements outlined in Section 608 Solar Facilities located in the Yavapai County Planning & Zoning Ordinance, there are areas where runoff from the development area is not able to be retained in a retention basin. Drainage ditches or berms have been utilized where possible to direct water to a retention basin. If a retention basin or drainage ditch is not feasible, silt fence and/or rock check dams will be used to reduce erosion and sediment transport from the project site.

Retention basin emergency overflows and drainage ditches have not been sized at the time of this submittal. Ditches are assumed to have a 10' bottom width, 1' depth, and 4:1 side slopes. Basin emergency overflows are assumed to be 100' in length along the berm for the purposes of the HEC-RAS hydrology modeling. These items will be sized later in design in accordance with the Yavapai County Drainage Manual.

9.0 Calculations and Data

Rainfall Depths

Climate and Precipitation

- Rainfall Frequencies per NOAA Atlas-14

Table 3 - Rainfall Events	
Recurrence Interval (yrs)	24-hour Rainfall Depth (in)
2-year	2.05
10-year	2.98
100-year	4.47

Rate Control Calculations

The existing and proposed HEC-HMS output reports from the model of this system are attached in **Appendix C**. HEC-HMS implements the HEC-1 unit hydrograph simulation method which satisfies the requirements from the Yavapai County Drainage Manual for rate reduction calculations to be done using the Unit Hydrograph Method.

Table 4 below outlines the results from the HEC-HMS modeling, showing that the post-development rates were reduced for each design storm after the addition of several drainage ditches, berms, and retention basins.

Table 4 – Pre and Post Runoff Rates						
Outflow Location	Pre-development 2-year (cfs)	**Post-development 2-year (cfs)**	Pre-development 10-year (cfs)	**Post-development 10-year (cfs)**	Pre-development 100-year (cfs)	**Post-development 100-year (cfs)**
CP1	38	**38**	409	**409**	1093	**1093**
CP2	297	**300**	810	**806**	1654	**1654**
CP3	318	**325**	2321	**2268**	6789	**6696**
CP4	361	**363**	999	**1004**	2073	**2084**
CP5	191	**194**	620	**634**	1344	**1368**
CP6	484	**508**	1454	**1521**	3102	**3223**

Volume Reduction Calculations

If the waiver has been approved, why is pre-vs-post analysis included?

According to the Yavapai County Drainage Manual, all stormwater runoff across the project area must be retained on site and meet the first flush volume retention requirement. To calculate the required first flush volume, the project area was broken up into 13 subcatchments. See **Appendix A** for the map depicting the subcatchment locations. **Table 5** states the required first flush volume based on composite runoff coefficient for the subcatchment and the subcatchment area draining to each basin.

Table 5 – Required First Flush Volume Calculations					
Subcatchment No.	Basin ID	Composite Runoff Coefficient C	Basin Subcatchment Area (ac)	Required Treatment Volume (cf)	Provided Treatment Volume (cf)
1	1-1	0.53	4.13	3,998	5,329
	1-2		4.80	4,645	5,516
	1-3		28.60	27,659	27,661
2	2-1	0.53	5.41	5,244	15,459
	2-2		6.28	6,085	6,488
	2-3		7.90	7,660	8,235
	2-4		3.39	3,287	4,173
	2-5		8.86	8,586	10,943
	2-6		42.38	41,072	46,245
	2-7		23.22	22,501	27,152
	2-8		1.84	1,786	4,521
	2-9a		22.50	21,805	37,514
	2-9b		6.34	6,146	12,314
	2-10		4.85	4,698	6,703
	2-11		27.94	27,079	27,473
	2-12		4.72	4,570	7,382
	2-13		9.89	9,582	9,901
3	No proposed development				
4	4-1	0.78	17.78	25,132	26,225
	4-2		20.96	29,625	30,015
	4-3		7.98	11,273	12,244
	4-4		17.36	24,529	25,211
5	5-1	0.58	6.44	6,804	6,862
	5-2		32.20	34,034	36,855
	5-3		17.76	18,771	18,888
	5-4		14.34	15,157	15,382
	5-5		4.04	4,267	6,880
	5-7		7.72	36,855	8,867
	5-8		29.44	18,888	32,113
	5-9		26.17	15,382	29,212
	5-10		11.74	6,880	13,489
	5-11		29.29	6,862	31,113
	5-12		19.09	36,855	21,659
	5-13		18.95	18,888	21,239
	5-14		13.44	15,382	16,431
	5-15		10.23	6,880	12,828

	5-16		7.48	6,862	9,593
	5-17		26.38	36,855	28,891
	5-18		15.60	18,888	17,635
	5-19		36.17	15,382	41,016
	5-20		39.90	6,880	43,215
	5-21		44.76	6,862	50,498
	5-22		5.81	36,855	8,541
	5-23		18.10	18,888	19,890
6	6-1	0.54	37.57	6,862	40,098
	6-2		14.89	36,855	15,068
	6-3		23.45	18,888	23,471
	6-4		22.07	15,382	24,609
7	7-1	0.51	13.41	12,445	13,563
	7-2		2.06	1,916	2,179
8	8-1	0.55	4.20	4,165	4,408
	8-2		12.30	12,201	14,512
	8-3		72.15	71,582	110,508
	8-4		12.95	12,847	22,222
	8-5		10.74	10,651	21,970
	8-6		6.74	6,691	8,062
	8-7		7.87	7,805	8,255
9	No proposed development				
10	10-1	0.62	66.33	74,575	74,942
	10-2		74.03	83,226	120,067
	10-3		21.52	24,194	24,382
	10-4		16.67	18,739	22,928
	10-5		9.35	10,517	12,627
	10-6		13.15	14,781	15,738
	10-7		48.35	54,360	80,177
	10-8		32.07	36,051	54,622
	10-9		45.71	51,385	51,400
	10-10		28.13	31,627	49,464
	10-11		18.03	20,271	24,178
	10-12		15.85	17,823	17,902
	10-13		2.42	2,720	3,187
11	11-1	0.61	8.97	9,930	21,336
	11-2		41.31	45,716	55,714
	11-3		10.44	11,555	13,715
	11-4		2.84	3,148	5,245
	11-6		5.08	5,617	12,796
	11-8		20.88	23,102	26,580

	11-9		54.14	59,916	58,902
	11-11		7.63	8,440	9,588
	11-12		12.43	13,753	19,131
	11-13		5.22	5,773	7,797
12	12-2	0.73	25.899	34,341	34,341
	12-4		11.241	14,905	16,349
13	13-2	0.74	11.58	15,502	44,000
	13-3		32.29	43,207	46,753

Table 6 – Treatment Volume Summary

Area No.	Total subcatchment area (ac)	Required Treatment Volume (cf)	Provided Treatment Volume (cf)
1	37.54	36,302	37,715
2	183.97	170,101	224,503
3	No proposed development		
4	64.08	90,559	93,695
5	510.55	462,063	491,560
6	108.74	98,009	103,657
7	15.48	14,360	15,742
8	126.94	125,942	189,937
9	No proposed development		
10	391.62	440,268	551,614
11	180.37	197,427	229,287
12	48.34	62,124	70,511
13	46.41	58,709	90,753
TOTAL	**1714.04**	**1,755,864**	**2,098,974**

Basin Drawdown Time

According to the Yavapai County Drainage Manual, all stormwater retention basins shall drawdown completely in 24 to 36 hours after the storm event has occurred. The geotechnical report and associated borings indicate the on-site soils to be very dense clay and bedrock with very little to no infiltration. Infiltration trenches will be utilized on proposed basins with sand trenches to be installed at the bottom of basins to allow water to be treated and infiltrate into a draintile system which can outflow from the basin from a singular outlet pipe. The infiltration trenches will allow the basins to retain the required treatment volume while ensuring the drawdown time requirements are also met. Drawdown and trench calculations can be found in **Appendix J**.

10.0 County Setbacks

The Yavapai County Board of Supervisors approved "Section 608 Solar Facilities" on November 6, 2024, taking effect on December 4, 2024. This document is located in the Yavapai County Planning & Zoning Ordinance, Section 608 Solar Facilities.

Due to the setbacks required in Section 608 and the stormwater runoff requirements for the project in the Yavapai County Drainage Manual, waivers will be requested from the County on specific setbacks and locations.

WHAT ABOUT SETBACKS FOR THE FAIRLY LARGE WASHES ONSITE AS IDENTIFIED BY 2D MODEL?

11.0 Federal Emergency Management Agency (FEMA)

There are several locations throughout the project site designated as FEMA Zone A floodplains. Most of these areas will not be impacted throughout construction. A 500' FEMA Zone setback has also been applied to these areas for design per the Yavapai County Planning & Zoning Ordinance – Section 608 Solar Facilities.

12.0 Scour & Erosion Potential

The computations for scour potential in the project area were based on an equation for local pier scour in non-cohesive taken from the Federal Highway Administration and U.S. Department of Transportation "Evaluating Scour at Bridges, Fifth Edition" manual found in **Appendix G** of this report.

$$\frac{y_s}{y_1} = 2.0K_1K_2K_3(\frac{a}{y_1})^{0.65} * Fr_1^{0.43}$$

y_s = Scour depth (ft)
y_1 = Flow depth directly upstream of pier (ft)
K_1 = Correction factor for pier nose shape
K_2 = Correction factor for angle of attack from flow
K_3 = Correction factor for bed condition
a = Pier width (ft)
Fr_1 = Froude number directly upstream of the pier

Total scour is typically calculated for bridge piers/abutments as general scour plus local scour. Pier scour is a type of local scour and is used for the pile scour depth analysis. Most local scour equations are simulated in a laboratory for piles located in stream channels. There hasn't been an analysis conducted/researched for a solar array situation. The HEC 18 equation is currently the most widely used and accepted equation for local pier scour. See assumptions below:

- Scour equation analysis was conducted in a laboratory simulating a streambed using non-cohesive soils
- HEC 18 calculated scour depth against field observed measurements indicate general overprediction for scour

Values for the K-value correction factors and pier dimensions are as follows:

Parameter	Value	Notes
a, Pier Width	0.5 ft	6.0-inch x 6.0-inch pile

L, Pier Length	0.5 ft	6.0-inch x 6.0-inch pile
K_1, Pier Nose Shape	1.0	Square Nose from Table 7.1, for $\theta > 5°$, K_2 dominates and K_1 is 1.0
K_2, Angle of Attack	1.3	From Eqn 7.4; (L/a) = 1, $\theta = 45°$
K_3, Bed Condition	1.1	Plane Bed and Anti-dune flow

Scour depth (y_s) is computed via the equation above in excel using output data from HEC-RAS 2D for each grid location that has an associated flow depth (y_1) and velocity (V_1). Froude numbers (Fr_1) are calculated from the flow velocity (V_1) and flow depths (y_1), where $Fr_1 = V_1/(gy_1)^{1/2}$. The pier/pile length (L) and width (a) used are standard pile sizes.

13.0 High Water Level

The 100-year high-water level for the overall site was analyzed using the HEC-RAS model and is shown in the high water level exhibit in **Appendix B.**

14.0 Drainage System Components and Maintenance

The stormwater design for the proposed Agua Fria project consists of drainage ditches, berms, and retention basins. The operations and maintenance of the primary drainage features are included below. The Landscaping Plan, submitted alongside this report, covers the Project's approach to preserving vegetation on-site, revegetating the site, managing weeds, and maintaining site vegetation during operations.

Maintenance Frequency

The owner shall perform an inspection at least once every four months and within 24 hours of each storm event of 0.5 inch or greater in 24 hours to ensure that control measures are functional. Non-storm event inspections must be at least three months apart. To determine the amount of rainfall from a storm event, the owner shall obtain rainfall information from either a properly maintained rain gauge on site, or a weather station that is representative of the site's location. Following a storm event, any trapped sediment shall be removed from rock stabilized areas around steep slopes and stormwater conveyance channels

Permanent Seeding

A native plant seeding mix s proposed as per the landscape plan for the project. Dust control measures have been implemented to meet ADEQ's CGP and Yavapai County's requirements.. If natural vegetation is established, routine mowing should be implemented to limit vegetation height to less than 1.0', or natural vegetation should be treated with herbicide to prevent growth.

Drainage Ditch Operation and Maintenance

Drainage ditches are used to ensure all runoff from the project site can be caught and treated in a retention basin. Maintenance will include the following:

- Repair areas where channelized flow occurs to restore flow through the structure.
- Repair areas with erosion and carefully remove accumulated sediments if needed to restore the function of the structure.

- Stabilize contributing areas to structures as needed to prevent erosion and sedimentation.
- Remove accumulated debris and/or excessive vegetation to restore the structure to its design function and routing capacity.
- Remove debris or other obstructions within the retention system and/or spillway as necessary.

The open channel design includes 4:1 side slopes for maintenance access.

Permanent Retention Basin Operations and Maintenance

Retention basins have been sized to hold and treat the first flush, defined as the first 0.5 inches of runoff from the project site. Maintenance will be the responsibility of the property owner after construction and will include the following:

- Repair areas where channelized flow occurs to restore flow through the structure.
- Repair areas with erosion and carefully remove accumulated sediments if needed to restore the function of the structure.
- Stabilize contributing areas to structures as needed to prevent erosion and sedimentation.
- Remove accumulated debris and/or excessive vegetation to restore the structure to its design function and routing capacity.
- Remove debris or other obstructions within the retention system and/or spillway as necessary.
- Ensure that berms are in working conditions, with no signs of failure.
- Clean out excess sediment on top of infiltration trenches to ensure infiltration rates are maintained.

Access Roads

When maintaining the all-weather access road, it is important to provide the following:

- A 1.0 to 2.0% cross slope is recommended for proper drainage.
- For all-weather access roads, it is recommended that vehicles do not exceed 10 miles per hour as to minimize dust control.
- Pay attention to the seasons. Some regions have certain times in the year when frequent and heavy rainfall can be expected. Try to avoid major reshape work during those time periods.
- Keep disturbed areas as small as possible. The more earth you disturb, the greater will be the risk of soil erosion. Set work boundaries and do not let work crews get outside of them. Consider stabilization of disturbed areas.
- Inspect recent work. It is vital to make sure channels or rills have not formed in ditch bottoms or on slopes near to roads, or around and under controls that were used. Be particularly vigilant after heavy rain events.

Rock Check Dam Operations and Maintenance

Rock check dams have been placed in drainage ditches to prevent erosion and sediment runoff into the retention basins. It is the responsibility of the owner to maintain the rock check dams. The rock check dams shall be inspected and repaired/reshaped as necessary. Trapped sediment will be removed following storm events.

15.0 Conclusion

In conclusion, the project was able to meet the requirements stated in the Yavapai County Drainage Manual while designing with the setback requirements put forth in the Yavapai County Planning & Zoning Ordinance – Section 608 Solar Facilities. The primary stormwater requirements were satisfied by the following:

- First Flush – Retain and treat the first 0.5" of runoff over the development area
    - Retention basins sized to retain this volume while infiltration trenches were added to the bottom of basins to treat the water
- 24 to 36 hour drawdown time requirement
    - Infiltration trenches at bottom of basins were designed to allow runoff to be treated but still outflow to drawdown the basin with the 36 hour requirement
- Post-development rates shall not exceed pre-development runoff rates
    - HEC-HMS was used to model the subcatchments and retention basins to ensure the runoff rates were reduced post-construction.

Construction phase stormwater requirements of this project are met by obtaining the ASPDES permit, which includes generating a SWPPP and implementing erosion control BMP's sufficient to satisfy the permit requirements. Post construction phase stormwater requirements are met by installing stormwater berms, ditches, and retention basins with infiltration trenches. The requirement for retention basins to catch everything leaving the project site is the primary contributor to the overall runoff rate reduction from pre to post construction.

Existing Condition			
Basin	Q100 (cfs)	Q10 (cfs)	Q2 (cfs)
ECP1	1093	409	38
ECP2	1654	810	297
ECP3	6789	2321	318
ECP4	2073	999	361
ECP5	1344	620	191
ECP6	3102	1454	484

NO EXISTING CONDITION DELINEATION?

CPs SYMBOLS ARE NOT AT CONCENTRATION POINTS

DIFFERENT CPs

ECP1

ECP2

ECP3

ECP4

ECP5

ECP6

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Eden Prairie, Minnesota 55344
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www.evs-eng.com

CLIENT
MCCARTHY BUILDING COMPANIES

PROJECT
AGUA FRIA SOLAR

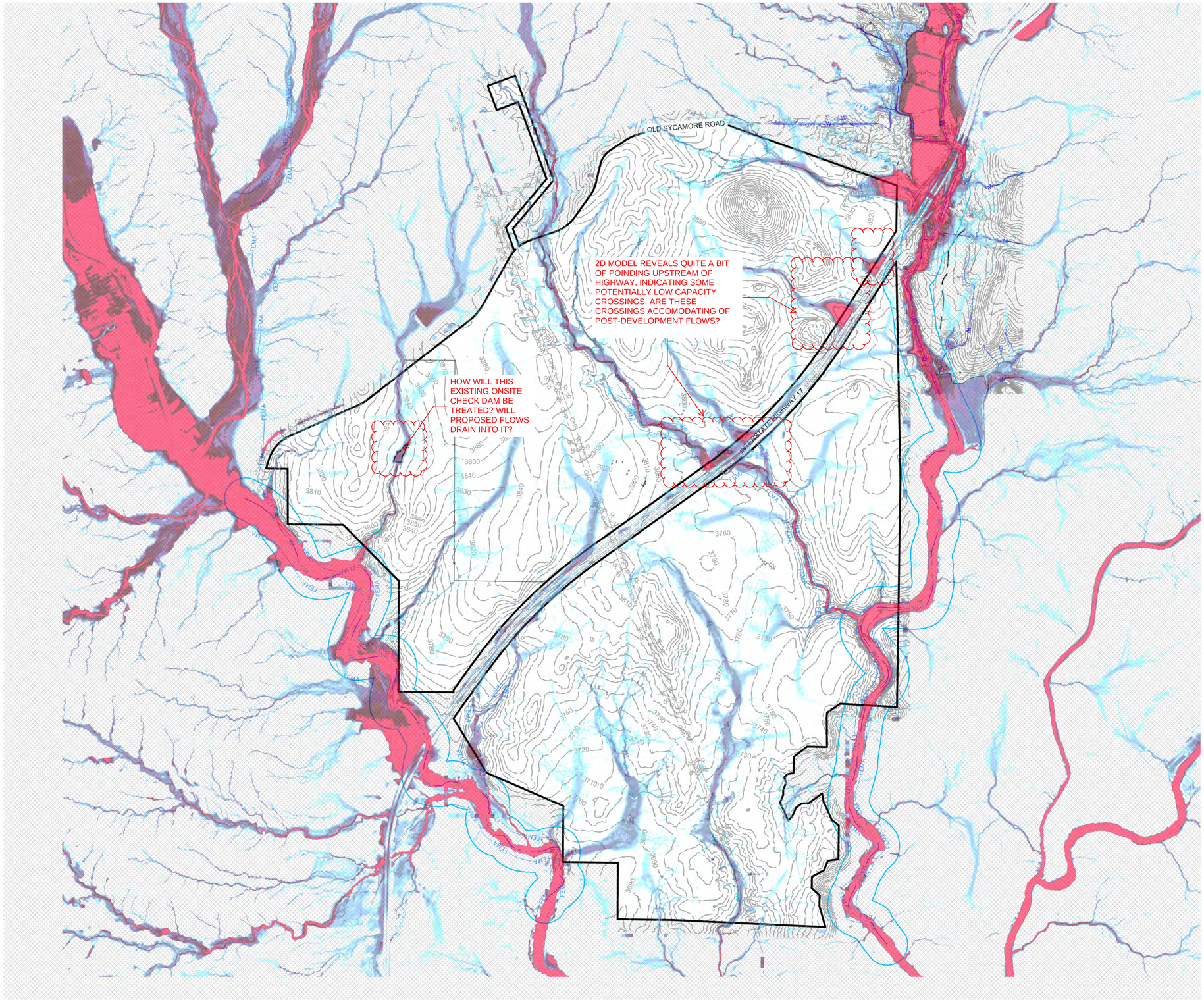
LOCATION
YAVAPAI COUNTY, AZ

LEGEND
- PROJECT SITE
- SUBCATCHMENT
- EXISTING FLOW PATH
- EXISTING CONCENTRATION POINT

0 5,000 10,000 ft

EXISTING CONDITION

PREPARED BY:	PROJECT #:
GVM	2024-167
CHECKED BY:	DATE:
WBH	07.28.2025



LEGEND

EXISTING FEATURES

- PROPERTY LINE
- EASEMENT LINE
- ROAD RIGHT-OF-WAY
- NON-PARTICIPATING BOUNDARIES
- PARCEL LINE
- DIRT ROAD
- ASPHALT ROAD
- VEGETATION
- FENCE
- OHP — OVERHEAD POWER
- OVERHEAD POWER POLE/TOWER
- STRUCTURE
- AGUA FRIA RIVER
- ASH CREEK
- FEMA — FEMA 100-YEAR (ZONE A)
- MAJOR CONTOUR

100-YR STORM HWL DEPTHS

- 0.25' - 0.50'
- 0.50' - 1.00'
- 1.00' - 1.50'
- 1.50' - 2.00'
- 2.00' - 2.50'
- 2.50' - 3.00'
- 3.00' - 3.50'
- 3.50' - 4.00'
- 4.00' - 5.00'
- 5.00'+

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Arizona Registration #16725-0

CLIENT

McCARTHY

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH
0 1200 2400 FT
1 2 IN
DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A		COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

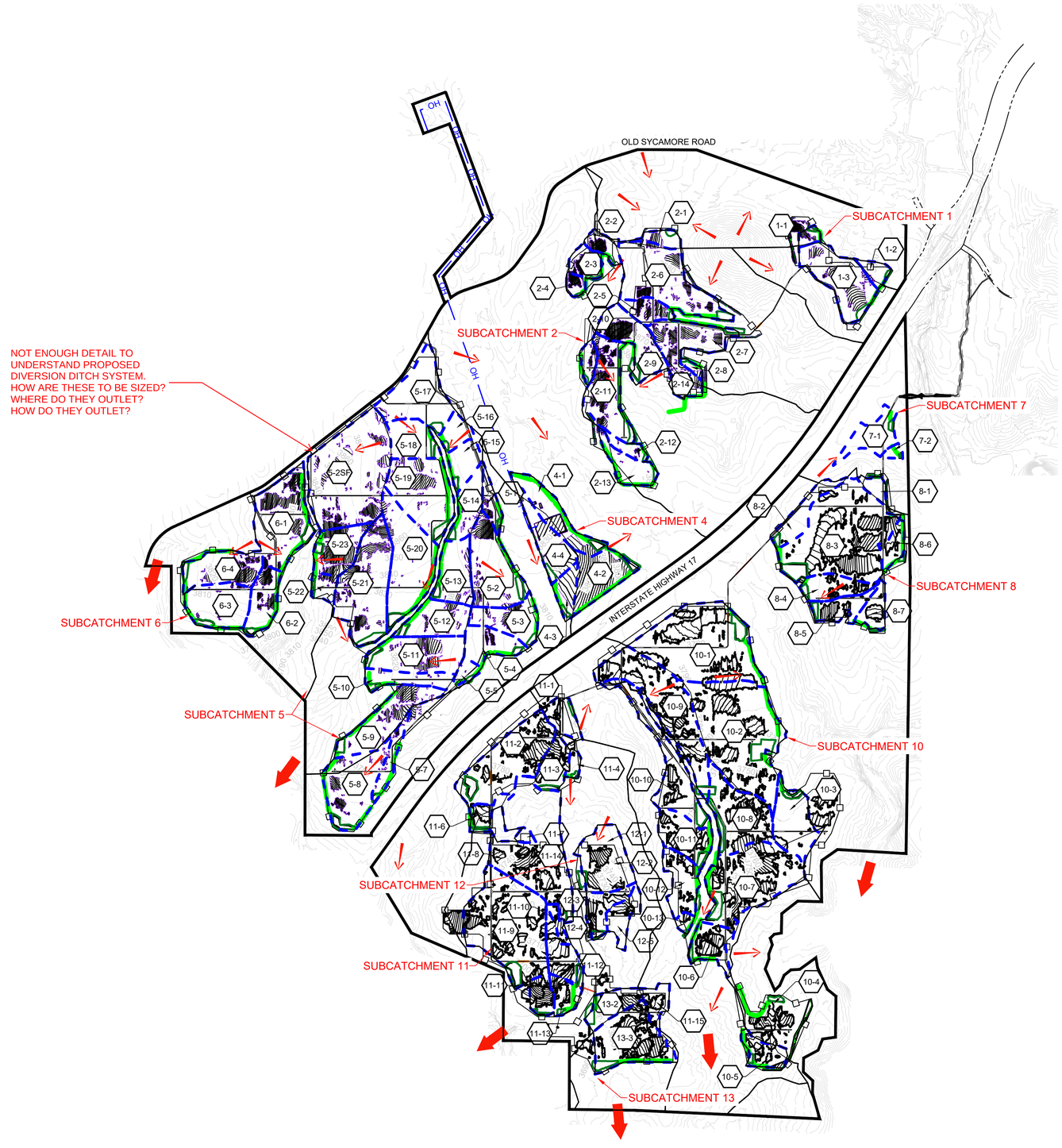
PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	**PROJECT #**
2025.07.29	2024-167

SHEET NAME
EXISTING 100-YEAR 24-HOUR HWL

SHEET NUMBER
EXHIBIT

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LEGEND

- PROJECT BOUNDARY
- SUBCATCHMENT BOUNDARY
- DRAINAGE PATTERN
- SUBCATCHMENT (#)
- STORMWATER BASIN
- DIVERSION DITCH
- SUBCATCHMENT OUTFLOW

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Arizona Registration #16725-0

CLIENT

McCARTHY

PROJECT
AGUA FRIA SOLAR

LOCATION
34.384909, -112.091644
MAYER, AZ

SUBMITTAL
COUNTY SUBMITTAL

SCALE

NORTH

0 1200 2400 FT
1 2 IN

DRAWING SCALES APPLY TO 22" x 34" SHEETS

#	DATE	DESCRIPTION
A		COUNTY SUBMITTAL

PROFESSIONAL CERTIFICATION

PRELIMINARY, NOT FOR CONSTRUCTION OR PROCUREMENT

DRAWN BY	CHECKED BY
SH/AM	BJ
DATE	PROJECT #
2025.07.29	2024-167

SHEET NAME
PROPOSED DRAINAGE EXHIBIT

SHEET NUMBER
OVERALL

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DATE: 2026.06.18

Title: Agua Fria Solar – Drainage Report – 1st Review Comment Responses

From: Bryan Jones – Civil Project Manager

Introduction

Please see below for EVS' responses to comments made by Westwood, on behalf of Yavapai County, AZ on May 28,2026 in regard to the *Agua Fria Solar: Preliminary Stormwater Management Plan*, dated July 29th, 2025 by EVS. Westwood comments made in the PDF "Sim_Comments.pdf" were copied and pasted into this document. The EVS responses are indicated by red text.

---

1. **(*PDF page 7, 6.2 New Offsite Flow Management*)**: According to the hydrology presented in this SMP, offsite flows do enter the Site; therefore, management of offsite flows is necessary for this project. Please discuss the general plan for capturing and conveying offsite flows through the Site where applicable.

    a. The large offsite washes from the north run through the lease boundary, but the proposed development avoids these areas. The project does propose ditches and berms to redirect flow from localized high points within nonbuildable areas which are within the lease line. Section 6.2 will be adjusted to clarify that large offsite washes entering the lease area from north of the site will be avoided with development. Drainage from high points within the lease will be redirected using swales and berms to route flow around development and into major washes.

2. **(*PDF page 11,8.2 Retention Basin Dewatering*):** While it is clear that the first flush basins are to be sized using equation 6.1, it is unclear what the first flush discharge will be used for. Please clarify this in the report.

    a. The stormwater design will rely on the retention of the first flush volume using Equation 6.1 of the drainage manual. The first flush discharge reference will be removed from the report.

3. ***(PDF page 12,8.2 Retention Basin Dewatering):*** Berms must have a minimum top width of 8 feet, per Section 15.4.3.3 of the Yavapai County Manual. Please list this in the design assumptions on this page.

    a. EVS to add minimum 8' width design requirement to this section.

4. ***(PDF page 12,8.4 Retention Basin Design (PDF Comment):*** Are perched basins allowed by YC? If no, do they need a waiver?

    a. According to section 15.4.3.3 of the Yavapai Drainage Manaul, basin berms are allowed if section requirements are followed.

5. ***(PDF page 13, 9.0 Calculations and Data (PDF Comment):*** If the waiver has been approved, why is pre-vs-post analysis included?
    a. Pre vs post rates provided for County visibility through the stormwater review process.

6. **(PDF page 17, 10.0 County Setbacks):** Discuss the general approach to drainage setbacks for local water courses in locations where waivers will not be requested.

a. Stormwater infrastructure is initially placed in accordance with setbacks outlined Section 608 Solar Facilities of the Yavapai County Planning & Zoning Ordinance. Further influences include concentration locations based on topography, project layout, and bedrock areas for locations of basin and conveyance swales.

7. **(PDF page 17, 10.0 County Setbacks):** What about setbacks for the fairly large washes onsite as identified by 2D model?

    a. As design progresses, basins will be adjusted accordingly to avoid areas of excessive high water level from surrounding washes

8. **(Appendix A, Proposed Drainage Exhibit):** Based on this exhibit, all stormwater runoff from the developed areas will be routed to the proposed first flush basin. Please note, for this design approach, the emergency overflow for the basin will need to be sized for all storm events up to the 100-year event.

    a. EVS to add note that emergency overflows for all basins need to be sized for storm events up to the 100 year.

9. **(Appendix A, Proposed 100-Year 24-Hour Drainage Exhibit):** Not enough detail to understand proposed diversion ditch system. How are these to be sized? Where do they outlet? How do they outlet?
    a. Diversion ditches are intended to convey drainage from high points within the lease boundary which drain into the development area into existing major washes that run through the site. Conveyance swales have been preliminary designed to be 10' wide but have not been finalized.
10. **(Appendix B, Existing 100-Year 24-Hour HWL):** The existing condition model identifies an existing check dam within a wash on the northwest side of the property. How will this existing onsite check dam be treated? Will proposed flows drain into it? Please discuss this in the SMP.

    a. Flow from project will be intercepted and treated by designed basins before discharging into check dam area

11. **(Appendix B, Existing 100-Year 24-Hour HWL):** The 2D model reveals ponding upstream of Interstate 17, indicating some potentially low capacity crossings. Do these crossings accommodate post-development flows?

    a. The stormwater design captures all water leaving the development area and detains it in basins to reduce peak flow at the highways box culverts. The HEC-HMS and HEC-RAS model will be used to verify that the proposed development will not have adverse effects to the AZDOT infrastructure.
12. **(Appendix C, Existing 100-Year 24-Hour Drainage Exhibit):** No existing condition delineation? CPs symbols are not at concentration points.
    a. The subbasins which drain to the CP's symbols are shown on page 132, 218, 274, 370, 436, 570, 680, 750, 880, and 964. The existing drainage exhibit will be updated to show the subbasins for each CP in a more concise manner in future submittal.

Agua Fria Solar and Storage Project

Visual Impact Analysis

Yavapai County, AZ

Prepared for:

Yavapai County

Prepared by:

kp environmental

December 2025

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Figure 2b: Visual Resources Zoom

Figures 2-1 – 2-9, 2-13: KOP Existing Conditions and Visual Simulations

Figures 2-10 – 2-12, 2-14 – 2-17: Photo Point Existing Conditions

Figure 3: Residential

Executive Summary

The proposed modifications to the existing landscape would attract attention as viewed from various viewpoints and viewing distances, but the changes would not generally dominate the view of the casual observer. The Project would be consistent with the Yavapai County Comprehensive Plan policies regarding development within viewsheds. The Project would incorporate best management practices (BMPs) and project design elements meant to avoid and reduce potential visual impacts. These include leaving open space areas throughout the Project Area, fencing designed to blend with the environment, and visual design considerations.

The Project would introduce low to moderate visual changes to the surrounding landscape. Further, the majority of the Project is relatively low in profile, with the exception of the project substation and Battery Energy Storage System (BESS), which include taller structures of approximately 15 feet in height. These taller structures are set back from viewpoints in the middle of the Project Area, reducing visual contrast with the environment. The BESS will be enclosed by a Project-specific corrugated metal fence to provide visual screening. The existing high-voltage transmission line's tall structures would reduce the perceived visual change resulting from the Project. The Project adheres to the setback requirement from existing roadways to increase viewing distance for motorists, including the minimum 300-foot setback from Interstate 17 (I-17). The retention of significant unfenced open space throughout the Project additionally mitigates visual impact and massing. Additionally, the revegetation plans of the Project will assist in softening the visual impact and will ensure cohesion with the surrounding environment. Overall, visual effects would be subtle to moderate, limited by distance, screening vegetation/fences, and the retention of broad natural landscapes.

1.0 Introduction

The Yavapai County Zoning Ordinance has been revised to add Section 608 *Solar Facilities* with requirements, standards, and procedures to regulate the development of utility scale solar facilities. The revised Zoning Ordinance was adopted on November 6, 2024, and took effect on December 4, 2024 (Yavapai County, 2024).

This Visual Impact Analysis was prepared to demonstrate project siting and analyze the potential visual impacts from the Project, as well as to determine opportunities for improvement, design changes, and enhanced screening which are included in the conclusion of this report. The Visual Impact Analysis was prepared pursuant to the requirements of the Solar Facility Use Permit. The Visual Impact Analysis describes the existing visual landscape in the Project vicinity, explains the methodology for selecting key observation points (KOPs) and Photo Points, provides photographic simulations of the Project, analyzes impacts on existing visual quality and character as seen by potential viewers, and identifies measures to minimize those impacts. The Visual Impact Analysis uses the Bureau of Land Management (BLM) Visual Resource Management (VRM) system and industry standard methodologies to assess public sensitivity to visual change based on the type of user, level of use, and orientation to the Project. The BLM's Visual Contrast Rating system assesses the degree to which a management activity affects the visual quality of a landscape depending on the visual contrast generated by a proposed project to the existing landscape. The BLM system measures the contrast by comparing the project features with the major features in the existing landscape. The basic design elements of form, line, color, and texture are used to make this comparison and to describe the visual contrast created by the Project.

The Yavapai County Comprehensive Plan contains the following policies regarding development in viewsheds:

Policy 4l: Discourage development on steep slopes and ridgelines that impact viewsheds

Policy 11a: Discourage high profile structures that obstruct viewsheds in scenic areas

Policy 11b: Discourage developments on ridge tops

Policy 11c: Encourage deeper setbacks along scenic roadways to avoid obstruction of viewsheds

1.1 Project Location

The Agua Fria Solar and Storage Project (Project) is located in the southeastern portion of Yavapai County, Arizona, within a rural area characterized by mountainous desert landscape and unincorporated communities. There are existing utilities and infrastructure in the Project vicinity including several existing high voltage transmission lines, the existing Dugas Substation, as well as Interstate 17 (I-17) which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the City of Prescott.

1.2 Project Components

The Project is an up to 450 megawatt (MW) nameplate capacity solar photovoltaic (PV) power plant. The Project consists of a solar field of PV modules (solar field), battery energy storage system (BESS), project substation, operation and maintenance building, and ancillary facilities. The Project would be located on Arizona State Trust Land managed by the Arizona State Land Department (ASLD) (ASLD Land), see **Figure 1,** and controlled by Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona (Applicant) via a solar lease. The Applicant is a subsidiary of Longroad Development Company, LLC (Longroad).

The Project Area is approximately 4,215 acres. Within the Project Area, the Development Area would be approximately 1,930 acres, the BESS would be approximately 35 acres, and the project substation would be approximately 5 acres. In addition, there will be a generation tie (gen-tie) line associated with the Project to connect the power generated from the solar facilities to the grid at Dugas Substation. The gen-tie would be approximately 1.8 miles in length and sited within a corridor located north of I-17, south and east of the existing Dugas Substation, and directly east of the existing 500 kilovolt (kV) transmission line corridor. The Applicant received a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission for the gen-tie in May 2025.

2.0 Visual Resources

Visual resource information for the Project Area and surrounding areas was gathered from Yavapai County, Google Earth, the Bureau of Land Management (BLM), the Arizona Game and Fish Department (AGFD), and the United States Forest Service (USFS). Yavapai County's outstanding scenery and diverse natural environment attracts people who enjoy diverse recreational opportunities, as well as many historic and cultural sites (Yavapai County, 2023).

A visual resource, as defined by Yavapai County, is a physical feature that defines the visual and aesthetic character of an area, and can include natural features, scenic vistas and viewsheds, or human-made structures on or in a landscape (Yavapai County, 2024). Resource designations such as a Scenic Byway, Scenic Corridor, Scenic Road, Historic Road, National All-American Road, gateway community, National Scenic, or National Historic Trails, or other well-established trails, National or County Parks and Monuments, ridgelines, and the Granite Dells are examples of Visual Resources, or as determined through the Preliminary Site Investigation described in subsection D.1.c(2) of Section 608 *Solar Facilities* of the Yavapai Zoning Ordinance. As noted above, the BLM's Visual Contrast Rating system methodology is also utilized in this report to assess the changes in visual quality and character due to implementation of the Project.

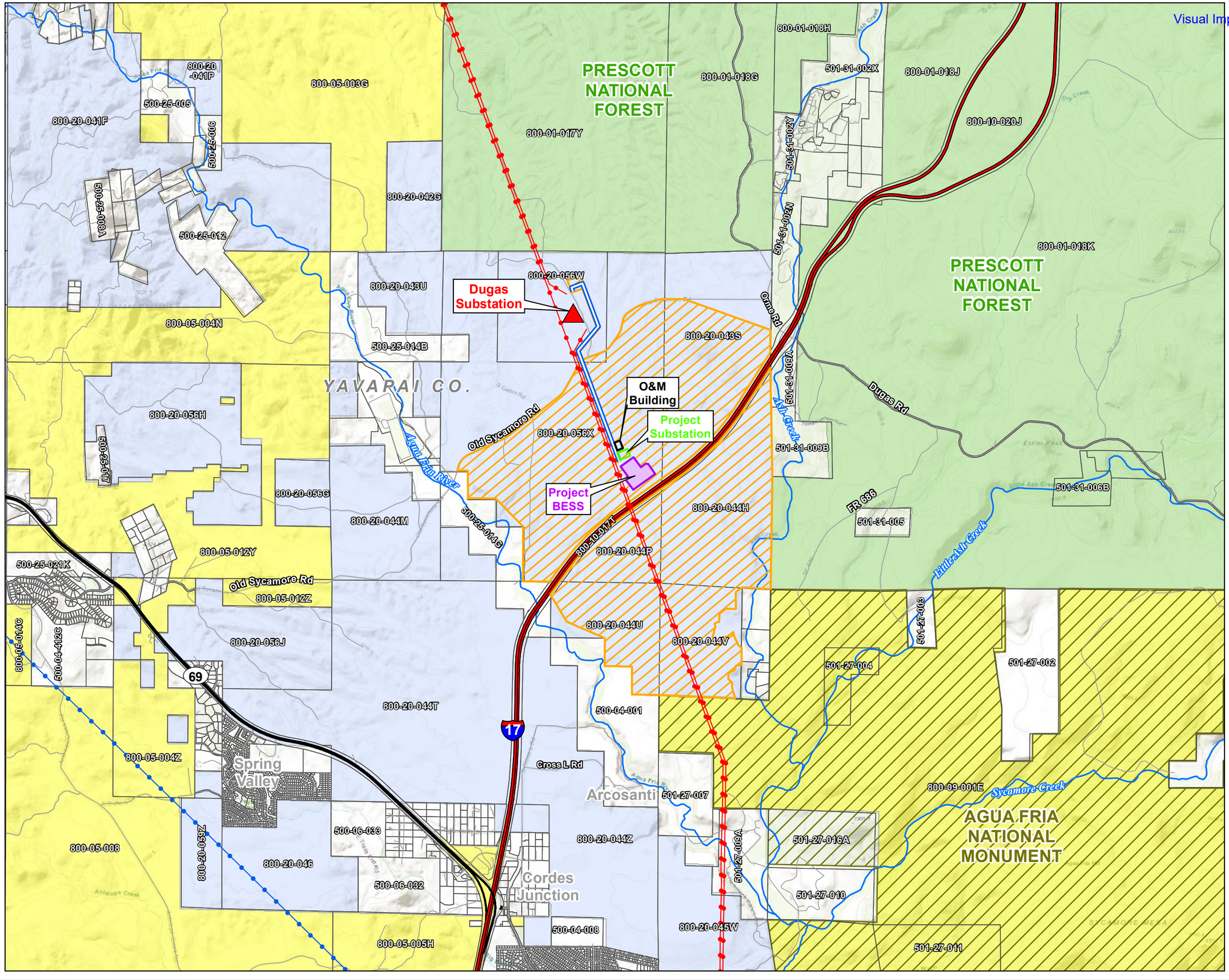
2.1 Methodology

This report follows a structured approach to evaluate visual impacts of the Project. The methodology includes the following key steps:

1. Describing existing visual landscape within the Project vicinity, specifically within 5 miles, to identify potentially sensitive areas
2. Identifying and selecting KOPs from locations where the Project is likely to be visible to the public
3. Developing photographic simulations of the Project from KOPs
4. Analyzing levels of visual contrast using the supporting photographic simulations from each KOP to assess conformance with VRM objectives and overall impacts to viewers and landscape character
5. Identifying best practices and proposed mitigation measures to reduce the overall visual impact of the Project

2.2 Project Vicinity Visual Resources

The existing landscape characteristics in the visual analysis area vary because of the different natural and human-made elements that occur and the diverse patterns these elements create when combined. The dominant vegetation communities in the Project Area consist of native mesquite grassland. The Project is within the Arizona /New Mexico Mountains Ecoregion, which is a transition zone from the lower elevation Sonoran desert located to the southwest, and Mojave desert to the west. The Project is located in the Lower Mogollon Transition Level 4 Ecoregion, characterized by hilly to mountainous terrain with numerous canyons and valleys (Griffith et. al., 2014). Ridges and valleys in mountainous regions naturally obstruct lines of sight, obscuring the Project Area as viewed from lower elevations in its immediate surroundings. The Project is located on Arizona State Trust Land, which are managed to generate maximum revenues for the beneficiaries of the State Land Trust through the sale or lease of State Trust Land (ASLD, 2025). The Project is adjacent to federal lands managed by the USFS and BLM but does not encroach or cross federal lands, see **Figure 1**.



Legend

Proposed Project Components

- Gen-Tie Route
- Project Substation
- Project BESS Site
- Operation and Maintenance Building
- Agua Fria Solar and Storage Project Boundary

Other Components

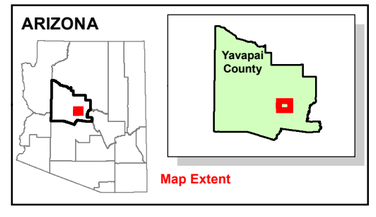
- Existing Substation
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Interstate Highway
- State Highway
- Road
- Watercourse
- Parcel
- National Monument

Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

0 0.5 1 1.5
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 1. Project Components

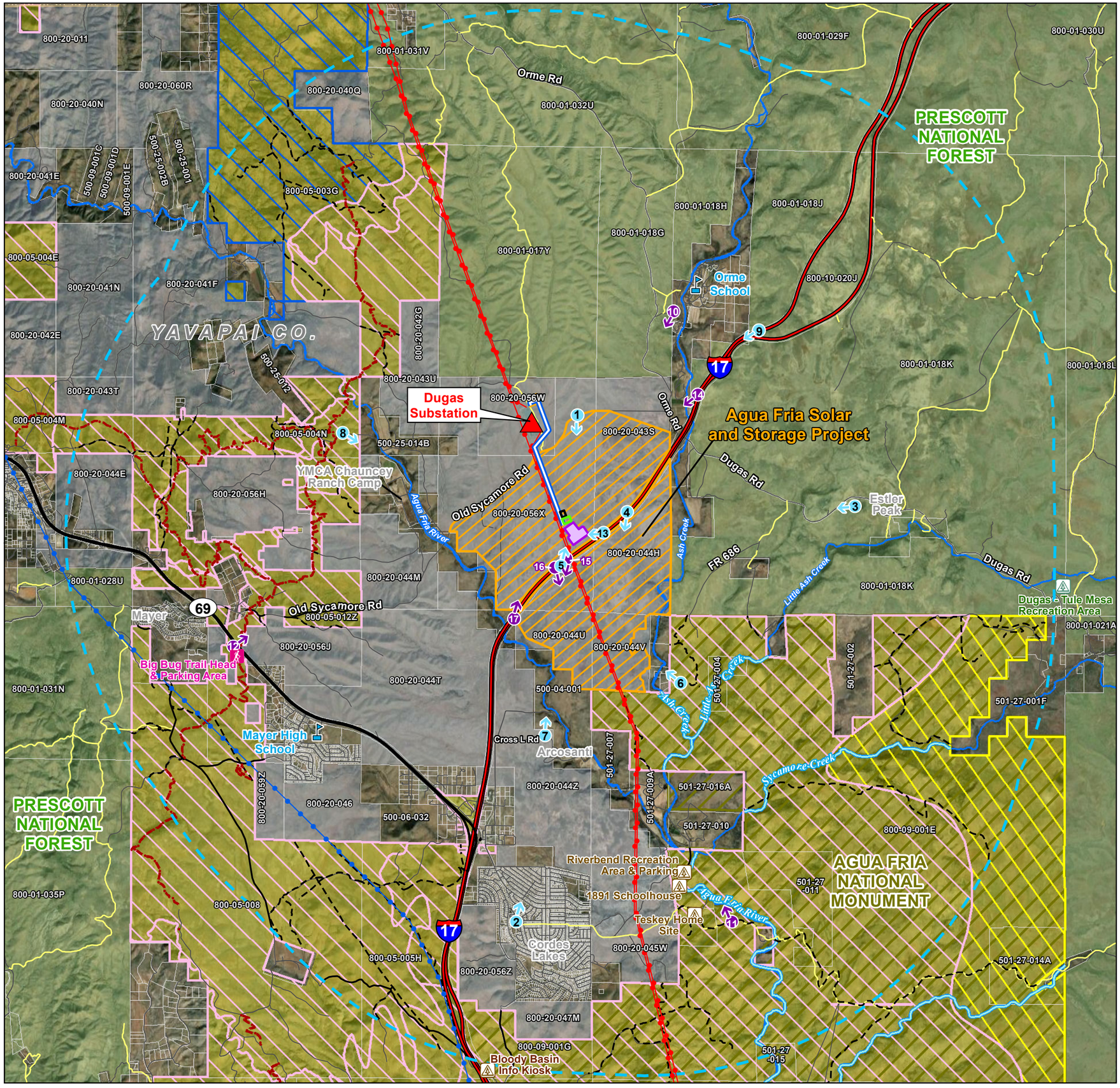
Map Extent: Yavapai County, AZ

Date: 7.7.25 | Author: sjw

One of the significant cultural and historical resources present in the analysis area is the Agua Fria National Monument (AFNM). The Agua Fria National Monument (AFNM), on BLM land, is located directly south of the Project Area. The AFNM has diverse vegetative communities and topographic features that decorate the landscape (BLM, 2025a). National Monuments are managed by the BLM to conserve, protect, restore, and enhance America's heritage, while providing compatible multiple uses including grazing, oil, gas, and mining (BLM, 2025b). The AFNM has inherently natural visual character and includes natural features. In addition, there are BLM designated recreation sites, trailheads, wild and scenic rivers and visual resource inventory (VRI) classes in the AFNM within 5 miles of the Project (**Figure 2a**).

The Prescott National Forest, managed by the USFS, is located adjacent to the Project on the eastern Project boundary and located approximately 0.4 miles north of the northern Project boundary. The Prescott National Forest lies in a mountainous section of central Arizona between forested plateaus to the north and arid desert to the south (NFF, 2025). National Forest lands are managed for multiple uses that deliver social, economic, and environmental benefits which include wildlife, timber, and recreation (USFS, 2025). Prescott National Forest's landscape is inherently natural for the most part and encompasses natural features. However, there are no designated scenic resources in Prescott National Forest within 5 miles of the Project.

BLM's Visual Resource Management (VRM) program is in place to help protect the quality of scenic values of BLM land. The VRM has designated VRI classes that represent the relative value of visual resources. Classes I and II are the most valued, Class III represents a moderate value, and Class IV is of the least value. The AFNM has land designated as Class II and III, with the Class II land being closer to the Project. Land classified as Class II is meant to retain the existing character of the landscape and any change to the characteristic landscape should be low (BLM, 1986a). The BLM also designates VRM classes from Class I to Class IV, which are assigned management objectives as provided in the BLM Manual 8431 – Visual Resource Contrast Rating. VRM Class I consists of the most stringent management objectives that aim to preserve the existing character of the landscape, and VRM Class IV provides for management activities that require major modification of the existing landscape and can consist of a high level of change (BLM, 1986b). The Project Area is also adjacent to public lands managed by BLM within the BLM Phoenix District Office Bradshaw-Harquahala Resource Management Plan (RMP) and the Agua Fria National Monument RMP. According to the Updated Record of Decision for the Approved Agua Fria National Monument and Bradshaw-Harquahala Resource Management Plan and Final Environmental Impact Statement, the adjacent BLM-managed areas are classified as VRM Class III (see **Figure 2a**) (BLM, 2007). The BLM's management objective (desired conditions) for VRM Class III is as follows: "*The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape*" (BLM 2010). Per the BLM's VRM system, an adverse visual effect occurs within a public view when (1) an action/project perceptibly changes existing features of the landscape such that they (landscapes) no longer appear to be characteristic of the subject locality or region, (2) an action introduces new features to the landscape that are perceptibly uncharacteristic of the region or area, and/or (3) aesthetic features of the landscape are blocked or obscured by project components/features/activities. Uncharacteristic changes are those that are perceived as out of place, discordant, or distracting. The severity of a visual impact depends on how noticeable the change or contrasts may be.



Legend

Proposed Project Components

- Gen-Tie Route
- Project BESS Site
- Agua Fria Solar and Storage Project Boundary
- Project Substation
- Operation and Maintenance Building
- 5-Mile Buffer of Project Site

Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Interstate Highway
- Road
- Watercourse
- Parcel
- School
- Existing 230 kV Transmission Line
- State Highway
- Trail
- Jurisdictional Boundary

Visual Resources

- Key Observation Point
- Photo Point

BLM Designation

- BLM Recreation Site
- BLM Primitive Road
- Wild and Scenic River
- Trailhead
- BLM Road
- Agua Fria National Monument

BLM Visual Resource Inventory Class

- Class II
- Class IV
- Class III

USFS Designation

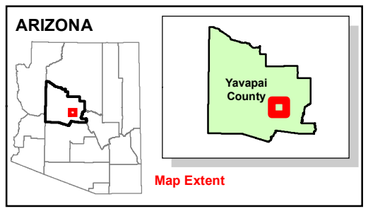
- USFS Recreation Site
- National Forest Road - closed to motorized uses
- National Forest Road
- USFS Motorized Trail

Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

0 0.5 1 1.5 Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: BLM, ESRI, YAVAPAI CO., USGS.



AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 2a. Visual Resources

Map Extent: Yavapai County, AZ

Date: 11.14.25 | Author: ckvw

The analysis stage of the VRM process involves assessing and disclosing the potential visual impacts from proposed activities and then determining whether such impacts would meet the management objectives established for the area for RMP conformance. To analyze and mitigate potential visual impacts associated with proposed activities, the BLM uses guidelines described in the BLM Handbook H-8431, Visual Resource Contrast Rating (BLM, 1986b). The degrees of contrast are determined from the KOPs, where simulations are provided, and categorized in a range, as follows: none, weak, moderate, or strong, where strong indicates that a proposed activity will create contrast that demands attention, will not be overlooked, and is dominant in the landscape. Environmental factors to be considered when applying the contrast criteria can include viewing distance, angle of observation, length of viewing time, relative size or scale, season of use, light conditions, disturbance recovery time, spatial relationships, atmospheric conditions, and motion associated with the project activities.

Per the BLM's VRM system, an adverse visual effect occurs within a public view when (1) an action/project perceptibly changes existing features of the landscape such that they (landscapes) no longer appear to be characteristic of the subject locality or region, (2) an action introduces new features to the landscape that are perceptibly uncharacteristic of the region or area, and/or (3) aesthetic features of the landscape are blocked or obscured by project components/features/activities. Uncharacteristic changes are those that are perceived as out of place, discordant, or distracting. The severity of a visual impact depends on how noticeable the change or contrasts may be.

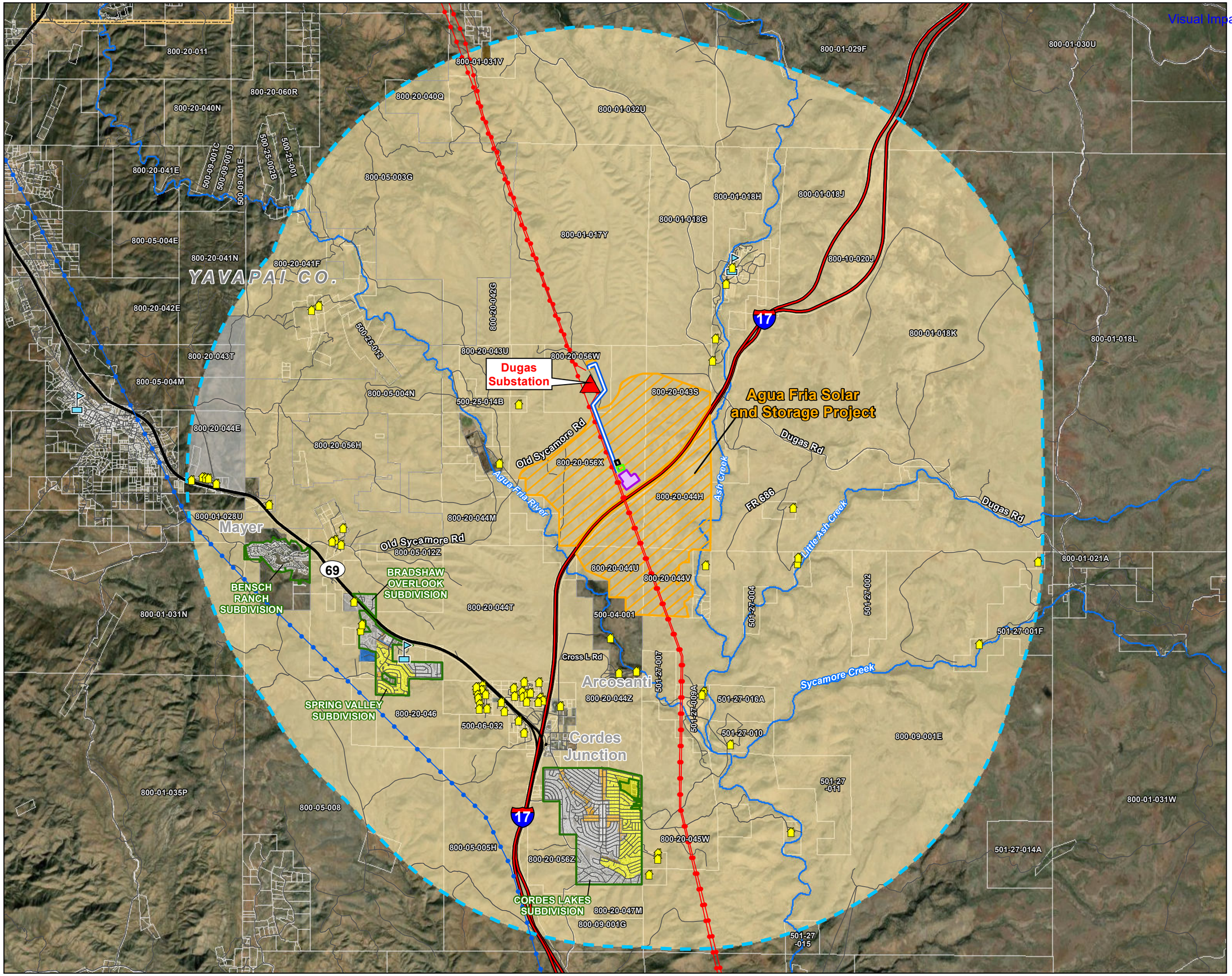
In accordance with BLM guidelines (BLM ,1986b), visual contrast is defined as follows:

- **None:** The element contrast is not visible or perceived.
- **Weak:** The element contrast can be seen but does not attract attention.
- **Moderate:** The element contrast begins to attract attention and begins to dominate the characteristic landscape.
- **Strong**: The element contrast demands attention, would not be overlooked, and is dominant in the landscape.

2.3 Surrounding Residential Uses

Residential Zoning

As depicted on **Figure 3**, the residential zoning districts within 5 miles of the Project include RCU (Residential; Rural), R1 (Residential; Single Family), R1L (Residential; Single Family Limited), R2 (Residential; Multi-Family), RMM (Residential; Multi-Sectional Manufactured Homes), and RS (Residential and Services).The Project Area and majority of adjacent land is zoned as RCU (see **Figure 3**), however, there are few residences in the immediate Project vicinity. As defined in the Planning and Zoning Ordinance, the RCU base zoning district is intended to provide a zoning classification for all portions of the county not presently characterized by urban uses, and primarily covers rural and relatively undeveloped areas with parcels or lots greater than 2 acres. Furthermore, Solar Facilities are required to be located in the RCU zoning district (Yavapai County, 2024).



Legend

Proposed Project Components

- Gen-Tie Route
- Project Substation
- Project BESS Site
- Operation and Maintenance Building
- Agua Fria Solar and Storage Project Boundary
- 5-Mile Buffer of Project Site

Other Components

- Existing Substation
- School
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Interstate Highway
- State Highway
- Road
- Watercourse
- Jurisdictional Boundary
- Parcel

Residential

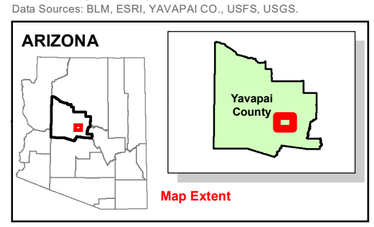
- Residence
- Residential Subdivision

Yavapai County Residential Zoning

- R1 - Residential; Single Family
- R1L - Residential; Single Family Limited
- R2 - Residential; Multi-Family
- RCU - Residential; Rural
- RMM - Residential; Multi-Sectional Manufactured Homes
- RS - Residential and Services

0 0.5 1 1.5 2 Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: BLM, ESRI, YAVAPAI CO., USFS, USGS.



AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 3. Residential

Map Extent: Yavapai County, AZ

Date: 7.11.25 | Author: ckvw

Residences

There are several residences and residential subdivisions within 5 miles of the Project, depicted in **Figure 3**. The nearest residential structure is located approximately 0.33 miles southeast of the Development Area. The next closest residence to the Project is housing at the Chauncey Ranch YMCA Camp, located approximately 0.5 miles northwest of the northwestern corner of the Development Area. These are the only residences located within half a mile of the Project. There are 6 dwellings within 1 mile of the Project Development Area.

The nearest residential subdivision is the Cordes Lakes Subdivision, located approximately 2.3 miles south of the southern border of the Project. The Cordes Lakes Subdivision primarily consists of single-family homes and residential trailers. The Spring Valley Subdivision is located approximately 2.5 miles southwest of the Project and consists primarily of single-family homes. The Bradshaw Overlook Subdivision is located approximately 2.7 miles southwest of the Project and consists of 10 residences. The Bensch Ranch Subdivision, located approximately 3.3 miles west of the Project, is primarily vacant with some residences.

2.4 Sensitive Viewpoints

Sensitive viewpoints consist of locations from which a significant number of individuals having some regard for the integrity of visual resources would view a landscape and be exposed to the presence of the Project. Potential sensitive viewpoints in the Project area occur along transportation corridors, from nearby residential areas, recreational and institutional uses, and state and federal lands around and near the Project (i.e., KOPs, Photo Points). Identification of KOPs and Photo Points for this analysis was based on a review of elevation data, aerial imagery, topographic maps, and field investigations. Sensitive viewing locations included the following:

- **Vehicular travel routes** – highways and roads used by origin or destination travelers, and recreation destination roads (roads that provide access to recreational areas).
- **Recreation areas** – existing recreational sites used for recreational activities.
- **Community and residential areas** – areas near residential dwellings, long-term housing, and community areas. These areas also include commercial and institutional uses such as schools.

Viewer sensitivity is based on the importance of features, conditions that affect visual perception, and social factors that contribute to view perception. The levels of sensitivity are generally classified as low, moderate, and high depending on viewer types and exposure, view orientation and duration, and viewer awareness/sensitivity to visual changes.

2.5 Observation Points

KOPs are selected based on the determined “most critical viewpoints”, where there is public sensitivity to visual change. Factors considered when determining critical viewpoints include distance, angle of observation, number of viewers, length of time the Project is in view, season(s) of use, and light conditions (BLM, 1986b). Potential changes in the viewshed are evaluated from these identified KOPs. In addition to KOPs, we have included Photo Points, which show the existing view, but were not simulated because the Project would not be obviously visible due to distance, intervening terrain, and/or vegetation.

KOPs should represent either a typical view from a sensitive viewing location or the range of impacts associated with the Project. KOPs are usually located on commonly travelled routes from which the project would be visible or other commonly used observation points. KOPs were selected to demonstrate views encountered in representative landscapes, rather than encompass all views of the Project area. The KOPs are used to provide representative views of a proposed project or action to assess potential visual impacts on landscapes and to evaluate compliance with designated visual management objectives. They are areas from which a project could be seen by the most people and/or that have public sensitivity. The visual contrast that would be created if the proposed Project were built are evaluated from these locations using the simulations.

The conclusion of the Preliminary Visual Resources Study was that the surrounding area has a variety of locations from which the Project would be visible, thus a robust KOP selection process was conducted. The Applicant reviewed suitable locations for potential photo simulations, incorporating suggestions from the County, at viewpoints where the Project would be visible, including travel routes (roads/highways), residential areas, camps, schools, community areas and recreational resources, especially those popular and frequently visited. **Figure 2a** illustrates potential locations from each of these resources and uses, including county roads, trails, watercourses, BLM Roads managed for Public Motorized Use (Roads and Primitive Roads), National Forest Roads, National Forest Roads closed to motorized uses, recreational sites, and local landmarks including scenic vistas.

Therefore, KOPs for the project were selected to represent views from motorists traveling on well-traveled local and high-volume roadways (KOPs 1, 4, 5, 9, 13), residential areas and local communities (KOPs 2, 7), and recreationalists, including hikers, bicyclists, and visitors to the AFNM (KOPs 3, 6, 8), shown in **Figures 2-1 – 2-9, 2-13**. Other locations were considered as KOPs and ultimately were not selected due to various factors such as longer viewing distance, shorter duration of view, and lower likelihood for continuous views to the Project Area; therefore, the selected KOPs were found to provide the most wholly representative and illustrative views of the visual impacts. Elevation and topography were also considered to locate KOPs where the Project will be visible in order to simulate and describe visual impacts resulting contrast. The Photo Points represent views from students or staff at Orme School entrance road (Photo Point 10), recreationists in the AFNM by Agua Fria River (Photo Point 11), recreationists at Big Bug Trailhead off of State Route 69 (Photo Point 12), and motorists travelling on I-17 (Photo Points 14, 15, 16, 17). All locations of the KOPs and Photo Points are shown in **Figure 2a**, with **Figure 2b** showing a more zoomed in extent to highlight the multiple KOPs and Photo Points on I-17. Photos were taken by a professional photographer during field reconnaissance in January and June 2025.

The KOP and Photo Point locations provide representative views of the existing landscape context and viewing conditions to the Project Area and capture a range of viewing angles, viewer types and exposures, and distances.

Dugas Substation

800-20-043U
800-20-056W
800-20-043S
500-25-014B
500-25-015
500-25-014C
Agua Fria River
Old Sycamore Rd
800-20-056X
800-01-018G
800-20-044H
800-20-044M
500-25-014G
800-20-044S
500-04-002
800-20-044U
800-20-044V
800-20-044T
800-20-044Z
500-04-001
501-27-006
501-27-004
Ash Creek
Little Ash Creek
FR 686
Orme Rd
501-31-002N
Dugas Rd
800-01-018K
501-31-009A
501-31-009B

Legend

Proposed Project Components

- Gen-Tie Route
- Project BESS Site
- Agua Fria Solar and Storage Project Boundary
- Project Substation
- Operation and Maintenance Building

Other Components

- Existing Substation
- Interstate Highway
- Watercourse
- Existing 500 kV Transmission Line
- Road
- Parcel

Visual Resources

- Key Observation Point
- Photo Point

BLM Designation

- BLM Primitive Road
- Agua Fria National Monument
- Wild and Scenic River

BLM Visual Resource Inventory Class

- Class II

USFS Designation

- National Forest Road

Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

0 0.25 0.5 0.75
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: BLM, ESRI, YAVAPAI CO., USGS.

ARIZONA

Yavapai County

Map Extent

AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 2b. Visual Resources Zoom

Map Extent: Yavapai County, AZ

Date:11.14.25 | Author: ckvw

Table 3. Key Observation Points

KOP Number	KOP Location	Viewer Type	Simulated y/n
1	Old Sycamore Road	Vehicular traveler	Yes
2	Cordes Lakes	Residential area	Yes
3	Estler Peak	Recreationist	Yes
4	I-17	Vehicular traveler	Yes
5	I-17	Vehicular traveler	Yes
6	AFNM 1	Recreationist	Yes
7	Arcosanti	Residential area	Yes
8	Black Canyon Trail / BLM Land	Recreationist	Yes
9	I-17	Vehicular traveler	Yes
13	I-17	Vehicular traveler	Yes

Table 4. Photo Points

Photo Point Number	Photo Point Location	Viewer Type	Simulated y/n
10	Orme School Property	Student/Staff	No
11	AFNM 2	Recreationist	No
12	Big Bug Trailhead	Recreationist	No
14	I-17	Vehicular traveler	No
15	I-17	Vehicular traveler	No
16	I-17	Vehicular traveler	No
17	I-17	Vehicular traveler	No

Views from the Photo Points were evaluated but were not carried forward for simulation due to viewing distance and intervening topography obscuring the Project Area. Photo Points 10, 11, and 12 are situated at a lower elevation than the Project Area and the Project was determined to be obscured or mostly obscured from view due to topography and vegetation, while Photo Points 14, 15, 16, and 17 provide a wide range of viewing perspectives from vehicular travelers on I-17. The seven Photo Points show the existing conditions, **Figures 2-10 – 2-12, 2-14 – 2-17**. Photo Points help establish a comprehensive context of the existing visual environment, while KOPs were used to show a more wholly representative potential views of the Project Area to assess potential visual contrast.

2.5.1 Existing Conditions

Vehicular Travel Routes

KOP 1 – Old Sycamore Road: Old Sycamore Road is an unpaved road that runs along the northern boundary of Project Area. KOP 1 represents a view from the nearest roadway to the Project. KOP 1 was taken from Old Sycamore Road, east of Dugas Substation, looking south. The existing view shows natural vegetation in the foreground, natural vegetation and hilly terrain in the middle ground, high-voltage electric transmission structures in the middle ground on the right side of the image fading towards the background in the middle to left side of the image. A

scattering of buildings are visible at the foot of hills in the background, with mountains in the distant background. Existing landform colors range from tan, gray, rust, and green in the foreground to middle ground due to the soils, grasses, and vegetation, and tan to dark brown in the middle to background due to the mountain terrain and its shadows, which vary depending on the time of day. In the middle ground just beyond the existing transmission structures, there are large swaths of grassy areas that appear smooth and tan in color with scattered brush and low, mounded vegetation. The existing buildings scattered in the background appear as white or light in color and geometric in shape, which presents some existing contrast with the natural landscape.

KOPs 4, 5, 9, 13 – Interstate 17: I-17, a major transportation corridor that connects Phoenix to Interstate 40 in Flagstaff, bisects the Project Area. Primary access to the Project is anticipated to be provided via I-17. The Project development area is set back at a minimum 300 feet from the interstate right-of-way (ROW). The views from these KOPs represent a view from travelers on a high-speed regional roadway.

KOP 4 is located on southbound 1-17, where the I-17 bisects the Project Area, east of the existing 500 kV transmission lines. KOP 4 looks southwest and the existing view shows the north and southbound lanes of I-17 with vegetation in the foreground and middle ground, natural vegetation and hilly terrain, and high-voltage electric transmission structures in the background, and mountains in the distant background.

KOP 5 is located on northbound 1-17, where the I-17 bisects the Project Area, west of the existing 500 kV transmission lines. KOP 5 looks northeast and the existing view shows north and southbound lanes of I-17 with vegetation in the foreground and middle ground, natural vegetation and hilly terrain, high-voltage electric transmission structures in the background, and mountains in the distant background.

KOP 9 is located on southbound I-17, northeast of the Project Area, looking southwest. The existing view shows the southbound lanes of I-17, the paved road shoulders, metal barrier structures, and natural vegetation in the foreground and middle ground, high-voltage electric transmission structures in the background, and mountains in the distant background. The existing high-voltage transmission structures lack scale and dominance from this viewing distance and begin to blend into the transition between valley and foothill terrain in the background. KOP 9 is at higher/superior elevation than the Project Area, and looks down on the valley the Project is located in. Existing landform colors and forms include the dark, smooth roadway with yellow and white paint in the foreground, tan, brown, and greens attributed to large swaths of grassy vegetated areas in the middle ground, and tan, brown, to dark brown in the background.

KOP 13 is located on southbound 1-17, where the I-17 bisects the Project Area, east of the existing 500 kV transmission lines, looking west. The existing view at KOP 13 shows vegetation in the foreground and middle ground, natural vegetation and hilly terrain, high-voltage electric transmission structures in the background, and mountains in the distant background. In the bottom left corner of the image, a small section of the gravel that borders the edge of the southbound lanes on I-17 can be seen.

Photo Points 14, 15, 16, 17 – Interstate 17:

Photo Point 14 is located on southbound I-17, northeast of the Project Area, looking southwest (**Figure 2-14**). The existing view shows the gravel that borders the southbound lanes on I-17, utility box covers, marker stakes, natural vegetation, including grasses and shrubs, in the

foreground. The middle ground features natural vegetation, consisting primarily of shrubs, some agriculture land, and rolling terrain, while the background consists of a mix of rolling hills and valleys in background, and mountains in the distant background. The existing cell tower stands out in the middle left quadrant of the background, and existing high-voltage electric transmission structures can be seen further in the background, running east-west across the landscape. This photo point was included as an additional drive by vantage point on I-17.

Photo Point 15 is located on southbound I-17, where the I-17 bisects the Project Area, west of the existing 500 kV transmission lines, just east of KOP 5 (**Figure 2-15**). Photo Point 15 looks southwest, and the existing view shows the north and southbound lanes of I-17, a vehicle travelling north, and vegetation in the foreground. The middle ground features natural vegetation, agricultural fencing, and ascending terrain in the middle ground, which conceals most of the background. The existing view shows rolling terrain in the background, and mountains in the distant background, primarily on the right side of the image. This photo point was included as an additional drive by vantage point on I-17.

Photo Point 16 is located on southbound I-17, where the I-17 bisects the Project Area, west of the existing 500 kV transmission lines, and west of KOP 5 (**Figure 2-16**). Photo Point 16 looks south and the existing view shows the north and southbound lanes of I-17, with vegetation in the foreground and middle ground, natural vegetation, hilly terrain, and existing buildings along the foothills in the background, and mountains in the distant background. This photo point was included as an additional drive by vantage point on I-17.

Photo Point 17 is located on northbound I-17, where the western boundary of the Project Area and I-17 intersects, looking northeast (**Figure 2-17**). The existing view shows the north and southbound lanes of I-17, the paved and gravel road shoulders, metal barrier structures, and natural vegetation in the foreground and middle ground, natural vegetation along the I-17, and moving vehicles in the background, and a high-voltage electric transmission structure in the distant background. This photo point was included as an additional drive by vantage point on I-17.

Figure 2-14 – Photo Point 14
I-17 Southbound Looking Southwest



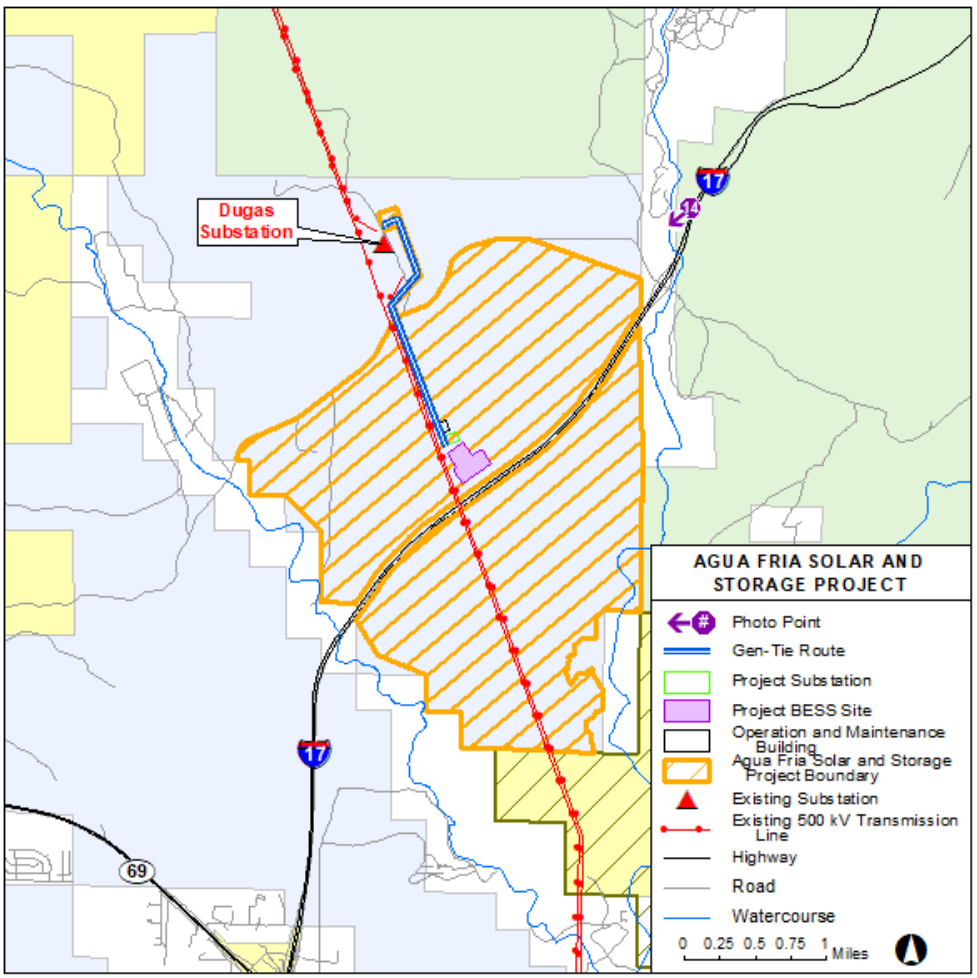


Figure 2-15 – Photo Point 15

I-17 Southbound Looking Southwest



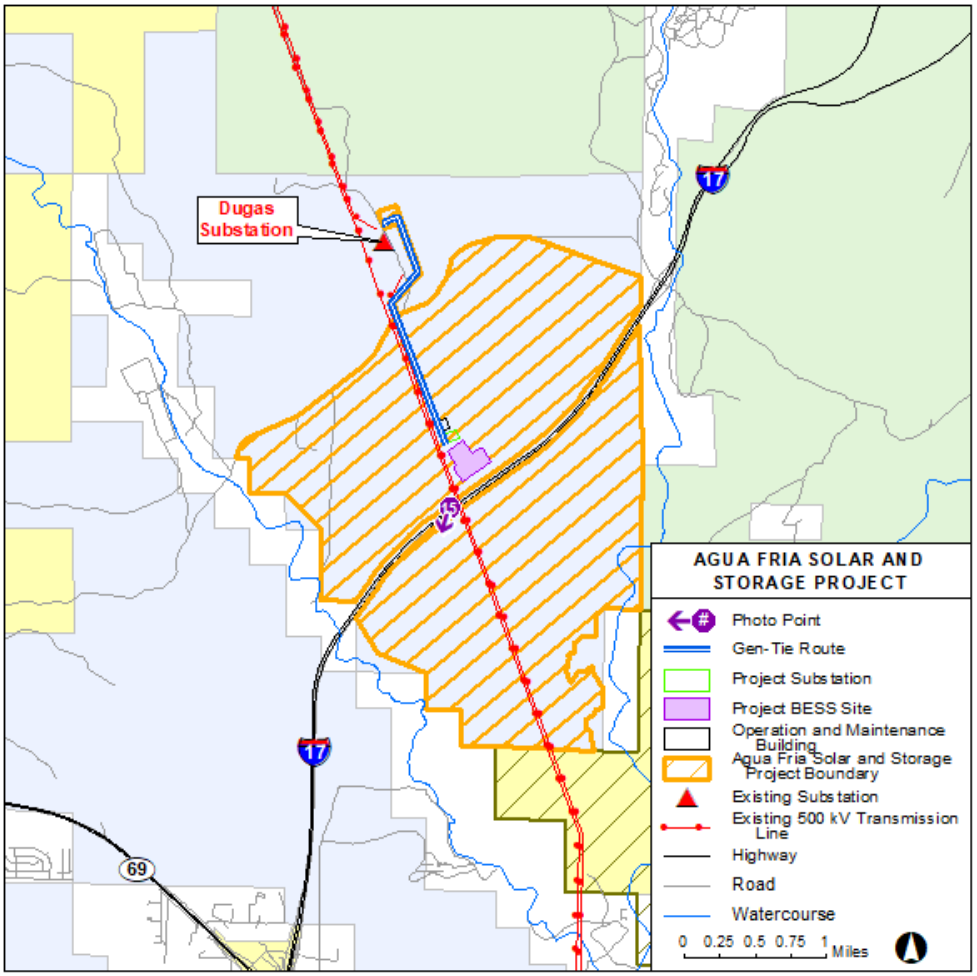


Figure 2-16 – Photo Point 16

I-17 Southbound Looking Southeast



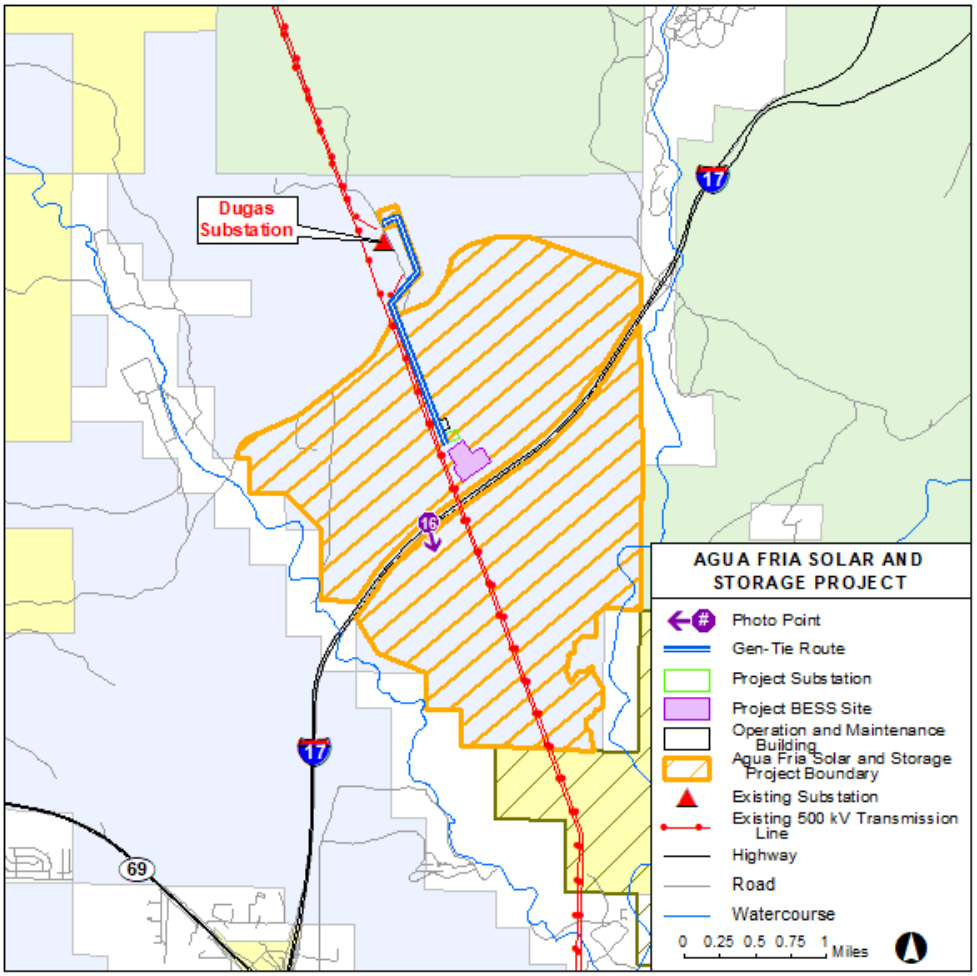
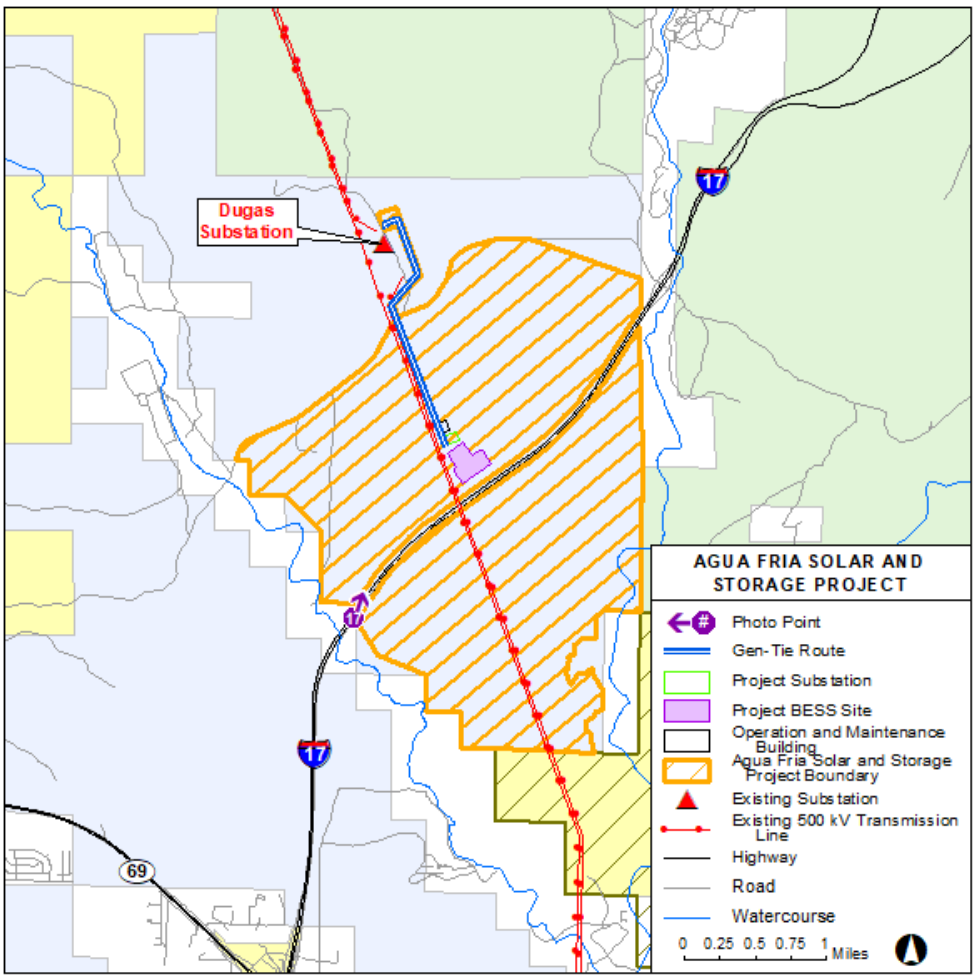


Figure 2-17 – Photo Point 17

I-17 Northbound Looking Northeast





Recreation Areas

KOP 3 – Estler Peak: Estler Peak is a summit south of Dugas Road in Prescott National Forest, located approximately 2.5 miles east of the Project. Estler Peak is a hiking destination, with an off-trail route that is approximately 0.6 miles to the high point and back (AllTrails, 2025). KOP 3 represents a view from recreationists hiking Estler Peak. KOP 3 was taken from the dirt tracks directly west of Estler Peak, looking west. The existing view is a superior viewing angle (i.e., higher elevation than the lower elevation area where the Project is located) and shows manmade dirt tracks off Dugas Road and natural vegetation in the foreground, natural vegetation and rolling terrain in the middle ground, a mix of rolling hills and valleys and a scattering of white, reflective buildings in the background, Dugas Substation in the background near the right edge of the image, and mountains in the distant background. Existing landform colors range from tan, gray, and green due to the soils, grasses, shrubs, and low mounded vegetation in the foreground to middle ground, tan to rust due to the disturbed dirt vehicle tracks in the foreground to middle ground, and brown to dark brown in the background attributed to the mountain terrain and its shadows. The existing high-voltage transmission line crosses the valley and is faintly visible in the middle to background, though it partially fades into the foothills of the background.

KOP 6 – Agua Fria National Monument (AFNM): The Agua Fria National Monument offers a wide range of recreational activities, including hiking, camping, off-roading, and hunting. There are BLM Roads and Primitive Roads throughout the monument as well, which would be common areas that visitors would travel on (**Figure 2a**). KOP 6 represents a view from recreationists visiting the AFNM. KOP 6 was taken from a primitive road in the Agua Fria National Monument east of Ash Creek, looking northwest to the Project. The existing view shows natural vegetation and sloping terrain in the foreground and middle ground, the Dugas Substation and high-voltage electric transmission structures in the background, and mountains in the distant background.

KOP 8 – Black Canyon Trail: Black Canyon Trail is multi-use trail primarily used for mountain biking (BLM, 2024). KOP d1 represents a view from a hiker or biker on Black Canyon Trail on BLM Land. KOP d1 was taken on Black Canyon Trail on BLM Land looking southeast to the Project, approximately 1.9 miles northwest of the Project. The existing view shows natural vegetation on a downward slope in the foreground, YMCA Chauncey Ranch Camp property and the Agua Fria River route in the middle ground, and natural vegetation and rolling hills in the background, and hills and mountains in the distant background. Electrical infrastructure, including electrical structures and high voltage transmission structures, are also visible in the background. The Agua Fria River route is discernable by the lush green vegetation that contrasts with the surrounding desert landscape.

Photo Point 11 – Agua Fria National Monument (AFNM): Photo Point 11 was also taken on a primitive road in the Agua Fria National Monument near the Agua Fria River, looking northwest to the Project (**Figure 2-11**). The existing view shows natural vegetation, wire fencing, and sloping terrain in the foreground and middle ground, and mountains in the distant background. The rising elevation in the foreground and middle ground obstructs views of the background. Due to the lack of visibility of the Project Area from this Photo Point, a simulation was not completed.

Photo Point 12 – Big Bug Trailhead: Photo Point 12 was taken near the Big Bug Trailhead, off State Route 69, looking east toward the Project (**Figure 2-12**). The Big Bug Trailhead is for the Black Canyon Trail and is the nearest trailhead to the Project. The existing view shows the end of a paved road, natural vegetation in the foreground, natural vegetation and rising terrain in the middle ground, and sky in the background. The hill in the middle ground obstructs the view from anything but sky in the background. The Project would not be visible from this point, therefore this was identified as a Photo Point, and a simulation was not completed.

Figure 2-11 – Photo Point 11

AFNM Primitive Road, South of Agua Fria River Looking Northwest



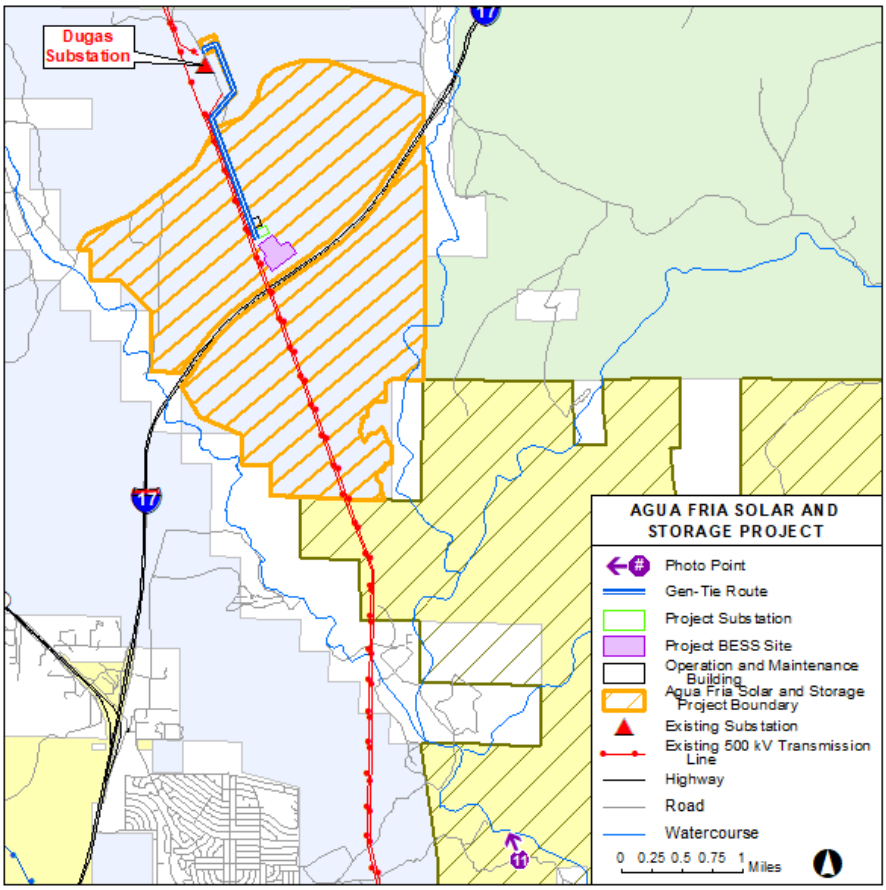
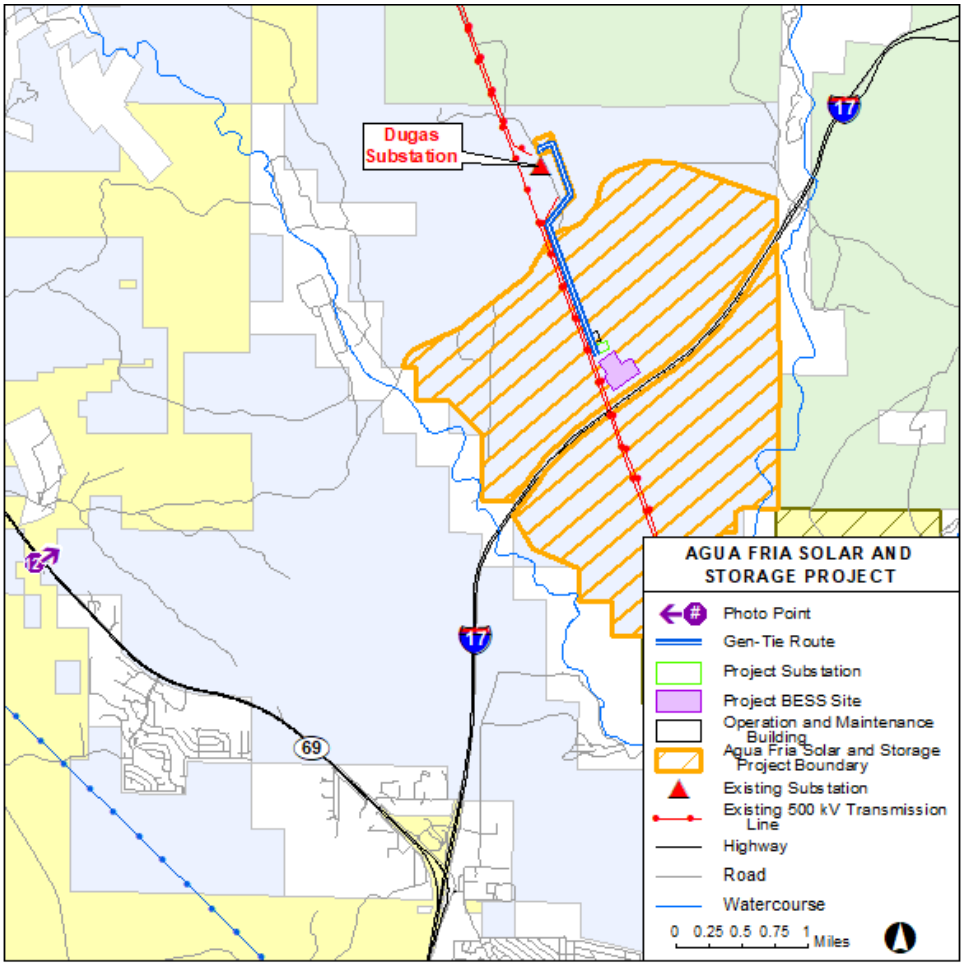


Figure 2-12 – Photo Point 12
Big Bug Trailhead Looking Northeast





Community and Residential Areas

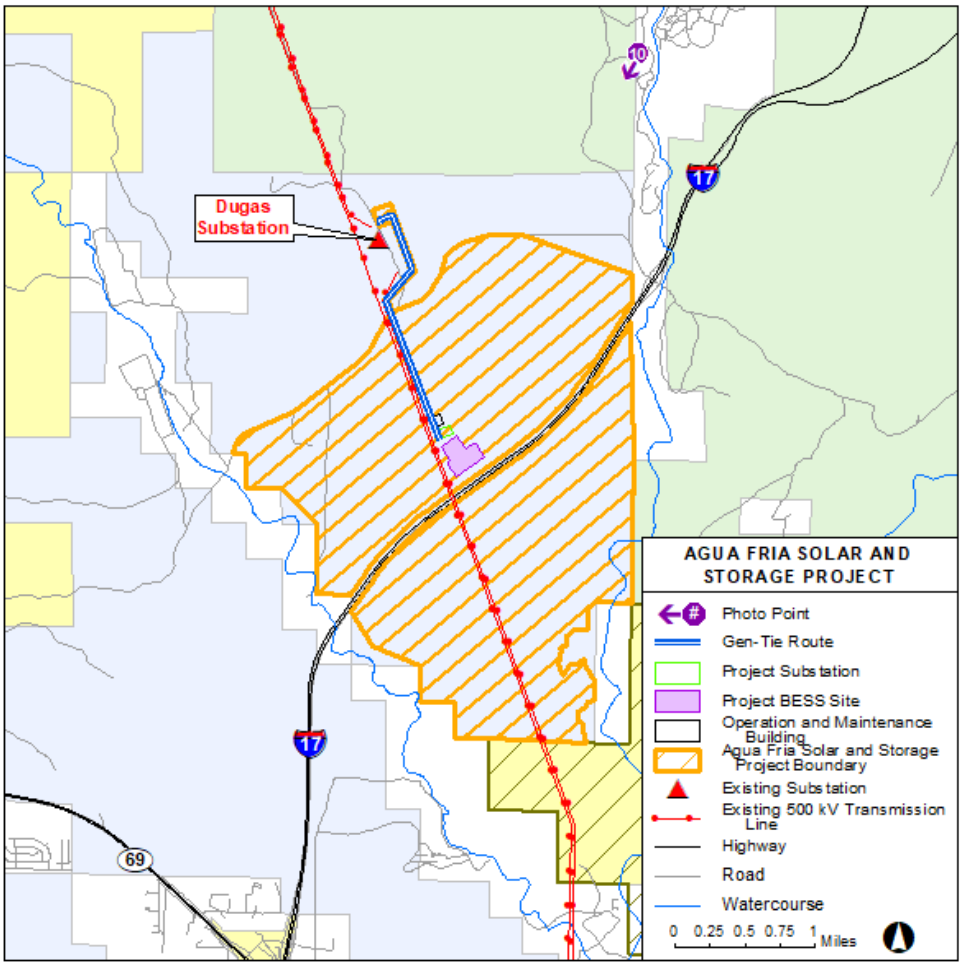
KOP 2 – Cordes Lakes: Cordes Lakes is the nearest unincorporated community, located approximately 1.3 miles south of the Project. KOP 2 represents a view from a Cordes Lakes residence or community member. KOP 2 was taken on Mingus Drive, on a highpoint in Cordes Lakes community looking north to the Project. The existing view shows rural residential development with dispersed vegetation (grasses, shrubs, and low mounded vegetation) on a downward slope in the foreground, multiple residential buildings and associated structures and vehicles in the middle ground, large trees and residential buildings in the middle to background, rolling terrain in the background above the treetops, and mountains in the distant background. There are also tall industrial structures located in the middle to background towards the left side of the image. The existing residential buildings, associated structures, and vehicles vary in color from white and light tan to dark brown and black, but are relatively consistent in size and form. Existing landform colors range from tan, gray, rust, and green in the foreground to middle ground due to the soils, grasses, trees, and vegetation, and tan to dark brown in the middle to background due to the vegetated mountain terrain. Existing high-voltage transmission structures are also faintly visible in the background beyond existing trees that partially obscure views to the distant foothills.

KOP 7 – Arcosanti: Arcosanti is an experimental town integrating the design of architecture with respect to ecology, located approximately 1 mile south of the Project (The Cosanti Foundation, 2024). KOP 7 represents a view from an Arcosanti community member or visitor. KOP 7 was taken from Cross L Road, south of the Project, looking north. The existing view shows natural vegetation in the foreground and middle ground. There are high-voltage electric transmission structures in the background, and mountains in the distant background. Existing landform colors primarily consist of tan, browns, and gray soils, rocks, and vegetation, in the foreground to middle ground, and tan and brown topography in the middle to background, and dark brown mountains in the distance background. There are also existing electrical utility facilities in view, including an existing distribution line supported by wooden poles in the middle ground, and large high-voltage transmission structures that are faintly visible in the background.

Photo Point 10 – Orme School: The Orme School, located approximately 1.7 miles to the northeast of the Project, is a college preparatory school for grades 8 through 12 (**Figure 2-10**). The Orme School is a working cattle ranch with equestrian and sustainability programs. The campus has various recreational facilities including athletic sports fields, tennis courts, a pool, and equestrian trails and also houses students and staff. Photo Point 2 represents a view from a student or staff at the Orme School. Photo Point 2 was taken on Orme School Road, off of Orme Road, looking southwest to the Project. The existing view shows a dirt road and natural vegetation in the foreground, natural vegetation in the middle ground. There are hills and mountains in the background. Existing landform colors primarily consist of tan, browns, and gray soils, rocks, and vegetation, in the foreground to middle ground, and tan and brown topography in the middle to background, and dark brown / blue mountains in the distance background. In the middle and background, hills and berms are visible which blocks much of the view from this point, and thus, a simulation was not completed.

Figure 2-10 – Photo Point 10
Orme School Road Looking Southwest





2.6 Visual Contrast Analysis

Potential impacts to existing views and visual resources that may result from construction and/or operation of the Project were evaluated from the 9 KOPs, which were simulated, established in the Project area using visual simulations from each KOP that depict the Project at completion of construction. Anticipated visual contrast resulting from implementation of the Project was evaluated from each KOP. The severity of visual contrast, the primary source of the contrast (as it pertains to evaluated landscape character elements), and the scale dominance as discussed in the KOPs below. The analysis also considered existing scenic quality and viewer sensitivity, which reflects the perceived attitudes and perceptions held by people regarding a landscape, and the anticipated response to noticeable change to the landscape. Viewer sensitivity is based on factors including the type of users (e.g., motorists, recreationalists, pedestrians, residents), amount of use, public interest, and adjacent land uses (BLM, 1986a).

Visual contrast evaluates a project's consistency with the visual elements of form, line, color, and texture already established in the viewshed. Visual contrast typically results from: 1) landform modifications necessary to construct the project, 2) removal of vegetation to construct and maintain facilities, and 3) introduction of new aboveground facilities into the landscape. Factors to be considered in assessing degree of contrast include viewing distance, angle of observation, length of time the project is in view, relative size or scale in comparison to existing surroundings, season of use, and light conditions (degree and angle of light, shadows, reflections, etc.). Other elements that are considered in evaluating visual contrast include the degree of natural screening by vegetation and landforms, placement of structures relative to existing vegetation, landforms, and other structures.

2.7 Visual Simulations

Visual simulations, which provide a theoretical view of the project, were prepared for the ten selected KOPs. These figures include both the existing conditions and Project simulated conditions from the selected KOPs, based on proposed Project design. KOP locations and photo angles are shown in **Figure 2a**.

A visual resource modeler prepared a 3D model of the proposed Project facilities, including the solar field, BESS, project substation, operation and maintenance building, and ancillary facilities. A digital rendering of the project facility was superimposed on the KOP existing conditions photographs, illustrating a simulated view of the proposed project. This information was used to aid in determining the level of visual contrast of the project before and after construction.

Visual effects associated with each of the KOPs are described below and shown in **Figures 2-1** through **2-9, 2-13** (visual simulations). The simulations show proposed views from the KOPs after construction of the Project. The simulations are for graphic representation only, and the exact Project design is still being determined.

Simulated Conditions

Vehicular Travel Routes

KOP 1 – Old Sycamore Road: KOP 1 is representative of views to the Project experienced by motorists on Old Sycamore Canyon Road, looking south (see **Figure 2-1**). As viewed from KOP 1, the solar panels and gen-tie structures are visible in the distant middle ground to background, and the gen-tie route and structures are visible in the middle ground on the right side of the image, fading towards the background in the middle to left side of the image. There are also several white rectangular enclosures for inverters/transformers located between arrays of solar panels would also be visible from this KOP. The top portions of the project substation structures are visible in the middle ground in the middle-left portion of the image, though the majority of the substation

and the BESS would be obscured by the undulating topography. From this vantage point, the solar panels in the middle to background are low in profile, dark in color, and smooth and flat in shape and form. The solar panels adjacent to the project substation facilities in the middle ground would be closer in viewing distance with a slightly more distinct geometric form. The solar panels visually contrast with the existing tan, brown, and green colors of the foreground to middle ground; however, there is no change to the existing soils, grasses, and vegetation in the foreground, and the distant mountain peaks and existing buildings located along the foothills are also still visible and unobstructed in the background. Portions of the existing swaths of smooth, tan grassy areas in the middle ground would be obscured by the solar panels, which contrasts with the existing landscape. However, the dark color of the solar panels is consistent with the shadows present on the hills in the background, which would vary in contrast depending on the time of day and the angle of the sun. The white inverter/transformer enclosures are white in color, rectangular, and low in profile, and appear to be scattered throughout the site and break up the dark color and solid form of the solar panels. The white enclosures contrast with the existing natural landscape, but are generally consistent in color and form with the existing buildings visible beyond the Project Area. The proposed gen-tie structures roughly parallel the existing high-voltage transmission line and present vertical, geometric, and thin but distinct lines visible in the middle ground and fading into the background. Although the gen-tie structures do not obscure distant views to the background, including mountainous terrain and existing buildings and development, they would be apparent against the natural landforms in the foreground and background. From this distance, the solar panels and gen-tie structures are visible and may attract attention of the casual observer driving on Old Sycamore Canyon Road. However, view impairment/obstruction of the valley floor in the foreground and background landforms would be minimal, and views from KOP 1a would be temporary in nature for low sensitivity viewers (motorists along Old Sycamore Canyon Road). Overall, weak visual contrast attributed to the dark color, solid form, and largely horizontal lines of the solar panels and the geometric, vertical form of the gen-tie structures would be present at KOP 1.

KOP 4 – Interstate 17: KOP 4 is representative of views from southbound I-17 where I-17 bisects the Project Area, looking southwest towards the Project Area and the existing high-voltage transmission line corridor (see **Figure 2-4**). The existing foreground is dominated by the I-17 roadway, its vegetated median, and paved road shoulders, and existing shrubs and vegetation along the northern border of I-17, which would not be impacted by the Project due to the setback from the roadway. As viewed from KOP 4, the solar panels would be visually dominant in the middle ground, and their dark color, low-lying horizontal lines, and solid form would contrast with the existing natural landscape. The existing high-voltage transmission lines would remain visible in the middle ground, and the solar arrays would not obscure existing views to the mountains in the background. The inverter/transformer enclosures are also visible but are not visually dominant in the Project Area. The project substation, BESS, and gen-tie structures would not be visible from this vantage point. Although views would be temporary in nature for low sensitivity viewers (motorists along I-17), and existing vegetation along the road shoulders would partially obscure views to the Project Area, the Project would likely attract attention from the casual viewer along the roadway at this KOP. Therefore, visual contrast at KOP 4 would be considered weak to moderate.

Figure 2-1 – KOP 1

Old Sycamore Road looking south





This simulation is for graphic representation only, and exact structure types and locations have not been determined.

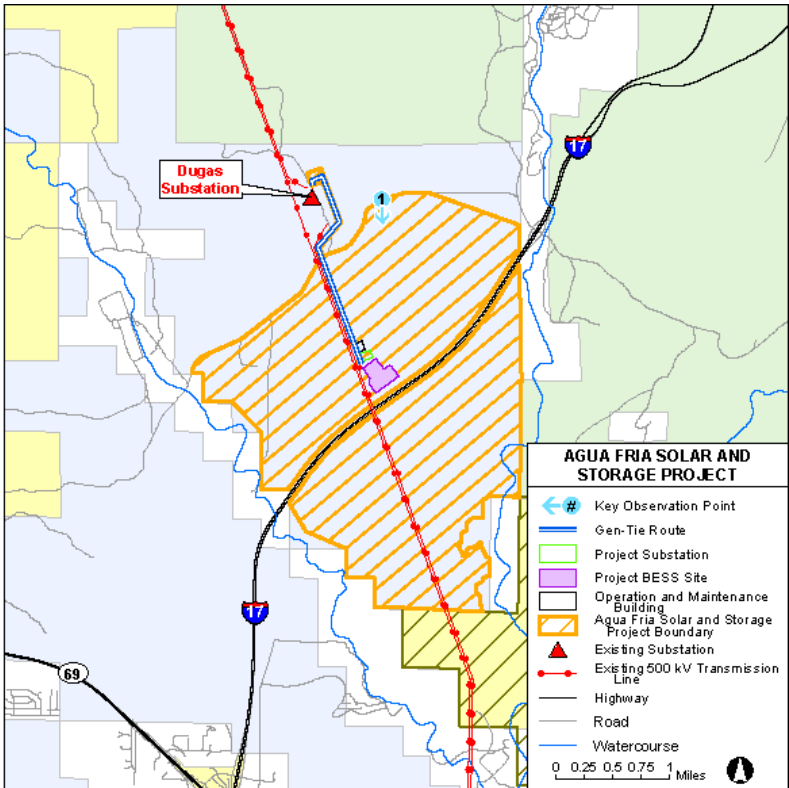


Figure 2-4 – KOP 4

I-17 Southbound looking Southwest

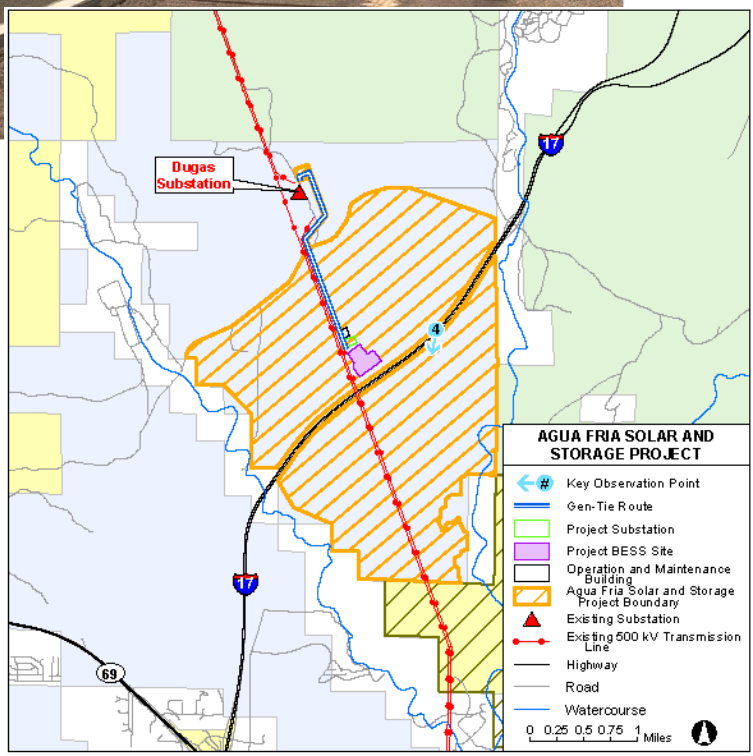


Existing Condition



Simulated Condition

This simulation is for graphic representation only, and exact structure types and locations have not been determined.



KOP 5 – Interstate 17: KOP 5 is representative of views to the Project Area from northbound I-17, looking northeast (see **Figure 2-5**). Existing views in the foreground are dominated by the I-17 roadway, its paved shoulder, and sparse grassy vegetation adjacent to the roadway, which would not be impacted by the Project. The middle ground is dominated by an existing high-voltage transmission structure and transmission lines, which are geometric with vertical and horizontal lines that contrast with the existing natural landscape and views to the mountains and sky in the background. As viewed from KOP 5, the Project is situated in the middle ground, just beyond the existing transmission structure, with at least a 300-foot setback from the I-17 roadway that retains the existing vegetation in the foreground. This KOP provides a close view of the BESS and project substation from the nearest public roadway. The BESS structures would be primarily obscured by enhanced screening using corrugated metal fencing, which will patina naturally to a rusty brown color, smooth and solid in form, and rectangular in shape, to blend into the tan and brown tones of the existing landscape. The top portion of the BESS facilities, white rectangular enclosures, would still be visible above the screening provided by the corrugated metal fence, which partially obscures the transition in topography from valley to low foothills in the background. The project substation structures would also be visible from I-17 and would introduce additional distinct vertical lines and low-lying structures that partially obstruct views to the mountains in the background. Views from KOP 5 would be temporary in nature for low sensitivity viewers (motorists on I-17), but would attract attention of the casual viewer, and visual contrast at KOP 5 would be weak to moderate.

KOP 9 – Interstate 17: KOP 9 is representative of views from southbound I-17, northeast of the Project Area, looking southwest (see **Figure 2-9**). As viewed from KOP 9, Project components are largely not visible as you approach the valley when driving in from Flagstaff but do become visible once you are on the flat area along I-17 as shown in KOPs 4 and 5. The proposed gen-tie structures and project substation would be partially visible where they are not obscured by intervening topography. Similar to the existing high-voltage transmission structures, the proposed gen-tie and substation structures would appear gray in color and begin to blend into the valley and foothill terrain. At this viewing distance, the proposed structures would be nearly indistinguishable from the existing transmission structures. Due to the expansive nature of available views at KOP 9 and the spatial dominance of existing landforms, the overall visual prominence of visible Project components and characteristics would be minimal and visual contrast would be weak.

Figure 2-5 – KOP 5

I-17 Northbound looking Northeast



Existing Condition



Simulated Condition

This simulation is for graphic representation only, and exact structure types and locations have not been determined.

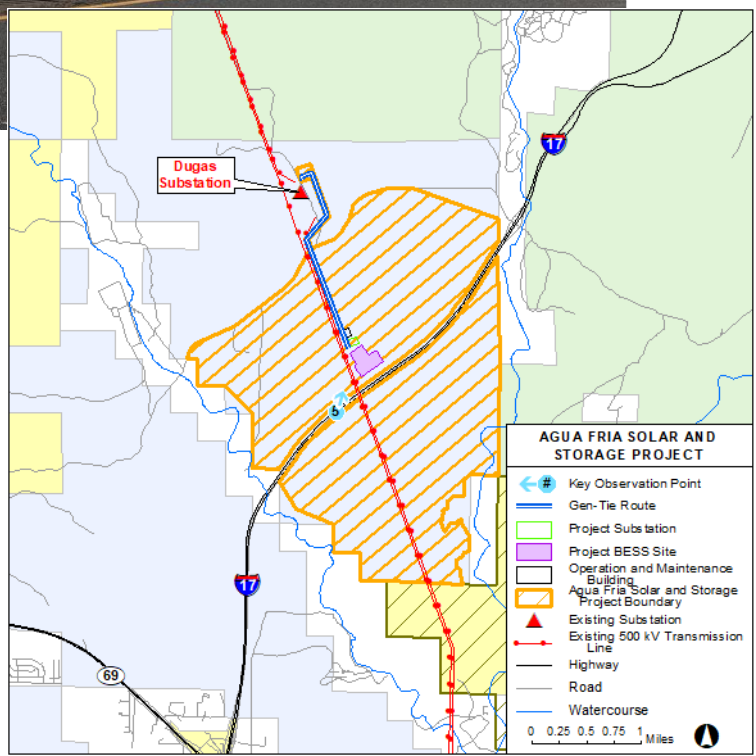


Figure 2-9 – KOP 9

I-17 Southbound Looking Southwest

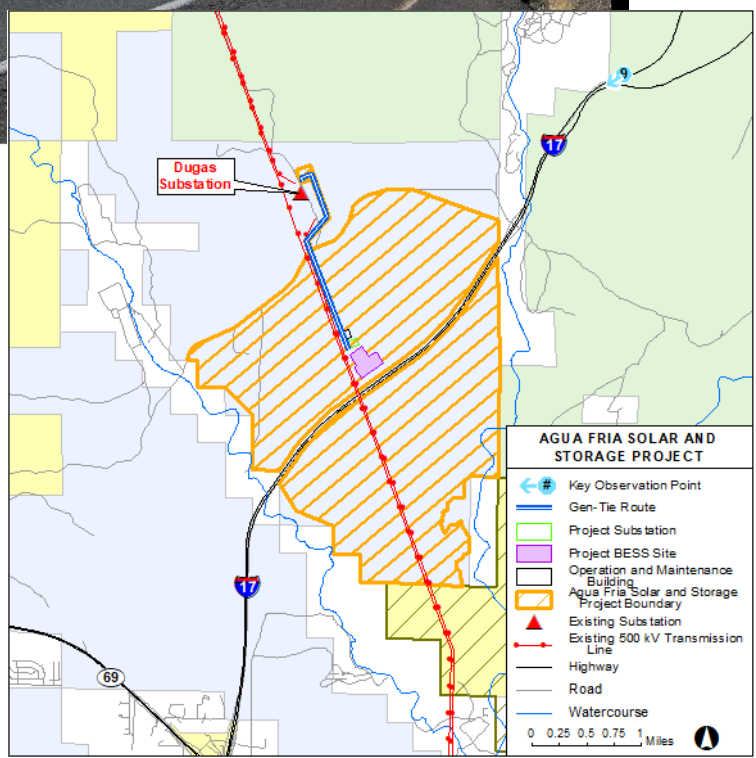


Existing Condition



Simulated Condition

This simulation is for graphic representation only, and exact structure types and locations have not been determined.



KOP 13 – Interstate 17: KOP 13 is representative of views from southbound 1-17 where I-17 bisects the Project Area, looking west at the existing high-voltage transmission line corridor and the proposed BESS site (**Figure 2-13**). Existing views in the foreground are dominated by grassy vegetation adjacent to the roadway, which would not be impacted by the Project. The middle ground is also dominated by existing grassy vegetation, with scattered bushes. The existing high-voltage transmission structures and lines are visible in the middle and background. As viewed from KOP 13, the Project components are situated in the middle ground, directly in front of the existing transmission structures, with at least a 300-foot setback from the I-17 roadway that retains the existing vegetation in the fore and middle ground. This KOP provides a close view fronting the BESS and project substation from the nearest public roadway. The BESS structures would be partially obscured by screening from the corrugated metal fencing, which patinas naturally to a rusty brown color. The corrugated fencing's smooth and solid form, and rectangular shape, will blend with the tan and brown tones of the surrounding landscape. The top portion of the BESS structures, white rectangular enclosures, would still be visible above the screening provided by the corrugated metal fence. The white BESS structures contrast with the existing natural landscape and would introduce new features to this observation point. The project substation structures would also be visible and would introduce additional distinct vertical lines and low-lying structures that partially obstruct views of the mountains in the background. In the far right of the middle ground, the operation and maintenance building is partially visible but largely concealed by existing vegetation in the fore and middle ground. The proposed gen-tie structures roughly parallel the existing high-voltage transmission line and present vertical, geometric, and thin but distinct lines visible in the middle ground adjacent to the project substation. Although the gen-tie structures do not obscure distant views to the background, including mountainous terrain and existing buildings and development, they would be apparent against the natural landforms in the foreground and background. From this distance, the BESS structures are the most prominent features visible, with the project substation and gen-tie structures also observable. These Project components would likely attract the attention of the casual observer driving on I-17. Views from KOP 13 would be temporary in nature for low sensitivity viewers (motorists on I-17), however the Project components would introduce new elements that are visually apparent within the landscape. Visual contrast at KOP 13 would be moderate.

Recreation Areas

KOP 3 – Estler Peak: KOP 3 is representative of views to the Project Area experienced by recreationalists visiting Estler Peak, looking west (see **Figure 2-3**). As viewed from KOP 3, the solar panels, gen-tie structures, BESS, and inverter/transformer enclosures would be visible in the middle to background. KOP 3 is an elevated vantage point from the Project, and provides broad, sweeping views of the desert valley landscape and mountainous backdrop. From this vantage point, the solar panels appear dark in color and low in profile, with a generally solid form that is interrupted by the vegetation and soils that will remain present in undeveloped areas within the site. The BESS (concentrated in the center of the image) and inverter/transformer enclosures (scattered throughout the solar arrays) are both white in color, geometric in form and shape, and low in profile, and are visible to the casual observer but lack scale and dominance from the viewing distance at KOP 3. The project substation, which is also faintly visible in the middle to background, and the gen-tie structures, which parallel the existing high-voltage transmission line, present weak form and color contrasts that would be visible but would not attract attention due to distance and the thin, horizontal lines near the visible transition between valley and foothill terrain. While the elevated vantage point at KOP 3 enhances visibility of the Project, and the dark color of solar panel surfaces and light color of the BESS would begin to attract some attention (solar panel and BESS color would not, however, dominate the landscape), line and texture contrasts associated with the Project would be reduced due to distance and lack of spatial dominance of Project features relative to the broad view available from the KOP.

Figure 2-13 – KOP 13

I-17 Southbound Looking West





This simulation is for graphic representation only, and exact structure types and locations have not been determined.

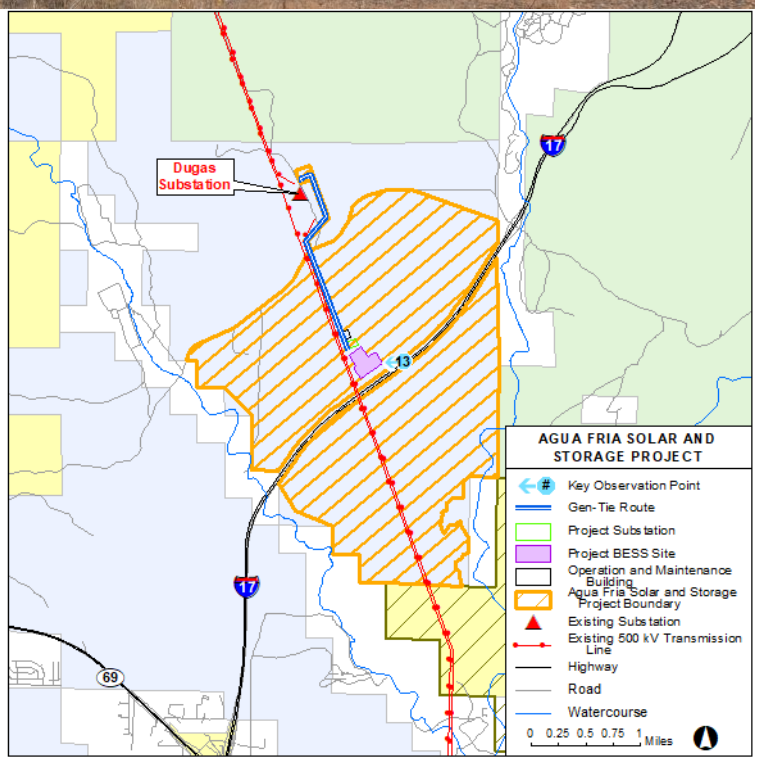


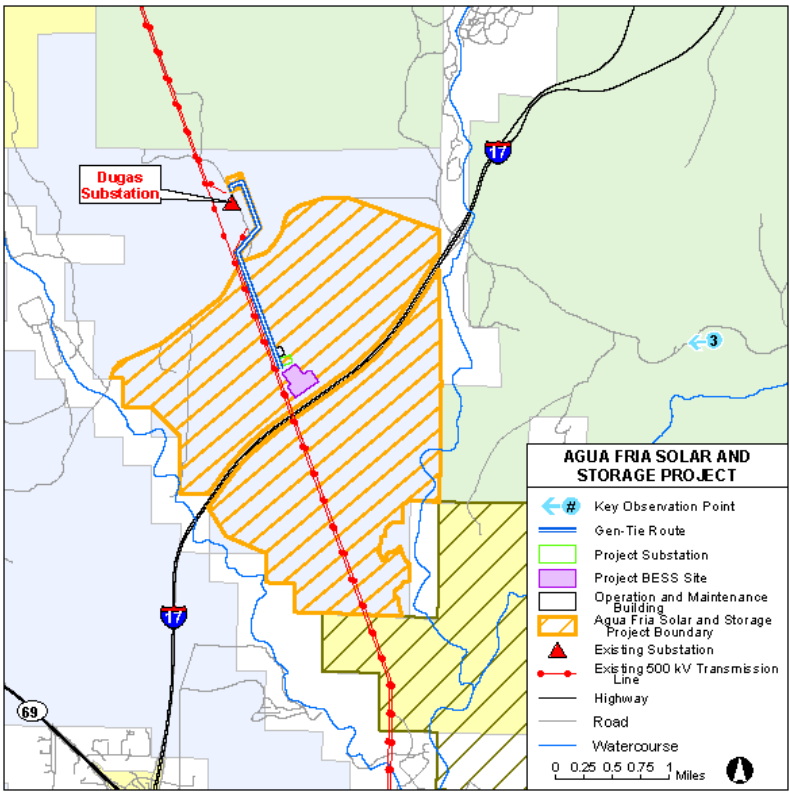
Figure 2-3 – KOP 3

Estler Peak Access Road Looking Southwest





This simulation is for graphic representation only, and exact structure types and locations have not been determined.



KOP 6 – Agua Fria National Monument (AFNM): KOP 6 is representative of views to the Project Area experienced by visitors to the AFNM, looking northwest from an unpaved access road near the Agua Fria River (see **Figure 2-6**). Types of viewers at KOP 6 include recreationalists, and general visitors to the AFNM, and are considered to be more sensitive than motorists along high-speed roadways such as I-17, for example. As viewed from KOP 6, the Project solar panels would be visible in the middle to background, which present altogether weak form, line, and color contrast due to their low, horizontal profile at this viewing distance. The project substation, BESS, and gen-tie structures would also be visible in the middle to background, but lack scale dominance in the broad valley landscape. The low profile of the solar panels, BESS, project substation, and gen-tie structures would allow for distant hills and ridges to remain dominant (i.e., view impairment of background landforms and the valley floor would be minimal). Overall, Project components located a greater distance from viewers would result in comparatively subdued (and weak) visual contrast. Further, visible Project components would lack scale or spatial dominance in the landscape and the valley and mountain terrain would remain visually dominant. Therefore, visual change and contrast resulting from the Project at KOP 6 would be considered to be relatively weak.

KOP 8 – Black Canyon Trail: KOP 8 is representative of views to the Project Area for recreationalists (hikers and bicyclists) on Black Canyon Trail, located approximately 1.9 miles northwest of the Project near the YMCA Chauncey Ranch Camp, looking southeast (see **Figure 2-8**). As viewed from KOP 8, the solar panels, inverter/transformer enclosures are visible in the middle to background, which are partially obscured by intervening topography. The project substation structures, and proposed gen-tie are also faintly visible in the middle to background. From this vantage point, the solar panels are dark in color and solid in form, contrasting with the existing brown, tan, and green soils and vegetation in the valley. While intervening shrub vegetation would have low potential for impairment of views to Project components, overall Project visibility and perceptible visual contrast would be minimal due to the viewing distance. Overall, weak visual contrast would be attributed to the dark color and largely horizontal lines presented by solar panels in the Project Area. The thin framing of project substation components and the thin, narrow form of gen-tie structures would be within the viewshed, but these features would tend to recede into the tones of background terrain. No impairment of views to the valley floor or background terrain would occur at KOP 8. Therefore, overall visual contrast attributed to the Project would be considered to be relatively weak.

Community and Residential Areas

KOP 2 – Cordes Lakes: KOP 2 is representative of views to the Project from residents, community members, and visitors of Cordes Lakes, looking north (see **Figure 2-2**). Existing views from KOP 2 are dominated by rural development with dispersed vegetation and trees in the foreground to middle ground, which would not be affected by the Project. As viewed from KOP 9, the Project would be situated in the middle to background, approximately 1.3 miles northeast of the KOP. The solar panels at a distance appear dark in color, and low in profile, with a generally thin form that is interrupted by the natural vegetation and soils that will remain present in undeveloped areas within the Project Area. Views from KOP 2 are relatively at-grade (i.e., a similar elevation as most of the Project Area), and trees in the foreground to middle ground and intervening topography partially obscure the solar panels. The project substation and gen-tie structures would be faintly visible from this KOP; however, they would lack scale and special dominance in comparison to existing landforms, and given the presence of existing high-voltage transmission lines and utility structures. Overall Project visibility and perceptible visual contrast would be minimal due to the viewing distance, and weak visual contrast would be attributed to the dark color and largely horizontal lines presented by solar panels in the Project Area.

Figure 2-6 – KOP 6

AFNM Primitive Road Looking Northwest





This simulation is for graphic representation only, and exact structure types and locations have not been determined.

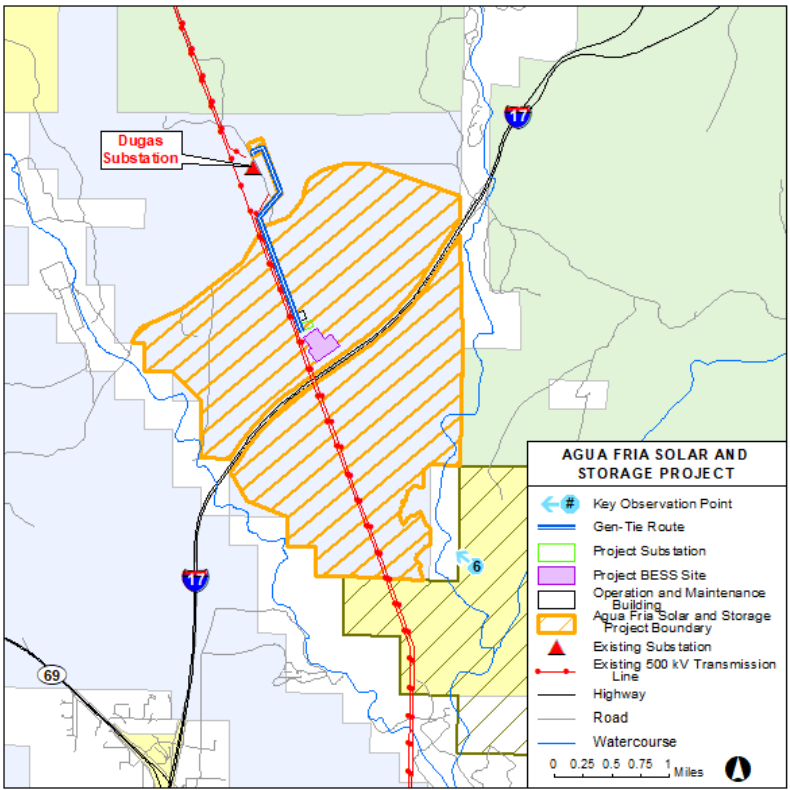


Figure 2-8 – KOP 8

Black Canyon Trail on BLM Land Looking Southeast





This simulation is for graphic representation only, and exact structure types and locations have not been determined.

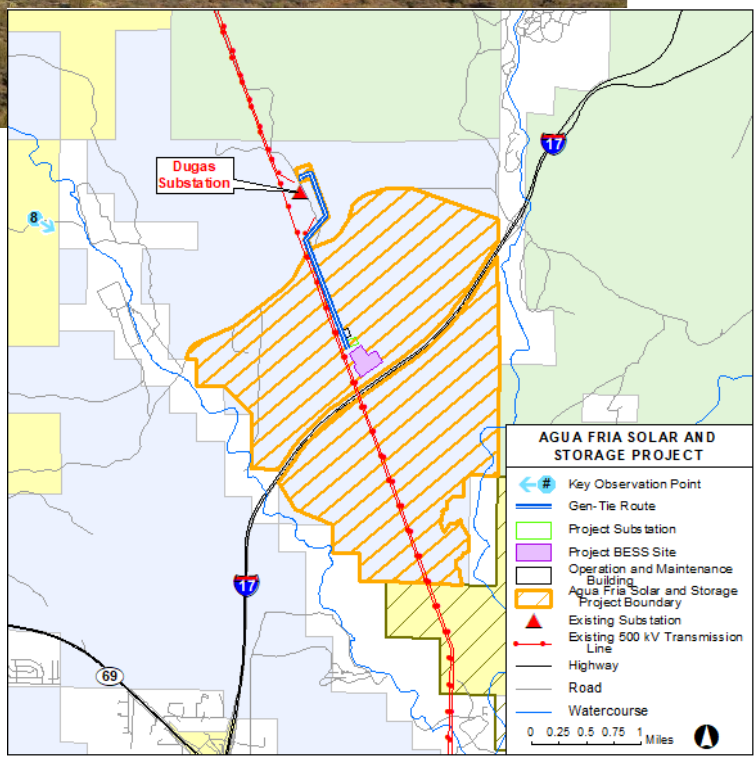


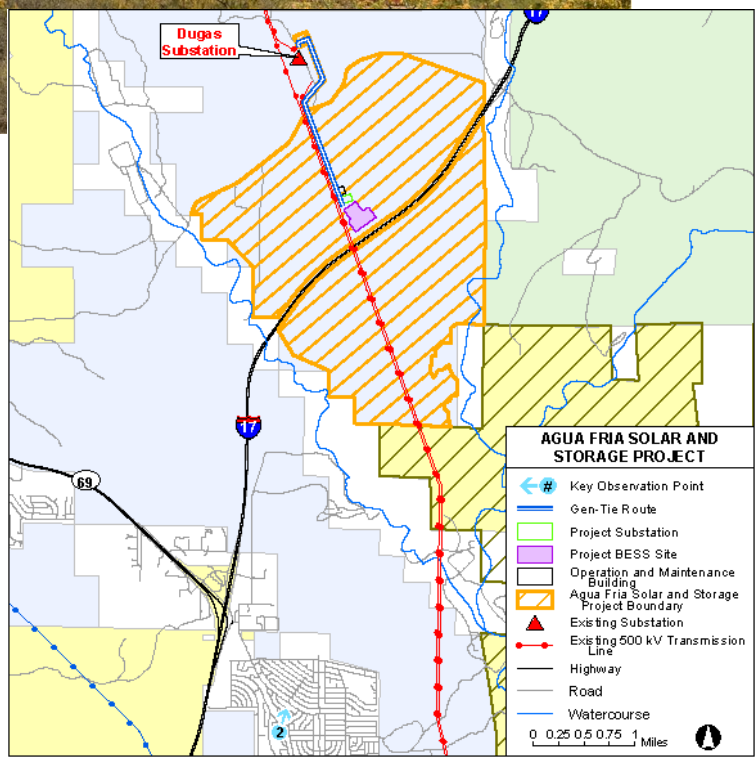
Figure 2-2 – KOP 2

East Mingus Drive in Cordes Lakes looking North





This simulation is for graphic representation only, and exact structure types and locations have not been determined.



KOP 7 – Arcosanti: KOP 7 is representative of views from Arcosanti, located approximately 1 mile south of the Project, looking north (see **Figure 2-7**). As viewed from KOP 7, the proposed solar arrays and inverter/transformer enclosures are present in the middle to background. The solar panels are dark in color and low in profile, with a solid form that is interrupted by the undisturbed vegetation and soils that will remain present in undeveloped areas within the site. The solar panels contrast with the existing brown, tan, and green soils and vegetation in the valley, and the white inverter/transformers enclosures present additional contrast against the backdrop of the dark black and gray solar panels and the surrounding terrain. Although the solar arrays are low in vertical profile, the horizontal scale would be visually dominant and remain large in scale within the broad, sweeping valley views. The project substation structures and gen-tie supports are also faintly visible in the background; however, the thin form and light gray color lack significant contrast with the landscape, and the proposed structures are nearly indistinguishable from existing high-voltage electrical transmission lines. Overall, the Project would attract attention of the casual observer at KOP 7 and begins to dominate the characteristic landscape in comparison to existing conditions. Therefore, perceptible visual contrast at KOP 7 would be moderate.

2.8 Visual Contrast Summary

2.8.1 Operations

The Project's visual impacts were evaluated to determine visual contrast, which included evaluating the level of visible contrast, the extent of proposed landscape alterations, and how noticeable the landscape alterations would be to the casual viewer during construction and operation of the Project. Overall, weak visual contrast is anticipated to occur at KOPs 1, 2, 3, 6, 8, 9. Weak to moderate visual contrast is anticipated to occur at KOP 4 and 5, where the contrast can be seen and may attract attention of the casual viewer, but does not dominate the visual landscape. Moderate visual contrast is anticipated to occur at KOP 7 and 13, where the contrast would be expected to attract attention and begins to dominate the characteristic landscape, particularly due to the direct and uninterrupted views to the site.

The Project may also be visible from elevated vantage points and distant public viewpoints to the east, south, and west. While visible at a distance, the Project features would not be prominent from these areas due to the separation distance, viewing angle, and the existing broad natural landscapes that would be retained in all directions that would be the focus of viewers. The Project would be directly visible from I-17; however, motorists traveling at high speeds (up to 75 miles per hour per posted signage on I-17) would have immediate views to the Project Area for only a short duration. As noted above and represented by KOPs 3 and 8, the Project would also be visible from designated hiking or biking trails situated in higher elevations to the east and northwest.

The Project plans to leave significant undeveloped open space within the Project boundary, which would leave the existing vegetation undisturbed. The undeveloped open spaces throughout the Project boundary would maintain existing land use for more than half of the Project Area. As shown in **Figures 2-1** – **2-9** and **2-13**, the existing vegetation between viewpoints and the Project facilities, provides a degree of screening by intervening vegetation. Portions of the solar arrays would be visible as a linear, horizontal, medium- to dark-gray areal mass on the valley partially screened from I-17 views by intervening vegetation and intervening terrain.

Figure 2-7 – KOP 7

Cross L Road Near Arcosanti looking North

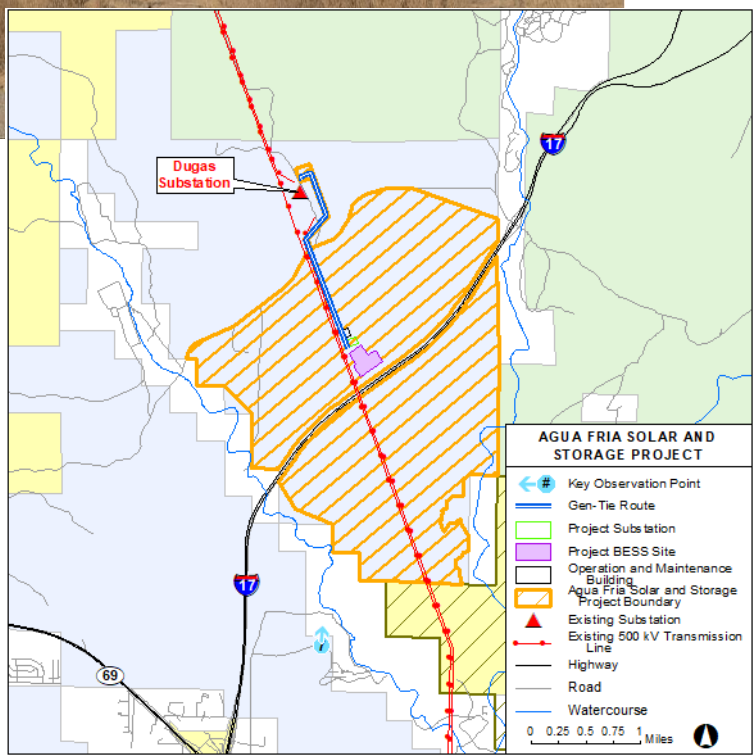


Existing Condition



Simulated Condition

This simulation is for graphic representation only, and exact structure types and locations have not been determined.



In general, the Project would not be visible from areas that are lower in elevation than the Project Area or are obscured by intervening topography, including from Photo Points 10, 11, and 12. Photo Point 11, which is located near the Agua Fria River within the AFNM, is situated at a lower elevation with intervening topography and vegetation that obscured the Project Area from view. At Photo Point 12, which is located at the Big Bug Trailhead, off SR 69 approximately 3 miles west of the Project Area, the Project would also be primarily obscured by intervening topography. From Photo Point 10, located near the Orme School entrance, views of the Project Area are obscured by natural vegetation, hills, and berms which block much of the background from this point. Furthermore, the KOPs provide the most critical viewpoints with representative views of the Project Area.

Photo Points 14, 15, 16, and 17 provide additional drive-by vantage points from vehicles travelling on I-17, both north and south bound. Photo Point 14 is taken near where the I-17 intersects with the eastern Project boundary, and Photo Point 17 is from where the western boundary of the Project Area and I-17 intersects. Photo Point 15 and 16 are taken from within the portion of the I-17 that bisects the Project Area. The additional I-17 photo points provide a wider range of representative views of the existing landscape context and viewing conditions in the Project Area and capture a range of viewing angles. As noted above, the Project would be directly visible from I-17 including from the locations of Photo Points 14, 15, and 16; however, motorists traveling at high speeds (up to 75 miles per hour per posted signage on I-17) would have immediate views to the Project Area for only a short duration. At an increased viewing distance, such as the location of Photo Point 17, intervening vegetation and topography is expected to provide additional screening of the Project components.

2.8.2 Construction

Visual effects due to temporary construction activities, including vehicle/equipment/worker presence, would be short-term and would not result in substantial, prolonged long-term visual change. Construction of the Project may entail the use of cranes; aerial lifts; heavy equipment, including tractors, rubber-tired dozers, graders, and scrapers; and temporary laydown and staging areas. Construction activities would include site preparation and grading, installation of solar panels and the transformers/converts and associated enclosures. The equipment, vehicles, and workforce involved with these activities (and components associated with the various phases of construction) would be visible from surrounding roadways and higher elevation viewpoints. Ground surface disturbance and vegetation removal, and general grading and trenching activities, could generate short-term dust that have potential to temporarily affect general view quality and visual character. Potential for short-term dust would be lessened by implementation of fugitive dust control measures. Project construction activities would typically occur during the day during normal working hours. At times, nighttime construction activities may be necessary to avoid the hottest portion of the day. When and if nighttime construction is required, illumination would be provided by portable temporary lighting that meets state and federal worker safety regulations. To the extent possible, nighttime construction lighting would be shielded and directed inward and away from possible outside observers.

2.9 Conclusion

Overall, the proposed modifications to the existing landscape would attract attention as viewed from various viewpoints and viewing distances, but the changes would not generally dominate the view of the casual observer. Although it is not located within BLM jurisdictional land, the proposed Project would be consistent with the nearby BLM lands within the AFNM that are designated as VRM Class III (as established in the RMP), which allows for moderate changes to

the landscape. The Project would also be consistent with the Yavapai County Comprehensive Plan policies regarding development within viewsheds. The Project includes best management practices (BMPs) and project design elements meant to avoid and reduce potential visual impacts. These include leaving open space areas throughout the Project Area, fencing designed to blend with the environment, and visual design considerations.

The Project is situated within a valley setting comprised of gentle slopes and landforms that is generally bordered by the Agua Fria River to the west, and Ash Creek to the east. As shown in the KOP photographs, the valley is surrounded by a backdrop of rolling foothills and mountainous terrain. The Project is not located on a steep slope or ridgeline that impacts the viewshed, and is therefore consistent with County Policies 4l and 11b. Further, the majority of the Project is relatively low in profile (solar panels, inverter/transformer enclosures). The project substation and BESS include taller structures of approximately 15 feet in height; however, the structures are set back from viewpoints in the middle of the Project Area, reducing visual contrast with the environment. Further, the existing high-voltage transmission line with tall structures, reduce the perceived visual change resulting from the Project. Therefore, the Project does not conflict with County Policy 11a, which discourages high profile structures that obstruct viewsheds in scenic areas. Lastly, although there are no designated scenic roadways within the Project vicinity, the Project design maximizes setbacks from existing roadways to increase viewing distance for motorists, particularly from I-17 (ADOT, 2025). Therefore, the Project is consistent with County Policy 11c, which encourages deeper setbacks along scenic roadways to avoid obstruction of viewsheds.

2.10 Recommended Best Management Practices

The Project design elements and proposed mitigation measures that are recommended to be incorporated into the Project to reduce visual contrast with the existing environment include retaining undeveloped areas and large buffer zones within the Project Area, minimized grading to less than 30% of the Project Area to maintain natural landscape, enhanced visual screening of the BESS facilities with a corrugated metal fence, low-impact game fencing around the solar arrays, maximized setbacks from roadways in proximity to the Project Area, co-location with existing infrastructure, and least visually obtrusive design considerations.

Retaining undisturbed open spaces throughout the Project Area increases the degree of natural screening by leaving existing natural vegetation. Undeveloped areas between solar arrays would provide views to the natural landscape that interrupts the otherwise solid, dark, and geometric form of the solar arrays.

The Applicant proposes the use of enhanced fencing around the BESS area to minimize visual impacts from travelers on I-17. This method of screening is effective, visually appealing, and can provide immediate results. The corrugated metal fence around the BESS would be reddish brown in color after left to patina naturally, which would obscure the BESS enclosures that would otherwise present a higher level of contrast with the existing setting. The fencing around the solar arrays is proposed to be game fencing. This fencing type was determined to be best for the Project because it is less visually impactful than chain link fencing or barbed wire fencing, is typical for use in Yavapai County, and is preferred and recommended by Arizona Game and Fish Department for wildlife movement.

In addition, maximizing setbacks from I-17 along the Project boundary increases viewing distance and leaves intervening vegetation between the viewer and Project facilities. Therefore, reducing perceived scale and dominance in the landscape as viewed by motorists. Furthermore, the

setbacks in Section 608 *Solar Facilities* restricts the development area, leaves ample natural open space, and the retention of ample existing vegetation on-site, which reduces visual contrast with the existing environment, as discussed above.

Where visual disturbance is inevitable, the Project design has taken steps to be the least visually obtrusive. The BESS structures are set directly on and step down from the existing grade. By placing taller Project structures on a lower grade, it allows the BESS to have the lowest exposure and profile from I-17. It also takes away the potential for a large fill slope at I-17 that would need revegetation and many years of regrowing before it heals.

In addition, the Project design includes using nonreflective materials, finishes, surface treatments, or color treatments of the solar array support structures to further reduce visual impacts. Materials, coating, or paints having little or no specular or reflective qualities should be used on structures including, but not limited to, buildings, tanks, fences, fence railings, poles, aboveground pipes and culverts, and reverse sides of signs and guardrails.

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Dugas Substation

Agua Fria Solar and Storage Project

PRESCOTT NATIONAL FOREST

YAVAPAI CO.

AGUA FRIA NATIONAL MONUMENT

Orme School

Mayer High School

YMCA Chauncey Ranch Camp

Cordes Lakes

Arcosanti

Mayer

Estler Peak

Dugas - Tule Mesa Recreation Area

Big Bug Trail Head & Parking Area

Riverbend Recreation Area & Parking

1891 Schoolhouse

Teskey Home Site

Bloody Basin Info Kiosk

Orme Rd

Old Sycamore Rd

Dugas Rd

FR 686

Agua Fria River

Ash Creek

Little Ash Creek

Sycamore Creek

800-20-011, 800-20-060R, 800-20-040N, 800-20-041E, 800-20-041N, 800-20-041F, 800-20-042E, 800-20-043T, 800-20-044E, 800-20-056H, 800-20-042G, 800-20-043U, 800-20-056W, 800-20-043S, 800-20-044H, 800-20-044M, 800-20-056J, 800-20-044T, 800-20-044U, 800-20-044V, 800-20-044Z, 800-20-046, 800-20-056Z, 800-20-045W, 800-20-047M, 800-20-056X, 800-01-031V, 800-01-032U, 800-01-029F, 800-01-030U, 800-01-018H, 800-01-018J, 800-01-018G, 800-01-017Y, 800-01-018K, 800-01-018L, 800-10-020J, 800-01-028U, 800-01-031N, 800-01-035P, 800-01-021A, 800-05-003G, 800-05-004E, 800-05-004M, 800-05-004N, 800-05-012Z, 800-05-059Z, 800-05-008, 800-05-005H, 800-09-001E, 800-09-001G, 500-09-001C, 500-09-001D, 500-09-001E, 500-25-002B, 500-25-001, 500-25-012, 500-25-014B, 500-04-001, 500-06-032, 501-27-004, 501-27-002, 501-27-001F, 501-27-007, 501-27-009A, 501-27-016A, 501-27-010, 501-27-011, 501-27-014A, 501-27-015

Legend

Proposed Project Components

- Gen-Tie Route
- Project BESS Site
- Agua Fria Solar and Storage Project Boundary
- Project Substation
- Operation and Maintenance Building
- 5-Mile Buffer of Project Site

Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Interstate Highway
- Road
- Watercourse
- Parcel
- School
- Existing 230 kV Transmission Line
- State Highway
- Trail
- Jurisdictional Boundary

Visual Resources

- Key Observation Point
- Photo Point

BLM Designation

- BLM Recreation Site
- BLM Primitive Road
- Wild and Scenic River
- Trailhead
- BLM Road
- Agua Fria National Monument

BLM Visual Resource Inventory Class

- Class II
- Class III
- Class IV

USFS Designation

- USFS Recreation Site
- National Forest Road
- National Forest Road - closed to motorized uses
- USFS Motorized Trail

Jurisdictional Land Ownership

- Bureau of Land Management Land
- State Land
- US Forest Service Land
- Private Land (No Shading)

0 0.5 1 1.5 Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: BLM, ESRI, YAVAPAI CO., USGS.

ARIZONA

Yavapai County

Map Extent

AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 2a. Visual Resources

Map Extent: Yavapai County, AZ

Date: 11.14.25 | Author: ckvw

Dugas Substation

800-20-043U
800-20-056W
800-20-043S
500-25-014B
500-25-015
500-25-014C
Agua Fria River
Old Sycamore Rd
800-20-056X
800-01-018G
800-20-044H
500-25-014G
800-20-044M
800-20-044S
500-04-002
800-20-044U
800-20-044V
800-20-044T
800-20-044Z
500-04-001
501-27-006
501-27-004
Ash Creek
Little Ash Creek
FR 686
Orme Rd
501-31-002N
Dugas Rd
800-01-018K
501-31-009A
501-31-009B

1 4 5 6 13 14 15 16 17

17

Legend

Proposed Project Components

- Gen-Tie Route
- Project BESS Site
- Agua Fria Solar and Storage Project Boundary
- Project Substation
- Operation and Maintenance Building

Other Components

- Existing Substation
- Interstate Highway
- Watercourse
- Existing 500 kV Transmission Line
- Road
- Parcel

Visual Resources

- Key Observation Point
- Photo Point

BLM Designation

- BLM Primitive Road
- Agua Fria National Monument
- Wild and Scenic River

BLM Visual Resource Inventory Class

- Class II

USFS Designation

- National Forest Road

Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

0 0.25 0.5 0.75
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: BLM, ESRI, YAVAPAI CO., USGS.

ARIZONA

Yavapai County

Map Extent

AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 2b. Visual Resources Zoom

Map Extent: Yavapai County, AZ

Date:11.14.25 | Author: ckvw



Existing Conditions
Old Sycamore Road Looking south

KOP 1

This is for graphic representation only, and exact structure locations have not been determined.



Proposed Conditions
Old Sycamore Road Looking south

KOP 1



Existing Conditions
East Mingus Drive in Cordes Lakes Looking North

KOP 2

This is for graphic representation only, and exact structure locations have not been determined.



Proposed Conditions
East Mingus Drive in Cordes Lakes looking North

KOP 2



Existing Conditions
Estler Peak Access Road looking Southwest

KOP 3

This is for graphic representation only, and exact structure locations have not been determined.



Proposed Conditions
Estler Peak Access Road looking Southwest

KOP 3



Existing Conditions
I-17 Southbound looking Southwest

KOP 4

This is for graphic representation only, and exact structure locations have not been determined.



Proposed Conditions
I-17 Southbound looking Southwest

KOP 4



Existing Conditions
I-17 Northbound looking Northeast

KOP 5

This is for graphic representation only, and exact structure locations have not been determined.



Proposed Conditions
I-17 Northbound looking Northeast

KOP 5



Existing Conditions
AFNM Primitive Road Looking Northwest

KOP 6

This is for graphic representation only, and exact structure locations have not been determined.



Proposed Conditions
AFNM Primitive Road Looking Northwest

KOP 6



Existing Conditions
Cross L Road Near Arcosanti looking North

KOP 7

This is for graphic representation only, and exact structure locations have not been determined.



Proposed Conditions
Cross L Road Near Arcosanti Looking North

KOP 7



Existing Conditions
Black Canyon Trail on BLM Land Looking Southeast

KOP 8

This is for graphic representation only, and exact structure locations have not been determined.



Proposed Conditions
Black Canyon Trail on BLM Land Looking Southeast

KOP 8



Existing Conditions
I-17 Southbound Looking Southwest

KOP 9

This is for graphic representation only, and exact structure locations have not been determined.



Proposed Conditions
I-17 Southbound Looking Southwest

KOP 9



Photo Point 10
Orme School Road Looking Southwest



Photo Point 11
AFNM Primitive Road, South of Agua Fria River Looking Northwest



Photo Point 12
Big Bug Trailhead Looking Northeast



Existing Conditions
I-17 Southbound Looking West

KOP 13

This is for graphic representation only, and exact structure locations have not been determined.



Proposed Conditions
I-17 Southbound Looking West

KOP 13



Photo Point 14
I-17 Southbound Looking Southwest



Photo Point 15
I-17 Southbound Looking Southwest



Photo Point 16
I-17 Southbound Looking Southeast



Photo Point 17
I-17 Northbound Looking Northeast

Agua Fria Solar and Storage Project

Landscaping Plan

Yavapai County, AZ

Prepared for:

Yavapai County

Prepared by:

longroad ENERGY

kp environmental

December 2025

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Figure 1: Project Components

Figure 2: Open Space Areas

Figure 3. Revegetation Plan Proposed View

Appendices

Appendix A: Baseline Vegetation Assessment for Revegetation Plan

Executive Summary

The Agua Fria Solar and Storage Project Landscaping Plan outlines strategies to preserve and restore native vegetation, minimize environmental disturbance, and ensure long-term site stability and visual integration with the surrounding landscape in Yavapai County. The 450-MW solar and battery project has been designed to minimize grading, preserve existing vegetation, and maintain natural vegetation for visual screening where possible. The Project design incorporates over 2,000 acres of dedicated open space that will not be disturbed or fenced, including a minimum 300' buffer along Interstate 17. In addition to this Landscaping Plan, a detailed grading design has been submitted for engineering review as part of the Development Plan, indicating existing and proposed contours at no greater than two-foot contours. A combination of grading, mowing and "crush and roll" methods will be used for construction of the solar PV areas. A pre-construction baseline vegetation assessment was completed to inform this preliminary plan to identify existing vegetation types and inform a proposed seed mix for revegetation. Per the requirements of Yavapai County's Section 608 Solar Facilities standards, temporarily disturbed areas will be revegetated using native, certified weed-free seed mixes tailored to four identified ecozones, enhancing erosion control, wildlife habitat, and visual quality. Weed management will rely primarily on mowing and targeted, low-risk herbicides, applied by licensed professionals, while ongoing site maintenance will control vegetation height for fire safety and limit invasive species spread. Overall, project impacts on vegetation and visual resources will be minor and reversible, and with implementation of the proposed revegetation, weed control, and maintenance measures, the site will remain ecologically stable, visually compatible, and compliant with Yavapai County's Section 608 Solar Facilities standards.

1.0 Introduction

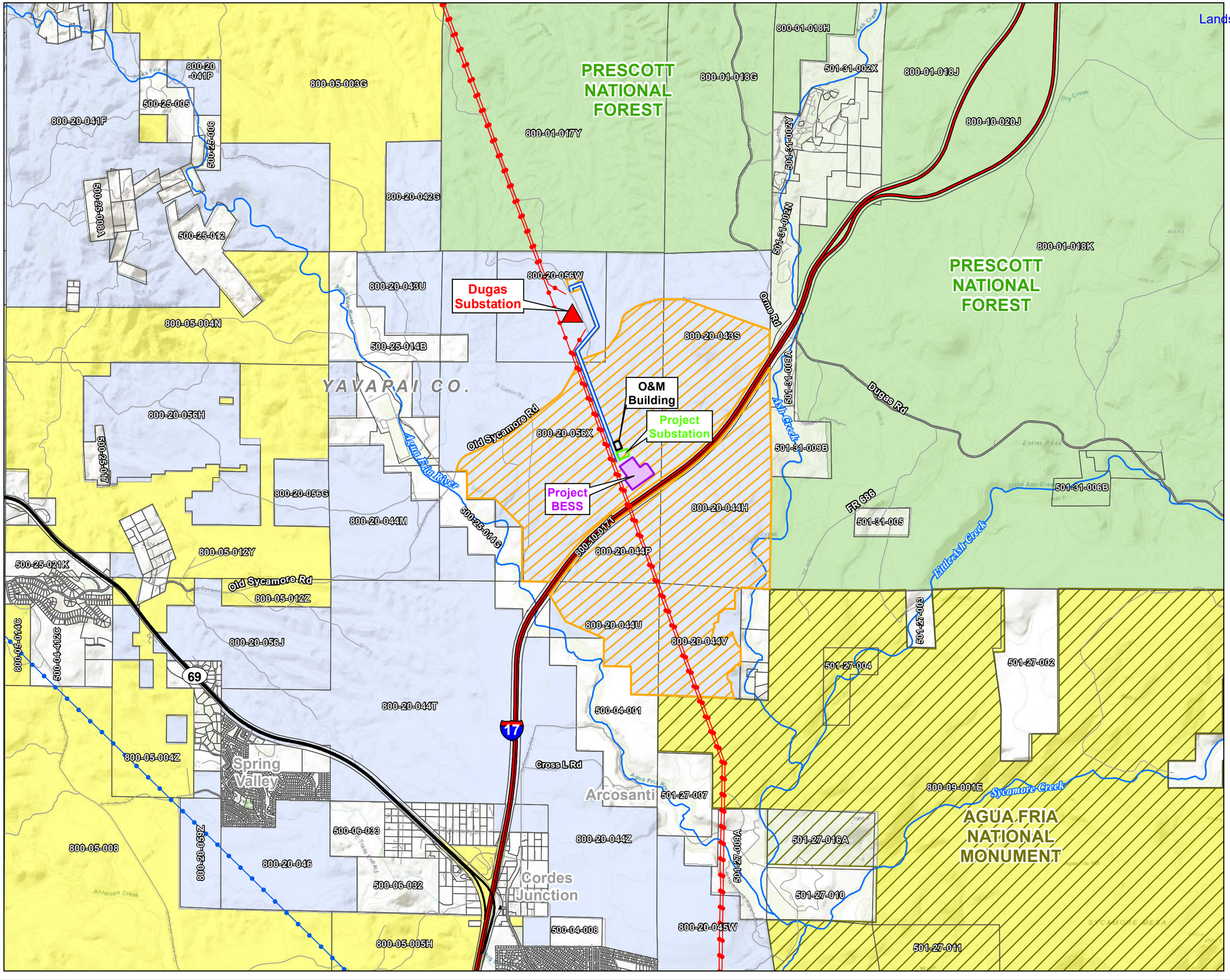
This Landscaping Plan (Plan) has been prepared for submittal to Yavapai County as part of the Solar Facility Use Permit (SFUP) application for the Agua Fria Solar and Storage Project (Project). This Plan has been developed in conformance with Section 608 *Solar Facilities* of the Yavapai County Zoning Ordinance, and presents the Project's approach to preserving vegetation on-site, revegetating the site, managing weeds, and maintaining site vegetation during operations.

1.1 Project Location

The Agua Fria Solar and Storage Project (Project) is located in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project vicinity including several existing high voltage transmission lines, the existing Dugas Substation, as well as Interstate 17 (I-17), which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott.

1.2 Project Components

The Project is an up to 450 megawatt (MW) nameplate capacity solar photovoltaic (PV) power plant. The Project consists of a solar field of PV modules (solar field), battery energy storage system (BESS), project substation, operation and maintenance building, and ancillary facilities. The Project would be located on Arizona State Trust Land managed by the Arizona State Land Department (ASLD) (ASLD Land), see **Figure 1,** and controlled by Agua Fria, LLC, a Delaware



Legend

Proposed Project Components

- Gen-Tie Route
- Project Substation
- Project BESS Site
- Operation and Maintenance Building
- Agua Fria Solar and Storage Project Boundary

Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Interstate Highway
- State Highway
- Road
- Watercourse
- Parcel
- National Monument

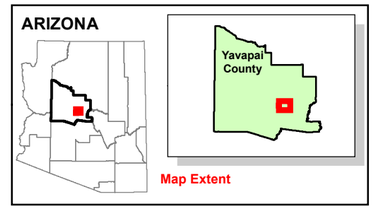
Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

0 0.5 1 1.5
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.

ARIZONA



longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 1. Project Components

Map Extent: Yavapai County, AZ

Date: 7.7.25 | Author: sjw

limited liability company d/b/a Agua Fria AZ, LLC in Arizona (Applicant) via a solar lease. The Applicant is a subsidiary of Longroad Development Company, LLC (Longroad).

The Project Area is approximately 4,215 acres. Within the Project Area, the Development Area would be approximately 1,930 acres, the BESS would be approximately 35 acres, and the project substation would be approximately 5 acres. In addition, there will be a generation tie (gen-tie) line associated with the Project to connect the power generated from the solar facilities to the grid at Dugas Substation. The gen-tie would be approximately 1.8 miles in length and sited within a corridor located north of I-17, south and east of the existing Dugas Substation, and directly east of the existing 500 kilovolt (kV) transmission line corridor. The Applicant received a Certificate of Compatibility (CEC) from the Arizona Corporation Commission for the gen-tie in May 2025.

2.0 Vegetation Preservation Plan

The Project has been designed to minimize grading and preserve existing vegetation to the greatest extent practicable. This approach preserves ecosystems including riparian zones along major drainages, and prominent landscape features.

2.1 Open Space Areas

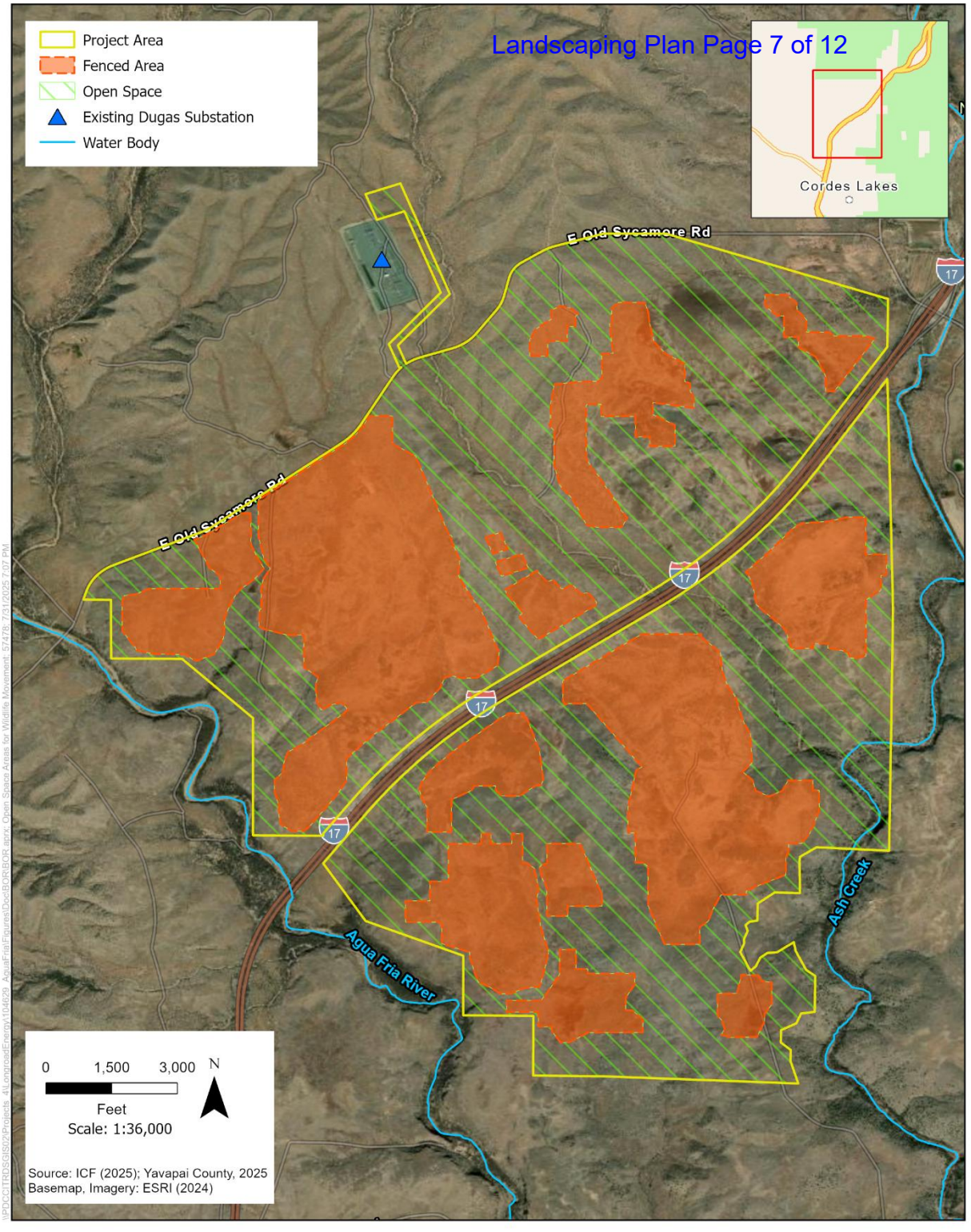
The Project design includes significant open space areas which will not be fenced. Existing vegetation will be left intact in these open space areas, therefore, this design feature will preserve existing native plants and local ecosystems. In addition, these open space areas will provide natural visual screening (**Figure 2**) and will preserve existing wildlife habitat. Maintaining existing vegetation will also minimize wind and water erosion.

In conformance with the Yavapai County Solar Facilities Ordinance, a minimum of 300 feet of existing vegetation will remain intact between I-17 and the Project.

2.2 Solar Array Areas

The fenced areas of the Project will be treated by a combination of grading, mowing, and/or "crush and roll" construction techniques. Grading of the site will be minimized as much as possible. Grading will be implemented in some portions of the site to allow for the installation of the solar trackers. A grading plan indicating existing and proposed contours at no greater than two-foot contours is illustrated within the Development Plan.

In solar array areas treated with "crush and roll" construction techniques, existing vegetation will be maintained as much as possible. "Crush and roll" means that existing topsoil and vegetation will not be removed prior to installation of solar facility components – e.g., crews and equipment will "crush" existing vegetation as they "roll" equipment through an area to install piles, panels, and other components. These areas may be mowed prior to the installation of equipment if vegetation presents human safety or fire hazards, or if mowing is otherwise determined necessary to efficiently construct the Project. The benefits of "crush and roll" include the preservation of existing vegetative communities and root systems and minimization of wind and water erosion.



\\PDCCITRDSIS02\Projects 4\Longroad\Energy\104629 AguaFriaFigures\Doc\BGR\BGR aprx: Open Space Areas for Wildlife Movement 57478: 7/31/2025 7:07 PM

ICF

AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 2. Open Space Areas

3.0 Revegetation Plan

Areas that are temporarily disturbed during construction, including graded solar array areas, will be revegetated where feasible. Areas where revegetation is not considered feasible include locations with exposed bedrock. Some areas of the project will remain clear of vegetation for operational needs and safety (e.g. parking areas, permanent road surfaces, fire break areas, substation, etc.).

Revegetation methods and implementation will comply with all relevant fire safety regulations and plans, and erosion and stormwater management plans.

Revegetated areas will provide natural visual screening, wildlife habitat, and protection from wind and water erosion, and invasive weeds.

3.1 Baseline Assessment

A baseline vegetation assessment was completed to inform a site-specific seed mix for the Project (**Appendix A**). Four ecozones were identified for the Project Development Area considering current vegetative conditions and potential total production based on soil water holding capacity. The four ecozones are classified as Bare, Rocky, Cactus, and Tobossagrass. Vegetative aerial coverage ranged from 27 to 68 percent. Grass aerial coverage ranged from 9 to 61 percent, while perennial forb and shrub percentages ranged from 7 to 17%. Preliminary proposed seed mix species were identified to be compatible with the four ecozones conditions and native vegetative communities. The preliminary proposed seed mix is discussed in detail below.

3.2 Seeding Method

Revegetation efforts will be focused on seeding areas of the Project Development Area which were temporarily disturbed during construction including graded portions of solar arrays. Locations for seeding will be determined based on final engineering designs, construction schedule, and site conditions.

Broadcast seeding or no-till drill seeding may be employed to distribute seed on the Project Development Area. The seeding method(s) to be employed on-site will be determined based on site conditions, construction sequencing, and other factors. Prior to application of seed, portions of the site may be mowed.

Seeding may occur prior to the commencement of equipment installation, during construction, or after equipment installation is complete. If possible, seeding will be scheduled to occur in late summer or early fall to improve germination likelihood in the following winter and seasons.

3.3 Seed Mix

Revegetation areas will be seeded with a certified weed free seed mix based on plants predominantly native to the site and Yavapai County. A preliminary proposed seed mix based on the baseline assessment is provided in **Table 1**. This is a diverse mix that is low in height and provides rapid stabilization and habitat for wildlife. The diversity within this mix will provide early successional and final climax species to provide for early erosional protection and long-term self-sustaining vegetive community. In addition, a “nurse crop” Such as Barley (*Hordeum vulgare*) or Quickguard (*Sterile triticale*) will be seeded. The intent of a nurse crop is to act as a hardy species which is more likely to germinate quickly and provide groundcover and suitable germination micro

environment for other species to grow. **Figure 3** is a representative visual rendering of the proposed revegetation in a solar panel array area of the Project. It illustrates the intended outcome of the revegetation plan and depicts the anticipated post-construction conditions after approximately 2 years.

Table 1. Preliminary Proposed Revegetation Seed Mix

Common Name	**Scientific Name**
Bottlebrush Squirreltail	*Elmyus elymoides*
Western Wheatgrass	*Pascopyrum smithii*
Tobossagrass	*Pleuraphis mutica*
Sideoats Grama	*Bouteloua curtipendula*
Prairie Junegrass	*Koeleria macrantha*

This proposed seed mix is preliminary and subject to change based on final assessments, additional subject matter expert input, seed availability, and seeding schedule.



Preliminary Proposed Revegetation Seed Mix

Common Name	Scientific Name
Bottlebrush Squirreltail	*Elmyus elymoides*
Western Wheatgrass	*Pascopyrum smithii*
Tobossagrass	*Pleuraphis mutica*
Sideoats Grama	*Bouteloua curtipendula*
Prairie Junegrass	*Koeleria macrantha*

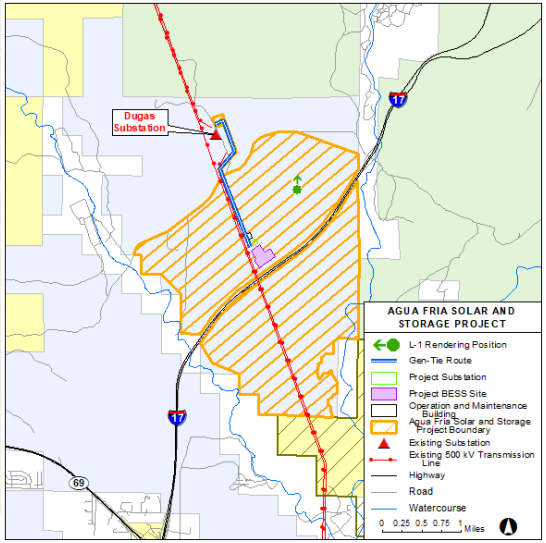


Figure 3.
Revegetation Plan – Proposed View

4.0 Weed Management

Weed management is critical to site management. There are several methods for controlling weeds, the following techniques will be considered for implementation in the Project Area.

4.1 Minimize Spread of Weeds

The site will be monitored on an ongoing basis to evaluate invasive and noxious weed problem areas and a plan to minimize the spread of weeds. To the greatest extent possible, traffic will be limited in areas with known weed presence. Equipment will be cleaned prior to delivery to the site.

4.2 Weed Control

Weed control may be accomplished via mowing, broadcast herbicide application, targeted herbicide application. Other methods may be considered, depending on the type and extent of weed presence on-site. Weed control activities will be focused on areas with weed presence, and will not be employed on areas with minimal or no weeds.

Where possible, mowing will be utilized to control weeds as an alternative to herbicides. Blanket herbicides will be minimized in areas where non-invasive plants are present.

Herbicides used on the Project Area will be products designated “minimum risk” by the Environmental Protection Agency. All herbicides will be applied by licensed and trained applicators in adherence with all product instructions.

With respect to timing, efforts will be made to control weeds prior to flowering or development of viable seeds. Further, weed control activities will be timed to minimize impacts to non-invasive plant species, to the greatest extent possible.

5.0 Site Maintenance

The vegetation on the Project will be continually managed for the duration of the SFUP. On-site vegetation will provide natural visual screening and wildlife habitat, and will also mitigate wind and water erosion and invasive weeds during the operational life of the Project.

All site maintenance activities will conform with fire mitigation rules, regulations, and best practices, in consultation with the applicable fire district. For example, vegetation height will be managed so that it does not present a fire hazard. Additionally, site maintenance must be in conformance with all insurance requirements.

Agua Fria Solar and Storage Project

Public Safety, Fire, and Emergency Management Plan

Yavapai County, AZ

Prepared for:

Yavapai County

Prepared by:

kp environmental

December 2025

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Figure 1: Project Components

Appendices

Appendix A: Public Safety, Fire, and Emergency Response Plan

Executive Summary

The Agua Fria Solar and Storage Project's Public Safety, Fire Protection, and Emergency Management Plan integrates proactive coordination with local fire and emergency agencies, site-specific fire mitigation measures, and detailed training and communication protocols to safeguard personnel, the public, and surrounding natural resources throughout the Project's lifecycle. During construction and operation, all Project personnel will receive Public Safety, Fire, and Emergency Management Plan training.

The Applicant is in close coordination with the Mayer Fire Department as they will be providing emergency response services for the Project Area. The Applicant will work closely with Mayer Fire Department to ensure the site design and emergency response plan meet their safety standards. Some areas within the Project Area will be cleared to maintain fire breaks and meet operational and insurance requirements. Revegetation efforts will use certified native, fire-resistant grasses to reduce wildfire risks and comply with applicable fire safety, stormwater, and erosion control plans.

The Emergency Response Plan (ERP) outlines site-specific procedures for notification, assembly, and evacuation. Designated construction and safety management personnel will act as emergency coordinators, ensuring a trained coordinator is always on site. Prior to construction and operations, contact numbers for emergency response coordinators shall be provided to the Mayer Fire District and the Yavapai County OEM.

1.0 Introduction

1.1 Yavapai County

The Yavapai County Zoning Ordinance has been revised to add Section 608 *Solar Facilities* with requirements, standards, and procedures to regulate the development of utility scale solar facilities. The revised Zoning Ordinance was adopted on November 6, 2024, and took effect on December 4, 2024 (Yavapai County, 2024a).

The Public Safety, Fire, and Emergency Management Plan was prepared pursuant to the requirements of the Solar Facility Use Permit. Section 2.h of the Solar Facilities Ordinance requires a proposed Public Safety, Fire Protection and Emergency Management Plan for construction and post construction operation of the facility, including plans for ongoing management of forest and fire fuels shall be submitted by the applicant. Additional mitigation may be required if requested by the local or nearest fire district to support response capabilities. This plan must be finalized and approved by the Development Services Director prior to issuance of construction permits (Yavapai County, 2024a). This plan will be submitted alongside the other Application requirements but will continue to be updated in accordance with ongoing coordination with the County Development Services and local first responders.

Public safety, fire, and emergency management information for the Project Area and surrounding areas was gathered from Yavapai County and Google Earth.

1.2 Project Description

1.2.1 Project Location

The Agua Fria Solar and Storage Project (Project) is located in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project vicinity including several existing high voltage transmission lines, the existing Dugas Substation, as well as Interstate 17 (I-17),

which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott.

1.2.2 Project Components

The Project is an up to 450 megawatt (MW) nameplate capacity solar photovoltaic (PV) power plant. The Project consists of a solar field of PV modules (solar field), battery energy storage system (BESS), project substation, operation and maintenance building, and ancillary facilities. The Project would be located on Arizona State Trust Land managed by the Arizona State Land Department (ASLD) (ASLD Land), see **Figure 1,** and controlled by Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona (Applicant) via a solar lease. The Applicant is a subsidiary of Longroad Development Company, LLC (Longroad).

The Project Area is approximately 4,215 acres. Within the Project Area, the Development Area would be approximately 1,930 acres, the BESS would be approximately 35 acres, and the project substation would be approximately 5 acres. In addition, there will be a generation tie (gen-tie) line associated with the Project to connect the power generated from the solar facilities to the grid at Dugas Substation. The gen-tie would be approximately 1.8 miles in length and sited within a corridor located north of I-17, south and east of the existing Dugas Substation, and directly east of the existing 500 kilovolt (kV) transmission line corridor. The Applicant received a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission for the gen-tie in May 2025.

Operational staffing for the Project is expected to be minimal at approximately three to six on-site full-time employees.

PRESCOTT NATIONAL FOREST

PRESCOTT NATIONAL FOREST

AGUA FRIA NATIONAL MONUMENT

YAVAPAI CO.

Dugas Substation

O&M Building

Project Substation

Project BESS

Old Sycamore Rd

Dugas Rd

Omar Rd

Agua Fria River

Ash Creek

Little Ash Creek

Sycamore Creek

FR 686

Spring Valley

Arcosanti

Cordes Junction

Cross L Rd

69

17

800-20-041P
800-05-003G
800-01-018H
800-01-018G
501-31-002X
800-01-018J
500-25-005
800-20-041F
500-25-006
800-01-017Y
501-31-002Y
800-10-020J
500-25-008A
800-20-042G
501-31-002N
500-25-012
800-01-018K
800-20-043U
800-20-056W
800-05-004N
500-25-014B
800-20-043S
501-31-009A
800-20-056H
800-20-056X
501-31-009B
500-25-017
800-20-056G
800-20-044M
500-25-014G
800-20-044H
501-31-006B
800-05-012Y
500-25-021K
800-10-017T
501-31-005
800-05-012Z
800-20-044P
800-06-014C
500-04-012C
800-20-036J
800-20-044U
800-20-044V
500-27-003
501-27-004
501-27-002
800-20-044T
500-04-001
800-05-004Z
800-09-001E
501-27-007
500-06-033
800-20-044Z
501-27-016A
800-20-039Z
800-05-008
800-20-046
501-27-009A
500-06-032
501-27-010
800-20-045W
500-04-008
800-05-005H
501-27-011

Legend

Proposed Project Components

- Gen-Tie Route
- Project Substation
- Project BESS Site
- Operation and Maintenance Building
- Agua Fria Solar and Storage Project Boundary

Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Interstate Highway
- State Highway
- Road
- Watercourse
- Parcel
- National Monument

Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

0 0.5 1 1.5
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.

ARIZONA

Yavapai County

Map Extent

longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 1. Project Components

Map Extent: Yavapai County, AZ

Date: 7.7.25 | Author: sjw

2.0 Public Safety, Fire Protection, and Emergency Management Plan

The proposed Public Safety, Fire Protection and Emergency Management Plan for construction and post-construction operation of the facility, including plans for ongoing management of forest and fire fuels shall be submitted by the applicant. Additional mitigation may be required if requested by the local or nearest fire district to support response capabilities. or as determined through the requirements of Section 608 *Solar Facilities* of the Yavapai Zoning Ordinance.

Appendix A outlines the general Public Safety, Fire, and Emergency Response Plan for the Project Area. The Public Safety, Fire, and Emergency Response Plan must be reviewed by all on-site personnel prior to the start of construction activities. Copies will be provided to all construction and operational staff onsite to ensure established protocol herein is followed in the case of an emergency.

2.1 Need for an Emergency Management Plan

The Project is located in rural, unincorporated Yavapai County, on Arizona State Trust Land. The Prescott National Forest (Prescott NF), which is managed by the United States Forest Service (USFS), is located adjacent to the Project on the eastern Project boundary and located approximately 0.4 miles north of the northern Project boundary. The Agua Fria National Monument, on Bureau of Land Management (BLM) managed land, is located directly south of the Project Area.

Due to the remote nature of the site, people working at the site during construction and operation shall be familiar with the Emergency Management Plan and actions to be taken in the event of an emergency.

2.2 Public Safety

Residential zoning districts within 5 miles of the Project include RCU (Residential; Rural), R1 (Residential; Single Family), R1L (Residential; Single Family Limited), R2 (Residential; Multi-Family), RMM (Residential; Multi-Sectional Manufactured Homes), and RS (Residential and Services).The Project Area and majority of adjacent land is zoned as RCU, however, there are very few residences in the immediate Project vicinity. Additionally, motorists travelling along I-17, Old Sycamore Road, Orme Road, and Dugas Road would be in the vicinity of the Project. Employees during construction and operation of the site will be provided the Public Safety, Fire, and Emergency Management Plan to ensure motorists and nearby residents are not impacted by development of the Proposed Project.

Roadways

I-17, a major existing roadway bisects the Project Area. Old Sycamore Road, Orme Road, and Dugas Road are the nearest County maintained roads to the Project Area, all of which are classified as Minor Collector county maintained roads. Old Sycamore Road and Orme Road are unpaved, maintained roads. Dugas Road is a paved maintained road. Arizona Department of Transportation (ADOT) recorded Average Annual Daily Traffic counts (AADTs) along I-17 between exits 263 and 268 reporting 29,645 trips per day in 2023 (ADOT, 2023a). On exit 268, Orme Road/Dugas Road, ADOT recorded AADTs as 134 trips per day in 2023 (ADOT, 2023b). There is no recorded data found for ADTs along Old Sycamore Road, but it is classified as a Minor Collector Road per the Yavapai County Roadway Design Standards issued in 2020, meaning these roads have lower traffic volumes at lower speeds over shorter distances than Major Collector or Arterial roads.

2.3 Fire Protection

Yavapai County consists of 17 fire districts that include volunteer departments, medical authorities, and full-time employed fire fighters. The nearest fire protection agency to the Project is the Mayer Fire Department, with the nearest station located approximately 3.3 miles west of the Project. The Mayer Fire Department is a combination district that provides fire suppression, fire prevention, wildland protection, advanced life support, rescue, extrication, and medical transportation services to a service area of approximately 302 square miles. This includes being first due to areas of the Prescott National Forest, BLM Lands, State Lands, and the Agua Fria National Monument. The Mayer Fire Department also serves over 25 miles of I-17 (Mayer Fire District, 2015).

The Applicant is in close coordination with the Mayer Fire Department as they will be providing emergency response services for the Project Area. Because the Project is located on State Trust Land, it is not currently served by the Mayer Fire Department. The Project Area will be annexed into the Mayer Fire Department service territory prior to the start of construction. The Project has begun this process with the Fire Marshal and Fire Chief at the Mayer Fire Department. Throughout the life of the Project, the Applicant will work closely with Mayer Fire Department to ensure the site design and emergency response plan meet their safety standards. This includes a commitment to install a minimum 30,000 gallon water storage tank on site per NFPA 1142 guidelines, as discussed with the Mayer Fire District Fire Marsal. Furthermore, the Applicant will offer emergency responder training and has offered the Fire Department staff a site visit to an operational Longroad-owned project. The Applicant and Mayer Fire Department will determine the frequency and timing of all future trainings.

The Arizona Department of Forestry and Fire Management (DFFM) provides fire protection to 22 million acres of State Trust Land and private property. The DFFM has internal staff along with access to 2,700 wildland firefighters from local and federal cooperating agencies (State of Arizona, 2025).

The Yavapai Community Wildfire Protection Plan (CWPP), included collaboration with Fire Chief Associations and Yavapai County personnel, reviewed central and southern Yavapai County topography, Fire District and Department borders, and fuel types to assist in determining fuels management planning and management area boundaries. The Project is located in Management Area 1 and is located on natural vegetation designated as 'Semidesert Grassland', as defined in the CWPP. Vegetation in Management Area 1 is primarily denser than in other parts of Yavapai County and consists of chaparral, juniper, ponderosa pine, and mixed underbrush. A majority of wildfire protection projects in the Yavapai CWPP area are coordinated and tracked by the U.S. Forest Service Wildland Fuels Group. This group consists of Yavapai County's Office of Emergency Management's (OEM), Prescott Area Wildlands/Urban Interface Commission, and wildland fuels mitigation teams from communities, Arizona Public Service (APS), fire departments, fire districts, DFFM, and USFS. The Yavapai CWPP works collaboratively with Federal and State lands pertaining to silvicultural prescription forestry plans as a wildfire mitigation effort (Yavapai County OEM, 2023).

The USFS conducts mitigation efforts through controlled burns of wildland fuels in Yavapai County. Other Federal, State, and Local Fire Districts in Yavapai County participate in ongoing mitigation efforts for community wildfire protection. Prescott Fire Department expanded its Wildfire Fuels unit in 2022 to a dedicated full-time team, increasing projects throughout the Prescott Basin (Yavapai County OEM, 2023).

2.4 Vegetation Management

The site has been designed to minimize grading and preserve existing vegetation and ecosystems including sensitive riparian zones along major drainages. Some areas of the Project will remain clear of vegetation for operational needs, providing fire break areas as needed, and for insurance requirements. Revegetation efforts will comply with all relevant fire safety plans, and erosion and

stormwater management plans. The Project included revegetation plans, which will be a certified weed free native revegetation seed mix based on plants predominantly native to the site and Yavapai County. Although there is no fireproof vegetation, the desirable native grasses have natural fire-resistant characteristics, and will help reduce the risk of wildfires within the Project Area. For greater detail on proposed methods of vegetation management, please see the Agua Fria Solar and Storage Landscaping Plan.

2.5 Emergency Management

Yavapai County's OEM responsibilities are to support the safety of citizens and visitors, protect infrastructure, and assist in community recovery efforts after an incident. They provide steps to residents to take before an emergency or natural disaster, provide emergency information and actions to take during an emergency, and provide recover services if an emergency occurs. Additionally, the County provides current emergency information and emergency news updates (Yavapai County OEM, 2025).

Evacuation Zones

Yavapai County, local fire agencies, and local law enforcement agencies have established evacuation zones to educate the public and emphasize the importance of residents being familiar with their specific evacuation zones. The Project Area falls in the YCU-2192 and YCU-2261 evacuation zones, which both have a normal zone status (Genasys Protect, 2025).

The County uses an application called Genasys Protect, a complete portfolio of Protective Communications Software and Systems (Genasys Inc., 2025). Genasys Protective Communications Solutions have a diverse range of applications, including emergency warning and customizable mass notification for public safety. Genasys Protect provides updates for specific evacuation zones. In the case an evacuation order or warning is ordered, emergency officials will utilize alert and notification methods such as wireless emergency alerts and emergency notifications through the application for the specific zone that a person is located in.

2.6 Emergency Response Plan

Appendix A outlines the general Emergency Response Plan (ERP) for the Agua Fria Solar and Storage Project. The ERP will be continually updated to reflect current Project design and key contacts.

During construction, when workers are present, the Applicant will designate specific construction management and safety management personnel as the notification, assembly and evacuation coordinators. Alternates to the construction management and safety management personnel will be established so a coordinator is on the Project site at all times that workers are present. Workers on the Project site will be trained in ERP procedures that include notification, assembly and evacuation procedures.

To ensure that the Incident Commander(s) are aware of workers and other persons on the site, construction workers, delivery persons, and visitors on the Project site will all be required to check-in with Security prior to entering and leaving the Site.

No later than 30 days after the start of construction, safety management personnel and site management emergency coordinators will complete Federal Emergency Management Agency (FEMA), National Incident Management System (NIMS) ICS-100 Training.

Prior to site operations, operators or workers on site shall receive emergency response training.

Prior to construction and prior to operations, contact numbers (mobile telephone) for emergency response coordinators shall be provided to the Mayer Fire District and the Yavapai County OEM. These coordinators on the Project site shall be responsible for being aware of any authorized personnel on the Project site at all times and being able to notify and assemble such persons at any time.

Assembly and evacuation should be as immediate as possible. Evacuation shall proceed along the designated evacuation route, detailed in **Appendix A** (Old Sycamore Road to Orme Road to I-17 or Dugas Road to I-17). In order to receive local emergency communications, personnel will turn on vehicle radios during evacuation.

2.7 Public Safety, Fire, and Emergency Response Plan Training and Signage

Construction and operations workers at the site shall be trained prior to the performance of any on-site construction activity. Training shall be in accordance with this Public Safety, Fire, and Emergency Response Plan.

Signatures providing written verification of training shall be retained for each worker performing work on the site.

When construction workers are present, appropriate signage shall be located throughout the site that identifies areas of assembly in the event of an emergency.

2.8 Emergency Response Plan Review History

This Emergency Response Plan will be updated on an as needed basis and any revisions to the plan will be documented in **Table 1** below.

Table 1: Emergency Response Plan Revisions

Date	Prepared by	Nature of Preparation or Revision
May 2024	KP Environmental, Inc.	Initial Preparation

3.0 References

Arizona State Land Department (ASLD), 2025. History of Arizona State Trust Land. Accessed 4/17/25. Available at: https://land.az.gov/our-agency-mission/history-trust-land#:~:text=With%20its%20authority%20vested%20from,all%20parts%20of%20the%20state.

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Yavapai County Fire Districts, 2025. Accessed 4/15/25. Available at : https://www.yavapaiaz.gov/County-Government/Special-Districts/Districts/Fire-Districts.

Yavapai County Office of Emergency Management, 2025. Accessed 4/15/25. Available at: https://www.yavapaiready.gov/Resilience/Respond/Current-Emergency-Information.

Yavapai County, 2024. Section 608 Solar Facilities. Accessed 4/14/25. Available at: https://www.yavapaiaz.gov/files/sharedassets/public/v/1/development-and-permits/development-services/documents/news/sec-608-solar-facilities-approved-11-6-24-in-effect-12-4-24-watermarked.pdf.

Yavapai County Office of Emergency Management (OEM), 2025. About Us. Accessed 4/24/25. Available at: https://www.yavapaiready.gov/About-Us.

Appendix A – Public Safety, Fire, and Emergency Response Plan

This Public Safety, Fire, and Emergency Response Plan ("ERP") has been prepared to provide for the safe and expedient evacuation of the Site in the event of an emergency. The ERP must be reviewed by all on-site personnel prior to the start of construction activities. The ERP is a living document and will be updated throughout the Project design phases prior to construction. All Key Contacts for the site will be designated prior to construction.

Responsibilities

Project Construction Site Manager

During actual emergency evacuation, the Project Construction Site Manager (or designee) has the responsibility and authority to direct workers, contractors and subcontractors to ensure effective emergency response. The Construction Site Manager shall:

- Approve the Emergency Response Plan;
- Act as the sole liaison to senior emergency services personnel;
- Relay the final accountability results to senior emergency services personnel;
- Have sole responsibility to allow workers to return to the Project Site or to dismiss them from the Project Site; and
- Organize a meeting of all key personnel after each evacuation to investigate, discuss, and review the occurrence.

Project Safety Manager

The duties of the Project Safety Manager include:

- Designation of an alternate when workers are present and neither the Project Construction Manager nor the Project Safety Manager is present on site.
- Reviewing and updating Emergency Response Plan periodically to cover conditions or dangers prevalent or likely to occur at the Site;
- No later than 30 days after construction start, take, complete and document completion of FEMA NIMS ICS-100 TRAINING
- Assessing site conditions and direct/control emergency response activities in accordance with the ERP;
- Ensuring Table A-1 entails the site-specific information regarding evacuations, emergency assembly areas, communication, and other site-specific emergency procedures;
- Ensuring Table A-2 entails project personnel contact information;
- Implementing the ERP based on the identified emergency condition;
- Preparing detailed written report(s) of each incident including recommendations for prevention of future incidents and suggestions for improved handling of similar emergencies;
- Notifying the appropriate project personnel of the emergency (Table A-2);
- Maintain accountability results and notify Project Construction Site Manager of any missing personnel; and
- Conducting routine ERP drills and an evaluation of compliance with the ERP.

Supervisor

The duties of the Supervisors include:

- Ensuring all personnel has received the proper evacuation training. This includes new and transferred personnel;
- Verifying emergency evacuation routes and emergency assembly areas are accessible;
- Assisting or coordinate the evacuation of handicapped personnel;
- Assisting with mobilization of supplies and equipment required during and after an emergency;
- Bringing their personnel together as a group in the emergency assembly area and obtain a headcount as soon as possible to determine whether any personnel are missing;
- Reporting accountability results to the Project Safety Manager; and
- Maintaining control of the personnel within their areas in order to prevent wandering, premature return to the work area, or unauthorized exit from the work area.

Security

Upon sounding of the evacuation alarm, security personnel shall:

- Assure the visitor log is given to the Project Safety Manager to assure accountability of visitors;
- Deny the access of visitors, pedestrians, or sightseers to the Site;
- Guide emergency vehicles into the scene;
- Assist responding outside agencies as requested; and
- Prevent the unauthorized/premature return of personnel into the work area until it has been approved by the Project Construction Site Manager.

Employees

In the event of an emergency, site personnel are evacuated and do not participate in emergency response activities. Specific employee duties are:

- Complying with the Site ERP; and
- Advising management of any problems or discrepancies associated with their involvement with this ERP.

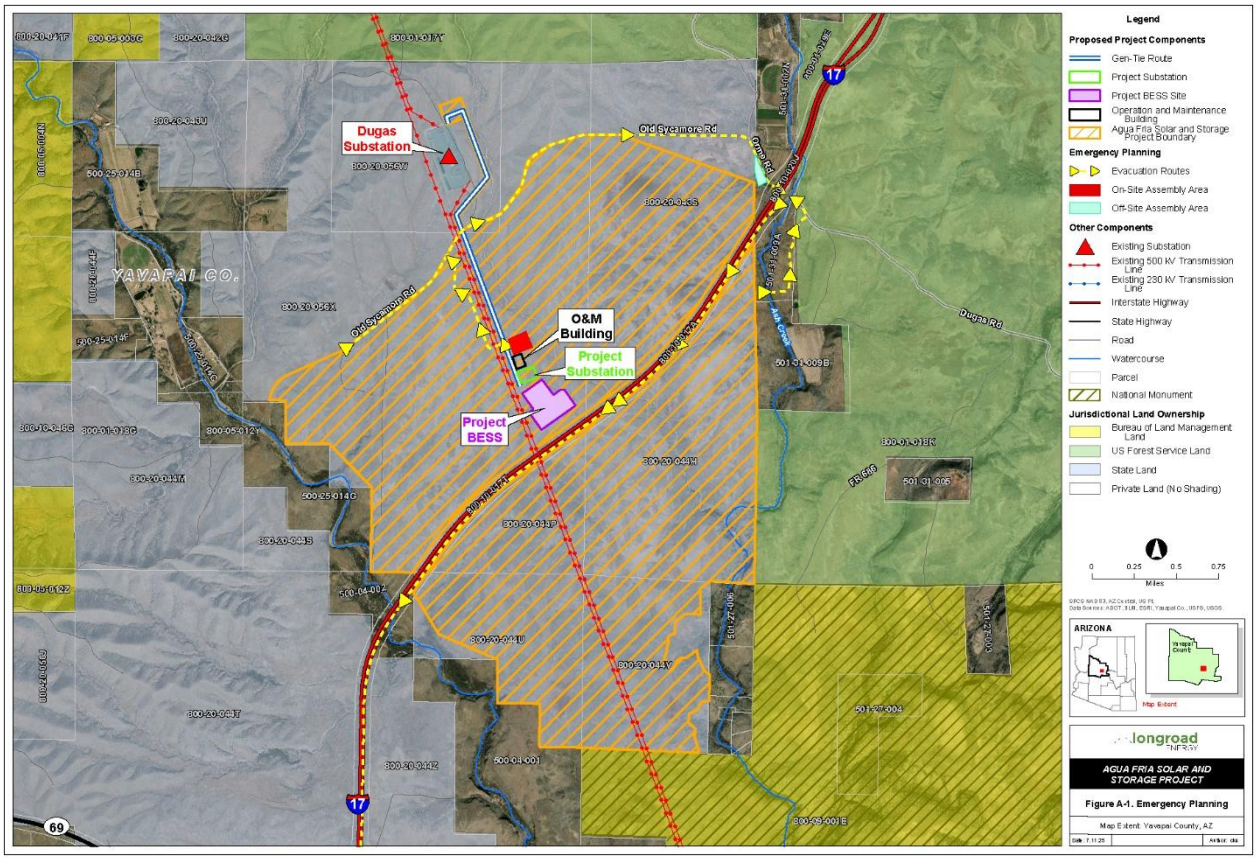
Emergency Procedures

Pre-Planning

- All personnel shall be trained in order to familiarize themselves of the locations of emergency assembly areas and the pre-determined routes in which to reach them, emergency notification numbers and alarm stations within their work areas.
- Logistic Plans should detail equipment and work supplies are not located in the path of evacuation routes, alarm stations, or emergency exits.
- Management and safety personnel on site will download the Genasys Protective Communications Solutions application and turn on notifications for emergency warnings
- Completion of Table A-1 and Table A-2 shall be verified prior to the start of site operations.

Table A-1: Emergency Planning

Emergency	Evacuation Route	Proposed Emergency Assembly Areas
Potential Evacuation	Routes as denoted on **Figure A-1**	***Note: Emergency assembly areas will be coordinated with local emergency services providers.*** On-site Assembly Area: the onsite assembly area will be directly north of the Operation and Maintenance Building and east of the Gen-Tie route, as shown on **Figure A-1**. Off-site Assembly Area: the off-site assembly area will be located east of the Project boundary, west of Orme Road, and north of I-17. See **Figure A-1**.



Additional Information	
Communication Procedures (Evacuation Notification System)	Via – Voice, Radio, Cell or Air Horn Blasts: 3 blasts-Evac./1 long blast-All Clear

Reporting / Alarm

In the event of emergency the following guidelines shall be followed:

- Sound the alarm. If there is no alarm, warn the others by knocking on doors, shouting as you leave or using a vehicle horn.
- Security will not allow any truck traffic to enter the gate during this time of emergency.
- Vehicles with four way flasher on must be given the right-a-way and all other vehicles must pull over to the right as far as possible to allow these vehicles to pass.

Evacuation

The Site evacuation notification system will consist of an air horn with three long blasts. Upon emergency alarm notification, all personnel shall take the following actions:

- Turn off all mobile equipment and power tools and report to the designated emergency assembly area;
- **Walk** briskly; do not run, to the designated emergency assembly area;
- Attempt to rescue/assist others only if it can be done safely;
- Exit the work area via the quickest possible route per the routes denoted in ERP;

Assembly Areas & Accountability

Upon exiting the work area all personnel shall proceed directly to the pre-determined assembly area(s). Upon reaching the proper assembly area:

- Stay calm, alert, and await further instructions from your supervisor;
- Listen carefully for your name to be called for accountability. If your name is not called, report this immediately to your supervisor;
- After you have been accounted for, continue to listen for the names of unaccounted personnel. Offer any information to the supervisor possible regarding their location (absent, out to lunch, off site meeting, etc.);
- Remain in the assembly area until dismissed by Project Construction Site Manager (or designee). Do not get into your car, leave the Site, or wander out of your assembly area unless approved by Project Construction Site Manager; and
- Do not return to the work area until the “all clear” or return to work authorization has been given by Project Construction Site Manager.

Table A-2: Emergency Contacts

Emergency Coordinators / Key Personnel				
Name	**Title**	**Office**	**Mobile**	**Home**
TBD – Will be updated prior to construction	Site Construction Manager (Incident Commander)			
TBD – Will be updated prior to construction	Site Safety Manager (Alternate Incident Commander)			
TBD – Will be updated prior to construction	Site Project Manager			
TBD – Will be updated prior to construction	Construction Director			
TBD – Will be updated prior to construction	EHS Safety Manager			
Police Department (local)	911			
Fire Department (local)	911			
Mayer Fire Department	On-Duty Battalion Chief	928-910-2365		
State Police	911			
Ambulance Service	911			

Agua Fria Solar and Storage Project

Traffic Plan

Yavapai County, AZ

Prepared for:

Yavapai County

Prepared by:

kp environmental

December 2025

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Figure 1: Project Components

Figure 2: Key Access Points

Executive Summary

The proposed Agua Fria Solar and Storage Project (Project), a 450 MW photovoltaic and battery facility on approximately 4,215 acres in southeastern Yavapai County, Arizona, will generate temporary construction traffic but minimal long-term impacts. Construction, anticipated to last 18–24 months, will involve approximately 400 workers and 20 daily semi-truck deliveries, primarily using Interstate-17 (I-17) Exit 268 (Orme/Dugas Road) and Old Sycamore Road for site access, avoiding local communities such as Cordes Lakes and Mayer. Once operational, up to five full-time operations and maintenance employees will be employed on site. Existing road capacities, including I-17 and county minor collector roads, are sufficient to accommodate the project, and no roadway improvements are required. With implementation of standard dust control, traffic management, and coordination with Yavapai County Public Works, the Project's overall traffic and community impacts will remain minimal and well within existing infrastructure capacity. Additional traffic analyses will be completed as needed prior to obtaining construction permits.

1.0 Introduction

The Yavapai County Zoning Ordinance has been revised to add Section 608 *Solar Facilities* with requirements, standards, and procedures to regulate the development of utility scale solar facilities. The revised Zoning Ordinance was adopted on November 6, 2024, and took effect on December 4, 2024 (Yavapai County, 2024).

This Preliminary Traffic Plan has been prepared in support of the Yavapai County Solar Facility Use Permit (SFUP) application for the proposed Agua Fria Solar and Storage Project (the Project). This Preliminary Traffic plan describes the estimated travel routes and trip volumes anticipated during the construction and operations as part of a utility-scale photovoltaic and battery project planned for the site. The Project encompasses approximately 4,215 acres, located along Interstate-17 (I-17) between mile markers 265 and 268.

This traffic statement discusses the following topics:

- Existing roadway network in the Project vicinity
- Project access
- Traffic levels (both construction and operational)
- Major traffic routes to/from the site
- Proposed roadway improvements

1.1 Project Location

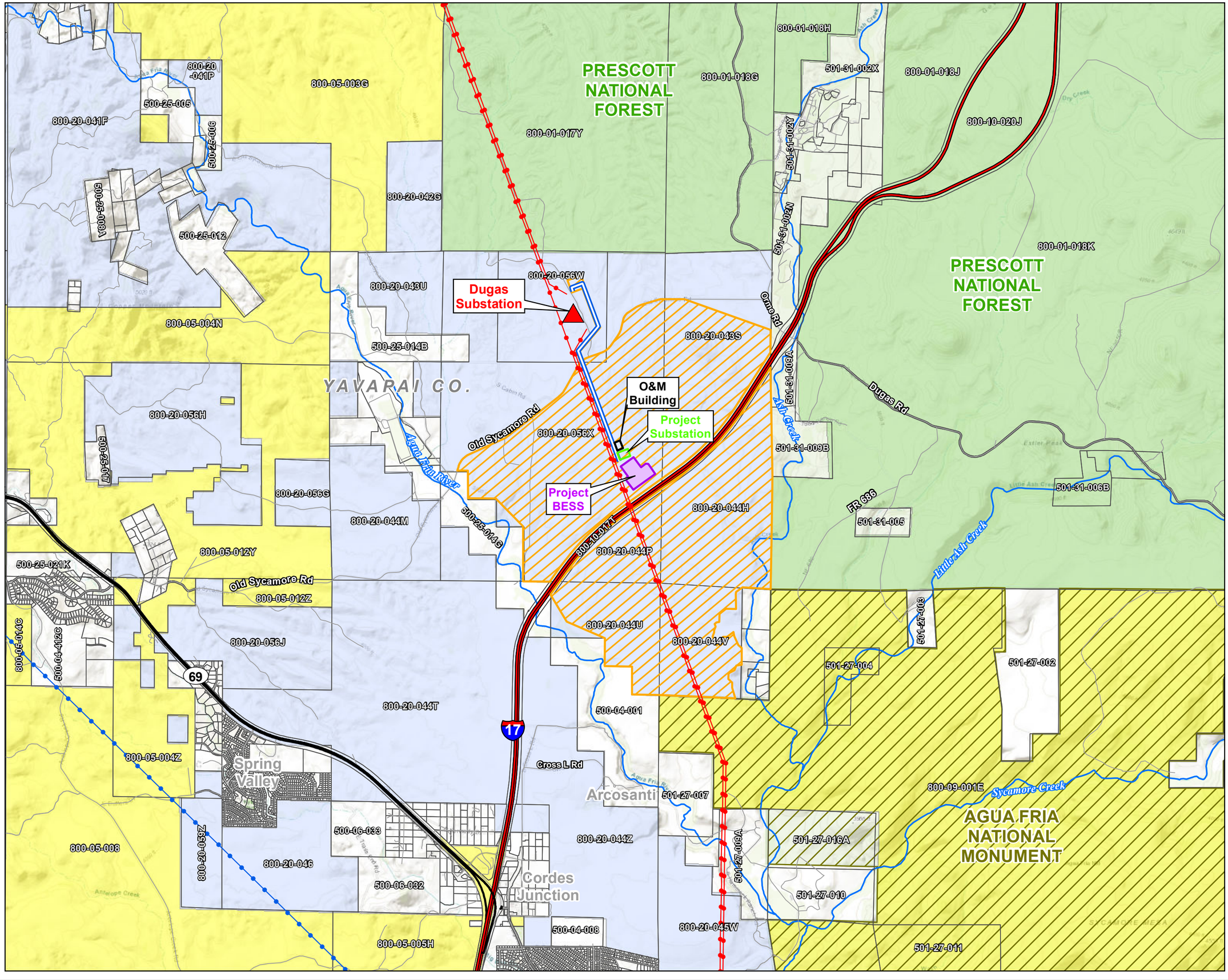
The Project is located in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project vicinity including several existing high voltage transmission lines, the existing Dugas Substation, as well as I-17 which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott.

1.2 Project Components

The Project is an up to 450 megawatt (MW) nameplate capacity solar photovoltaic (PV) power plant. The Project consists of a solar field of PV modules (solar field), battery energy storage

system (BESS), project substation, operation and maintenance building, and ancillary facilities. The Project would be located on Arizona State Trust Land managed by the Arizona State Land Department (ASLD) (ASLD Land), see **Figure 1,** and controlled by Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona (Applicant) via a solar lease. The Applicant is a subsidiary of Longroad Development Company, LLC (Longroad).

The Project Area is approximately 4,215 acres. Within the Project Area, the Development Area includes approximately 1,930 acres, the BESS would be approximately 35 acres, and the project substation would be approximately 5 acres. In addition, there will be a generation tie (gen-tie) line associated with the Project to connect the power generated from the solar facilities to the grid at Dugas Substation. The gen-tie would be approximately 1.8 miles in length and sited within a corridor located north of I-17, south and east of the existing Dugas Substation, and directly east of the existing 500 kilovolt (kV) transmission line corridor. The Applicant received a Certificate of Compatibility (CEC) from the Arizona Corporation Commission for the gen-tie in May 2025.



Legend

Traffic Plan Page 5 of 9

Proposed Project Components

- Gen-Tie Route
- Project Substation
- Project BESS Site
- Operation and Maintenance Building
- Agua Fria Solar and Storage Project Boundary

Other Components

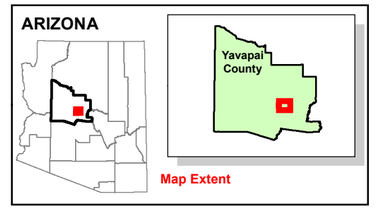
- Existing Substation
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Interstate Highway
- State Highway
- Road
- Watercourse
- Parcel
- National Monument

Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

0 0.5 1 1.5 Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 1. Project Components

Map Extent: Yavapai County, AZ

Date: 7.7.25 | | Author: sjw

2.0 Traffic

2.1 Existing Roadway Network

I-17, a major existing roadway, bisects the Project. Old Sycamore Road, Orme Road, and Dugas Road are the nearest county maintained roads to the Project Area, all of which are classified as Minor Collector county maintained roads. Old Sycamore Road and Orme Road are unpaved, maintained roads. Dugas Road is a paved maintained road. Arizona Department of Transportation (ADOT) recorded Average Annual Daily Traffic counts (AADTs) along I-17 between exits 263 and 268 reporting 29,645 trips per day in 2023 (ADOT, 2023a). On exit 268, Orme Road/Dugas Road, ADOT recorded AADTs as 134 trips per day in 2023 (ADOT, 2023b). There is no recorded data found for AADTs along Old Sycamore Road, but it is classified as a Minor Collector Road per the Yavapai County Roadway Design Standards issued in 2020, meaning these roads have lower traffic volumes at lower speeds over shorter distances than Major Collector or Arterial roads (Yavapai County, 2020).

2.2 Site Access

Access to the Project will be via existing roads and private easements. Primary access is anticipated to be provided via I-17 and Exit 268 onto Orme Road then to Old Sycamore Road. The southern portion of the site will be accessed via the existing Dugas Road and a private access easement. The private access easement includes a bridge crossing over Ash Creek on private land. The Project is not proposing to modify or improve existing County roads.

On-site parking and staging facilities for construction traffic vehicles and equipment would be located in the vicinity of the primary site access, a significant distance away from local residences located north of the site. During construction, dust control measures would be implemented as required by Yavapai County.

2.3 Traffic Levels

Traffic generated by the normal operation of the Project will be minimal. It is anticipated that up to five persons will be full-time on site to maintain the facility.

As would be expected with any development, the Project is expected to generate construction and material delivery truck trips during the construction phase. Construction is anticipated to start in 2026 or later and continue for approximately 18 to 24 months. The peak of construction will require approximately 20 semi-trucks per day delivering materials to the site from the I-17 corridor.

At its peak, construction is anticipated to require a workforce of approximately 400 persons, adding approximately 400 vehicles to I-17 and Old Sycamore Road per day. These workers will be staying off-site and will be encouraged to carpool. The mobilization and demobilization of equipment used for earthwork, including scrapers, graders, water trucks, compactors, truck-mounted post drivers, skid loaders, and forklifts, is anticipated to generate a minimal amount of traffic.

Due to the existing I-17 infrastructure and the low traffic volumes associated with the Project, traffic impacts to the adjacent road system will be minimal.

2.4 Major Traffic Routes

Regional traffic will mostly arrive via I-17. Most delivery trucks are anticipated to come from the Phoenix area. The two nearest traffic interchanges with I-17 are at Arcosanti Road and Orme Road/Dugas Road. The key access points for the site are shown on **Figure 2**. The proposed traffic plan routes construction and employee vehicles from I-17 to the Orme Road/Dugas Road exit, and will not increase traffic in the area near Cordes Lakes community, AZ at the intersection of Highway 69 and Old Sycamore Road.

2.5 Proposed Roadway Improvements

No roadway improvements are anticipated as part of the Project. Adequate road capacity exists on Old Sycamore Road to accommodate construction traffic as well as the anticipated Project traffic. No roadway improvements are needed to provide access to the site.

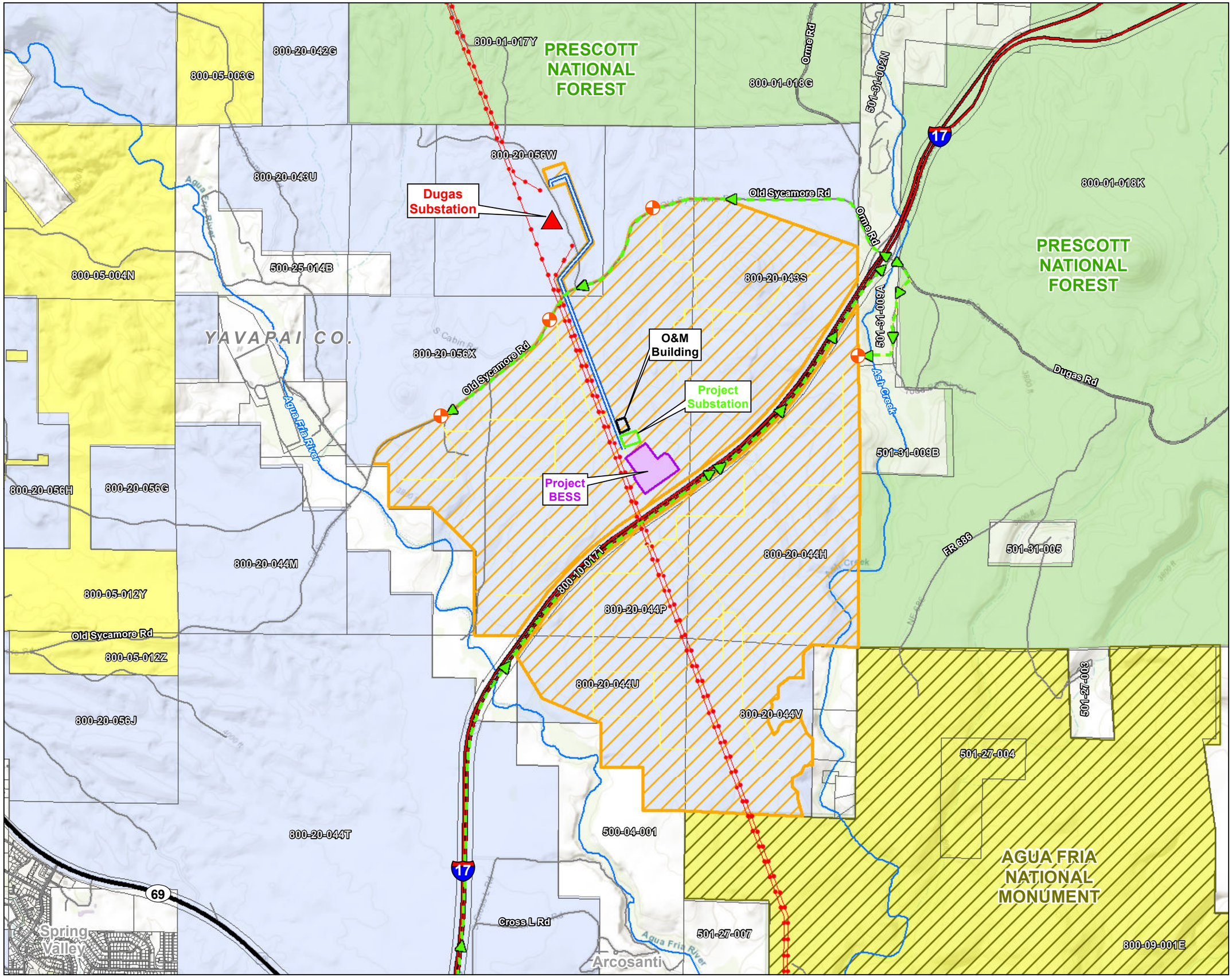
2.6 Ongoing Coordination

The Applicant will review any modifications to the Traffic Plan, and provide any additional information and analyses to Yavapai County Public Works as needed. The Applicant is committed to coordinating with Yavapai County Public Works and the County Engineer on a Traffic Impact Analysis and other required coordination as described in Section 608 prior to obtaining construction permits.

2.7 Key Findings

The key findings related to traffic operation and site access are summarized below:

- Primary access to the site will be via I-17 and Old Sycamore Road via the Orme Road/Dugas Road Exit #268.
- Regional traffic will access the site via the Orme Road/Dugas Road traffic interchange at I-17 to minimize construction traffic impacts on the local community.
- Agua Fria estimates that a peak of approximately 20 semi-trucks may typically access the site each day during construction for deliveries from I-17.
- The peak of construction is anticipated to require workforce of approximately 400 persons, adding approximately 400 vehicles to I-17 and Old Sycamore Road per day.
- Up to five full-time employees are anticipated to be onsite during the project operation phase, primarily for site maintenance.
- Due to the existing I-17 infrastructure and the low traffic volumes associated with the Project, traffic impacts to the adjacent road system will be minimal.
- Road capacities on I-17 and Old Sycamore Road are adequate to accommodate deliveries of construction materials and construction workforce traffic.
- No offsite road improvements are needed as part of the Project.



Legend

Traffic Plan Page 8 of 9

Proposed Project Components

- Gen-Tie Route
- Project Substation
- Project BESS Site
- Operation and Maintenance Building
- Agua Fria Solar and Storage Project Boundary

Project Construction Access

- Key Access Point
- Project Access Roads
- Common Project Traffic Route

Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Interstate Highway
- State Highway
- Road
- Watercourse
- Parcel
- National Monument

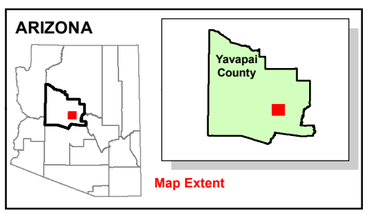
Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

0 0.25 0.5 0.75

Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 2. Key Access Points

Map Extent: Yavapai County, AZ

Date: 7.11.25 | Author: ckv

3.0 References

Arizona Department of Transportation (ADOT), 2024a. Average Annual Daily Traffic Report 2023 – Arizona Interstate Sections. Accessed 4/11/25. Available at: https://azdot.gov/sites/default/files/2024-07/2023-AADT-PUBLICATION_Interstate.pdf.

Arizona Department of Transportation (ADOT), 2024b. ADOT 2023 Average Annual Daily Traffic (AADT) Map. Accessed 4/11/25. Available at: https://azgeo-open-data-agic.hub.arcgis.com/maps/51fd91145d034bcd812eb62fd9cf82b2/about.

Yavapai County, 2024. Section 608 Solar Facilities. Accessed 1/2/25. Available at: https://www.yavapaiaz.gov/files/sharedassets/public/v/1/development-and-permits/development-services/documents/news/sec-608-solar-facilities-approved-11-6-24-in-effect-12-4-24-watermarked.pdf.

Yavapai County, 2020. Roadway Design Standards. Accessed 4/21/2025. Available at: https://www.yavapaiaz.gov/files/sharedassets/public/v/3/resident-services/public-works-amp-roads/documents/final-roadway-design-standards-2020-12_w-figures.pdf.

Agua Fria Solar and Storage Project

Airport Study

Yavapai County, AZ

Prepared for:

Yavapai County

Prepared by:

kp environmental

December 2025

Table of Contents

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Figures

Figure 1: Project Components

Figure 2: Aeronautical Features

Appendices

Appendix A: FAA Notice Criteria Tool

Executive Summary

The Agua Fria Solar and Storage Project (Project) located outside the influence area of any airport. The nearest airport, Northstar Airport, is located approximately 16.5 miles southwest of the Project. Given the distance, the Project is not expected to have any impact on surrounding airports. The Federal Aviation Administration (FAA) Notice Criteria Tool determined the Project does meet or exceed the FAA's notice criteria thresholds. As the nearest airport is more than 16 miles away, the Project does not trigger FAA filing requirements.

1.0 Introduction

The Yavapai County Zoning Ordinance has been revised to add Section 608 *Solar Facilities* with requirements, standards, and procedures to regulate the development of utility scale solar facilities. The revised Zoning Ordinance was adopted on November 6, 2024, and took effect on December 4, 2024 (Yavapai County, 2024).

This Airport Study has been prepared in support of the Yavapai County Solar Facility Use Permit (SFUP) application for the purpose of determining impacts on area airports.

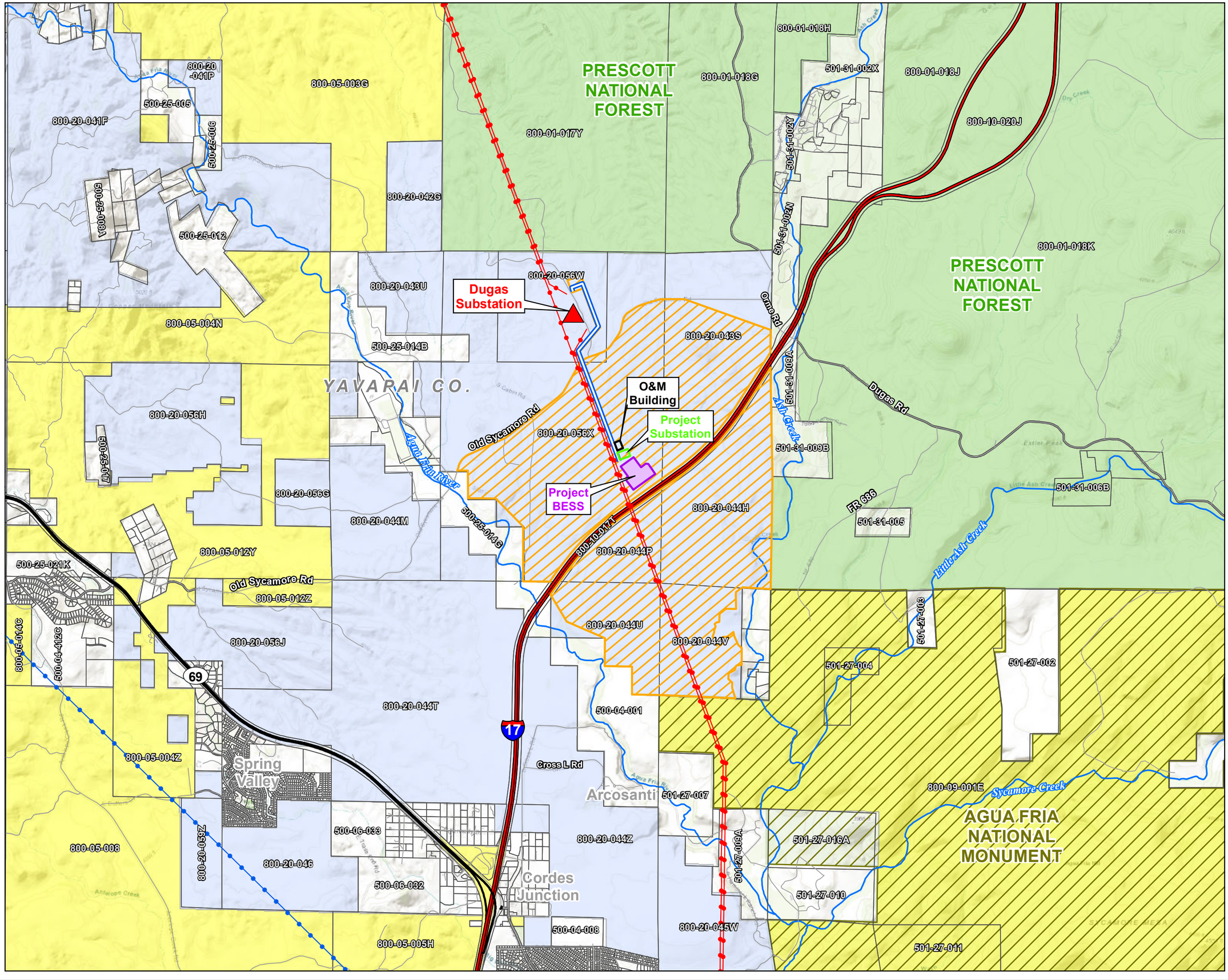
1.1 Project Location

The Agua Fria Solar and Storage Project (Project) is located in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project vicinity including several existing high voltage transmission lines, the existing Dugas Substation, as well as Interstate 17 (I-17), which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott.

1.2 Project Components

The Project is an up to 450-megawatt (MW) nameplate capacity solar photovoltaic (PV) power plant. The Project consists of a solar field of PV modules (solar field), battery energy storage system (BESS), project substation, operation and maintenance building, and ancillary facilities. The Project would be located on Arizona State Trust Land managed by the Arizona State Land Department (ASLD) (ASLD Land), see **Figure 1,** and controlled by Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona (Applicant) via a solar lease. The Applicant is a subsidiary of Longroad Development Company, LLC (Longroad).

The Project Area is approximately 4,215 acres. Within the Project Area, the Development Area would be on approximately 1,930 acres, the BESS would be approximately 35 acres, and the project substation would be approximately 5 acres. In addition, there will be a generation tie (gen-tie) line associated with the Project to connect the power generated from the solar facilities to the grid at Dugas Substation. The gen-tie would be approximately 1.8 miles in length and sited within a corridor located north of I-17, south and east of the existing Dugas Substation, and directly east of the existing 500 kilovolt (kV) transmission line corridor. The Applicant received a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission for the gen-tie in May 2025.



Legend

Airport Study Page 4 of 13

Proposed Project Components

- Gen-Tie Route
- Project Substation
- Project BESS Site
- Operation and Maintenance Building
- Agua Fria Solar and Storage Project Boundary

Other Components

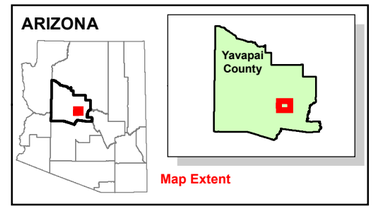
- Existing Substation
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Interstate Highway
- State Highway
- Road
- Watercourse
- Parcel
- National Monument

Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

0 0.5 1 1.5 Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 1. Project Components

Map Extent: Yavapai County, AZ

Date: 7.7.25 | | Author: sjw

2.0 Airport Study

2.1 Project Area Airports

The Project is not located within the vicinity of an airport as shown in **Figure 2**. The nearest airport is Northstar Airport, which is a private airport located approximately 16.5 miles southwest of the Project. The next nearest airport is Montezuma Airport, a private airport located approximately 18 miles northeast of the Project. The Prescott Regional Airport and the Rimrock Regional Airport are located approximately 23 miles northwest and approximately 23.5 miles northeast of the Project, respectively. Furthermore, the Project would not have impacts on area airports.

2.2 FAA Notice Criteria Tool

The Federal Aviation Administration (FAA) has developed a desk reference guide with a notice criteria tool that can be utilized to determine if a project requires filing with the FAA. The tool requires information on structure type, location, elevation, and determines filing requirements based on distance to the nearest airport or flight path. For purposes of this analysis and as described further in **Appendix A**, four points were chosen at the edges of the developable areas on the Project Area. The four points were placed in the corners of the Project Area; including a northwest point, northeast point, southwest point, and southeast point, shown in **Appendix A**. The northwest point is located east of the Agua Fria River at the northwesternmost part of the development area. The northeast point is located north of I-17, along the eastern boundary of the development area. The southwest point is east of the Agua Fria River and southeast of I-17. The southeast point is the furthest southern point of the development area and is located west of Ash Creek as shown in **Appendix A**. For each point, 15 feet was used as the structure height as this is the maximum height the solar panels would be. Based on the Notice Criteria Tool included in **Appendix A**, all four analysis points did not meet or exceed the notice criteria for the FAA. Additionally, as discussed previously, the closest airport is Northstar Airport, which is a private airport located approximately 16.5 miles southwest of the Project Area. Therefore, based on the FAA Notice Criteria Tool, the Project would not require consultation or filing with the FAA.

Morgan Ranch Airstrip
Robin
A C Goodwin Mem Fld
Prescott Regional/ Ernest A Love Fld
Cottonwood
Rimrock
Montezuma
Yav'ipe Ma'ta
Northstar

PRESCOTT NATIONAL FOREST
COCONINO NATIONAL FOREST
AGUA FRIA NATIONAL MONUMENT
TONTO NATIONAL FOREST

YAVAPAI CO.
GILA CO.
MARICOPA CO.

89
69
260
17
179

Legend

Aeronautical Features
- Airport
- Military Training Route
- Recreational Flyer Fixed Site
- Military Operations Area
- Restricted Area

Other Components
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Interstate Highway
- State Highway
- National Monument
- County Boundary
- City Boundary

Jurisdictional Land Ownership
- Bureau of Land Management Land
- US Forest Service Land
- Military Land
- National Park Service Land
- State Land
- Tribal Land
- Private Land (No Shading)

Agua Fria Solar and Storage Project Boundary
15-Mile Buffer of Project Site

0 2 4 6 8
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, FAA, Yavapai Co., USFS, USGS.

ARIZONA
Yavapai County
Map Extent

longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 2. Aeronautical Features

Map Extent: Yavapai County, AZ

Date: 4.22.25 | Author: ckv

3.0 References

Federal Aviation Administration. Notice Criteria Tool. Accessed 4/22/2025. Available at: https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm

Federal Aviation Administration. Notice Criteria Tool Desk Reference Guide. Accessed 4/21/2025. Available at: https://oeaaa.faa.gov/oeaaa/downloads/external/content/deskReferenceGuides/Notice%20Criteria%20Tool%20-%20Desk%20Reference%20Guide%20V_2018.2.0.pdf.

Yavapai County, 2024. Section 608 Solar Facilities. Accessed 4/21/25. Available at: https://www.yavapaiaz.gov/files/sharedassets/public/v/1/development-and-permits/development-services/documents/news/sec-608-solar-facilities-approved-11-6-24-in-effect-12-4-24-watermarked.pdf.

Appendix A: FAA Notice Criteria Tool

Dugas Substation

Northeast Point
34°24'5.46"N
112°4'41.38"W

YAVAPAI CO.

Northwest Point
34°23'6.85"N
112°7'26.50"W

Agua Fria River

O&M Building

Project Substation

Project BESS

Ash Creek

17

Southwest Point
34°21'51.57"N
112°6'17.26"W

Southeast Point
34°21'27.86"N
112°5'5.25"W

17

69

Legend

Proposed Project Components

- Gen-Tie Route
- Project Substation
- Project BESS Site
- Operation and Maintenance Building
- Development Area
- Agua Fria Solar and Storage Project Boundary

FAA Notice Criteria Tool

- Point of Measure

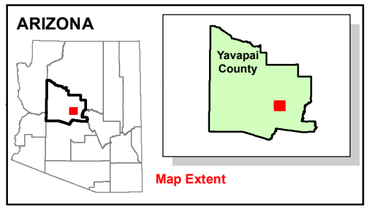
Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Interstate Highway
- State Highway
- Major Stream

0 0.25 0.5 0.75
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.

ARIZONA



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AGUA FRIA SOLAR AND STORAGE PROJECT

FAA Notice Criteria Tool

Map Extent: Yavapai County, AZ

Date: 4.8.25		Author: ckv

Notice Criteria Tool

Notice Criteria Tool - Desk Reference Guide V_2018.2.0

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the FAA Co-location Policy
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the Air Traffic Areas of Responsibility map for Off Airport construction, or contact the FAA Airports Region / District Office for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

* **Structure Type:**	SOLAR | Solar Panel Please select structure type and complete location point information.
Latitude:	34 Deg 23 M 6.85 S N
Longitude:	112 Deg 7 M 26.50 S W
Horizontal Datum:	NAD83
Site Elevation (SE):	3808 (nearest foot)
Structure Height :	15 (nearest foot)
Is structure on airport:	(●) No ( ) Yes

Results

You do not exceed Notice Criteria.



Federal Aviation Administration

« OE/AAA

Notice Criteria Tool

Notice Criteria Tool - Desk Reference Guide V_2018.2.0

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.

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- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the Air Traffic Areas of Responsibility map for Off Airport construction, or contact the FAA Airports Region / District Office for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

* **Structure Type:**	SOLAR | Solar Panel Please select structure type and complete location point information.
Latitude:	34 Deg 21 M 27.86 S N
Longitude:	112 Deg 5 M 5.25 S W
Horizontal Datum:	NAD83
Site Elevation (SE):	3735 (nearest foot)
Structure Height :	15 (nearest foot)
Is structure on airport:	(●) No ( ) Yes

Results

You do not exceed Notice Criteria.



Federal Aviation Administration

« OE/AAA

Notice Criteria Tool

Notice Criteria Tool - Desk Reference Guide V_2018.2.0

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.

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- filing has been requested by the FAA

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The tool below will assist in applying Part 77 Notice Criteria.

* **Structure Type:**	SOLAR | Solar Panel Please select structure type and complete location point information.
Latitude:	34 Deg 24 M 5.46 S N
Longitude:	112 Deg 4 M 41.38 S W
Horizontal Datum:	NAD83
Site Elevation (SE):	3819 (nearest foot)
Structure Height :	15 (nearest foot)
Is structure on airport:	(●) No ( ) Yes

Results

You do not exceed Notice Criteria.

Notice Criteria Tool

Notice Criteria Tool - Desk Reference Guide V_2018.2.0

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
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- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the Air Traffic Areas of Responsibility map for Off Airport construction, or contact the FAA Airports Region / District Office for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

* **Structure Type:**	SOLAR | Solar Panel Please select structure type and complete location point information.
Latitude:	34 Deg 21 M 51.57 S N
Longitude:	112 Deg 6 M 17.26 S W
Horizontal Datum:	NAD83
Site Elevation (SE):	3723 (nearest foot)
Structure Height :	15 (nearest foot)
Is structure on airport:	(●) No ( ) Yes

Results

You do not exceed Notice Criteria.



Agua Fria Solar and Storage Project

Land Use Impacts and Mitigation

Yavapai County, AZ

Prepared for:

Yavapai County

Prepared by:

kp environmental

December 2025

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Figure 1: Project Components

Figure 2: Public Lands

Figure 3: Land Use

Figure 4: Zoning

Figure 5: Recreational Areas

Executive Summary

Existing land use in the Project vicinity primarily consists of rural development, grazeland, large areas of undeveloped land, existing transportation infrastructure, and private land. The Project Area is designated as Residential (0-1 dwelling unit [du]/acre) land use and zoned RCU-2A (Residential; Single-Family; Rural). The Project Area's zoning designation is consistent with the zoning requirement in the Solar Facility Use Permit. Recreation activities in vicinity of Project Area include outdoor activities on public lands, organized sports areas, and open space parks (Yavapai County, 2025c; State of Arizona, 2024).

The Applicant has corresponded with the following relevant land use agencies and stakeholders regarding the Project's scope, design, and anticipated impacts: Yavapai County Development Services Department, Arizona Power Plant and Transmission Line Siting Committee, Arizona Corporation Commission, United States Bureau of Reclamation, Yavapai County Board of Supervisors, Arizona State Land Department (ASLD), local ranchers, United Stated Forest Service (USFS), Bureau of Land Management (BLM), Arizona Game and Fish Department (AGFD), US Fish and Wildlife Service (USFWS), Friends of the Agua Fria National Monument, Upper Agua Fria Watershed Partnership (UAFWP), Central Arizona Land Trust (CALT), and Orme Ranch.

While there are multiple recreational opportunities surrounding the Project area, Ash Creek is the only recreational resource within the Project Area. Ash Creek will be kept as is and will not be fenced into the Development Area in order to minimize impacts. The Applicant is committed to making the Project as minimally disruptive to recreational activities in the surrounding areas as possible. The Project's incorporation of open space and sensitive placement of perimeter fencing mitigates potential land use impacts by maintaining natural landscape features within the Project Area. The undeveloped open spaces throughout the Project Area would maintain existing land use for more than half of the site. These design features mitigate and minimize potential land use conflicts and support the Project's compatibility with the surrounding land uses, zoning, ownership and recreational resources.

1.0 Introduction

The Yavapai County Zoning Ordinance has been revised to add Section 608 *Solar Facilities* with requirements, standards, and procedures to regulate the development of utility scale solar facilities. The revised Zoning Ordinance was adopted on November 6, 2024, and took effect on December 4, 2024 (Yavapai County, 2024).

Per Section 608 *Solar Facilities* of the Yavapai Zoning Ordinance, this Land Use Impacts and Mitigation Report was prepared to detail all interactions with relevant land use entities in the vicinity of the proposed Solar Facility (i.e., U.S. Forest Service [USFS], Bureau of Land Management [BLM], etc.) to discuss, and memorialize in written form, the potential impacts of the project and the recommended mitigation strategies and measures.

1.1 Project Location

The Agua Fria Solar and Storage Project (Project) is located in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project vicinity including several existing high voltage transmission lines, the existing Dugas Substation, as well

as Interstate 17 (I-17), which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott.

1.2 Project Components

The Project is an up to 450 megawatt (MW) nameplate capacity solar photovoltaic (PV) power plant. The Project consists of a solar field of PV modules (solar field), battery energy storage system (BESS), project substation, operation and maintenance building, and ancillary facilities. The Project would be located on Arizona State Trust Land managed by the Arizona State Land Department (ASLD) (ASLD Land), see **Figure 1,** and controlled by Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona (Applicant) via a solar lease. The Applicant is a subsidiary of Longroad Development Company, LLC (Longroad).

The Project Area is approximately 4,215 acres. Within the Project Area, the Development Area includes approximately 1,930 acres, the BESS would be approximately 35 acres, and the project substation would be approximately 5 acres. In addition, there will be a generation tie (gen-tie) line associated with the Project to connect the power generated from the solar facilities to the grid at Dugas Substation. The gen-tie would be approximately 1.8 miles in length and sited within a corridor located north of I-17, south and east of the existing Dugas Substation, and directly east of the existing 500 kilovolt (kV) transmission line corridor. The Applicant received a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission for the gen-tie in May 2025.

1.3 Project Purpose and Need

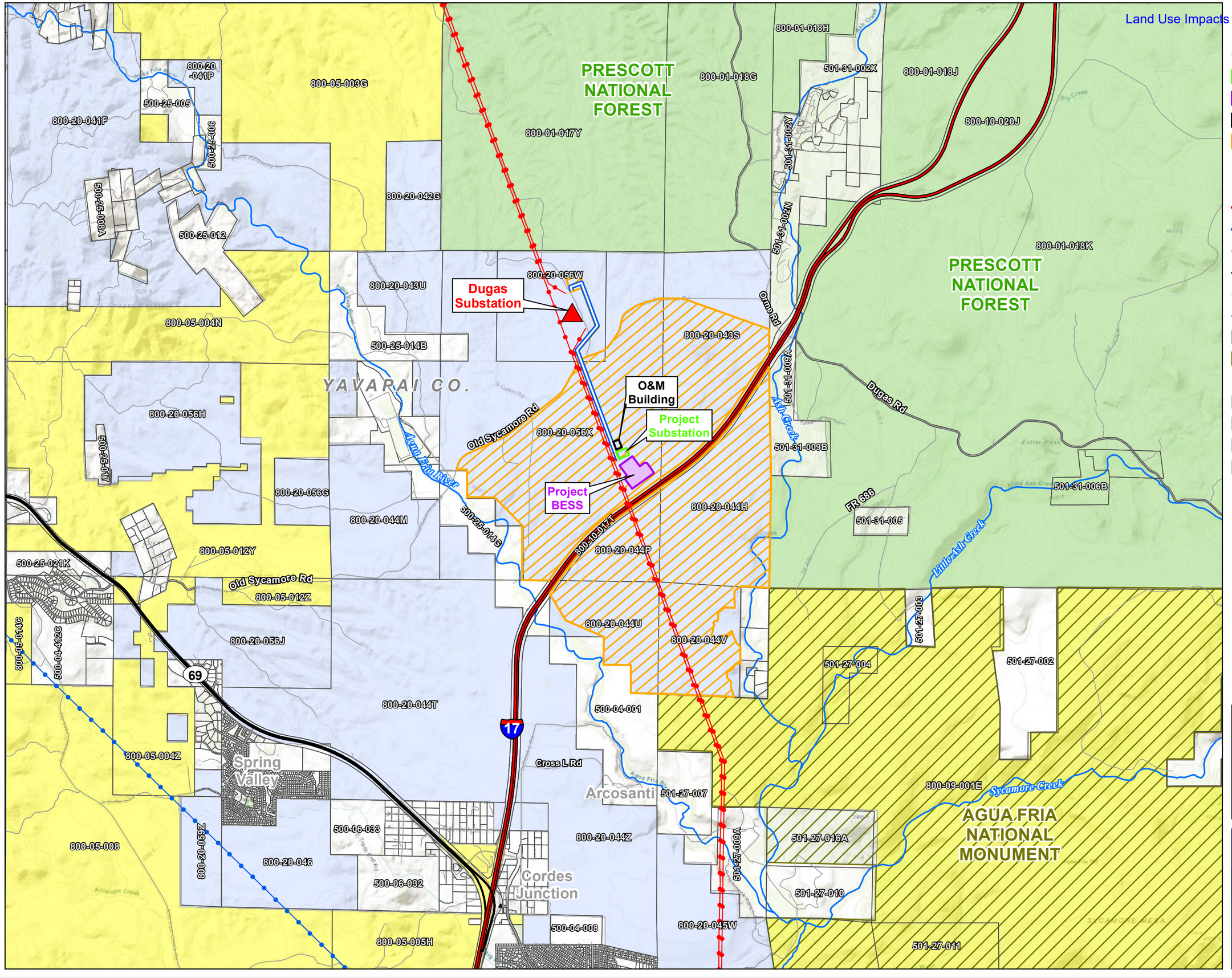
The Project would help Arizona utilities meet growing energy demand and support existing and future energy loads by producing and storing energy and delivering it to the regional transmission grid. The Project site is a favorable location for this land use due to the proximity to an existing high voltage transmission line as well as the Dugas Substation. The Project is located on ASLD Land and the solar lease with ASLD is already in place; the rent paid pursuant to this lease provides revenues to Arizona schools as the beneficiaries of the State Trust. The Project would also provide a new energy resource and electrical capacity to help satisfy energy needs and regional system reliability requirements.

2.0 Land Use

2.1 Land Use Entities

The Project would be located in unincorporated Yavapai County. Yavapai County is located in the central western portion of Arizona and has a total area of approximately 8,100 square miles. The Project is not within the jurisdiction of an incorporated city or town; the nearest unincorporated community is Cordes Lakes, located approximately 1.3 miles south of the Project (see **Figure 2**).

The Project components are located entirely on ASLD Land controlled by the Applicant via a solar lease. The solar lease with the ASLD is already in place; the rent paid pursuant to this lease provides revenues to Beneficiaries of the State Trust. The designated Beneficiary for the lands within the Project Area is the Arizona K-12 Common Schools. ASLD manages over 9 million acres of State Trust Land and publishes a yearly Strategic Plan that outlines their strategic priorities and objectives in relation to government priority outcomes. The ASLD's mission is to manage the State's Land Trust and to generate maximum revenues, through prudent planning decisions for



Legend

Proposed Project Components

- Gen-Tie Route
- Project Substation
- Project BESS Site
- Operation and Maintenance Building
- Agua Fria Solar and Storage Project Boundary

Other Components

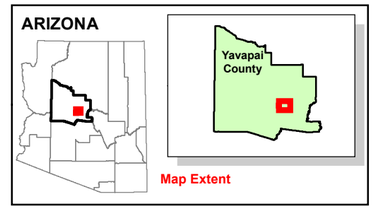
- Existing Substation
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Interstate Highway
- State Highway
- Road
- Watercourse
- Parcel
- National Monument

Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

0 0.5 1 1.5
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 1. Project Components

Map Extent: Yavapai County, AZ

Date: 7.7.25 | | Author: sjw

R1E R1.5E R1.5E R2E R2E R3E

T13N T12N T11.5N T11.5N T11N

YAVAPAI CO.

PRESCOTT NATIONAL FOREST

PRESCOTT NATIONAL FOREST

AGUA FRIA NATIONAL MONUMENT

Dugas Substation

Mayer

Spring Valley

Cordes Lakes

Old Sycamore Rd

Cross L Rd

Dugas Rd

Orme Rd

FR 686

Agua Fria River

Little Ash Creek

Ash Creek

Sycamore Creek

800-20-040N 800-20-060R 800-20-040Q 800-01-032U 800-01-029F 800-01-030U
800-20-041E 800-05-003G 800-01-018H 800-01-018J 501-31-002X
800-05-004E 800-20-041N 800-20-041F 500-25-005 800-01-017Y 800-01-018G 501-31-002Y 800-10-020J
500-25-003A 500-25-002 501-31-002N
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800-20-043U 800-20-056W
800-05-004M 800-05-004N 500-25-014B 800-20-043S 501-31-009A
800-20-056H 800-20-056X 501-31-009B
800-20-056G 800-20-044H 501-31-005
800-20-044M 500-25-014C 800-20-044P
800-01-028U 500-25-021K 800-05-012Y 800-05-012Z 800-20-044U 800-20-044V 501-27-003
800-05-014C 800-04-012C 800-20-056J 501-27-004 501-27-002
800-01-031N 800-20-044T 500-04-001
800-05-004Z 501-27-007 800-09-001E
500-06-033 800-20-044Z 501-27-016A
800-20-052Z 800-20-046 501-27-009A 501-27-010
500-06-032 800-20-045W
800-01-035P 800-05-008 500-04-008 501-27-011
800-05-005H

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SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, CALT, ESRI, Yavapai Co., USFS, USGS.

ARIZONA

Yavapai County

Map Extent

Legend

Proposed Project Components

- Gen-Tie Route
- Project Substation
- Project BESS Site
- Operation and Maintenance Building
- Agua Fria Solar and Storage Project Boundary

Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Interstate Highway
- State Highway
- Road
- Watercourse
- Parcel
- Township / Range Boundary
- Agua Fria National Monument
- Orme Ranch Forever Conservation Easement

Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land

Municpal Jurisdiction

Unincorporated Yavapai County

longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 2. Public & Protected Land

Map Extent: Yavapai County, AZ

Date: 7.8.25 | Author: ckv

R1E R2E R2E R3E R3E R4E

the Beneficiaries. All land uses must compensate the Beneficiaries, a fact that distinguishes it from the way public land, such as parks or national forests, may be used. While public use of Trust land is not prohibited, it is regulated to ensure protection of the land and reimbursement to the beneficiaries for its use, as prescribed in the State's Constitution and supporting case law (ASLD, 2025).

The Project is adjacent to federal lands managed by the USFS and BLM but does not encroach or cross federal lands (**Figure 2**). Outside of the lease area, there will be an associated access road through USFS land administered by the Prescott National Forest. The Prescott National Forest, managed by the USFS, is located adjacent to the Project on the eastern Project boundary and located approximately 0.4 miles north of the northern Project boundary. The Agua Fria National Monument, on BLM land, is located directly south of the Project Area.

There are no tribal lands under the jurisdiction of the Bureau of Indian Affairs (BIA) present within the Project vicinity; the nearest tribal lands belong to the Yavapai-Apache Nation and are located approximately 15 miles to the northeast of the Project. Portions of the Yavapai-Apache Nation Reservation that are located within the planning area of the Town of Camp Verde are jointly managed under an Intergovernmental Agreement between the Town of Camp Verde and the Yavapai-Apache Nation (Yavapai-Apache Nation, 2024).

The Central Arizona Land Trust (CALT) is a nationally accredited non-profit dedicated to protecting natural landscapes in central Arizona. They work with landowners to develop conservation agreements to protect the land for today and future generations. The Orme Ranch Forever Conservation Easement, held by the CALT, encompasses 907 acres of the historic Orme Ranch property, shown in **Figure 2**. The nearest land in the Orme Ranch Forever Conservation Easement is located adjacent to the eastern boundary of the Project. The conservation easement was established in 2023 and is meant to conserve historic ranch lands for sustainable agricultural uses (CALT, 2023). The Project was among the donors to the Orme Ranch Forever Campaign, supporting the conservation of historic ranch lands and the promotion of sustainable agricultural practices in the Project vicinity.

2.2 Existing Land Use

The existing land use of the Project Area is generally rural with arid desert shrub habitat and was utilized for grazing prior to the solar lease. Existing land use in the Project vicinity primarily consists of rural development, grazeland, large areas of undeveloped land, existing transportation infrastructure, and private land. Other existing land uses include residential, recreational, and institutional uses. There are limited existing residential areas in the Project vicinity; the closest residence is located approximately 0.33 miles to the southeast of the Development Area.

The nearest school is Mayer High School, located approximately 2.7 miles southwest of the Project in the community of Spring Valley.

The YMCA Chauncey Ranch Camp is located approximately 0.25 miles west of the northwestern corner of the Project. It consists of a 5,000-acre working ranch primarily utilized as a summer camp, which consists of recreational, agricultural, and educational uses.

Arcosanti, an experimental town integrating the design of architecture with respect to ecology, is located approximately 1 mile south of the Project (The Cosanti Foundation, 2024). Existing uses in Arcosanti consist of residential, commercial, recreational, and institutional uses.

2.3 Designated Land Use Plans

Land use planning information for the area was gathered from Yavapai County. The ASLD defers to local and county planning and community development departments in regard to planning and zoning regulations on state lands. The Yavapai County Comprehensive Plan was updated in January 2023 and is the current planning guide for future development, redevelopment and preservation while supporting the future vision desired by the county residents. Historically, land uses in Yavapai County were largely ranching, agriculture and mining. During the past 40 years of rapid population growth, much of the ranching and agricultural areas have developed into urban growth areas and expansions of municipalities (Yavapai County, 2023a).

The Project is located on land designated as Residential (0-1 dwelling unit [du]/acre) (**Figure 3**). The Residential (0-1 du/acre) land use designation includes areas that are used for residential dwelling units on lots of at least 1 acre but less than 5 acres. The intent is to provide for large lot communities (Yavapai County, 2023a).

2.4 Zoning

The Yavapai County Planning and Zoning Ordinance is intended to conserve and promote public health, safety, convenience and general welfare, by guiding and accomplishing a coordinated and harmonious county development for future growth (Yavapai County, 2023b).

The Project is located in the RCU-2A (Residential; Single-Family; Rural) zoning designation (**Figure 4**). As defined in the Planning and Zoning Ordinance, the RCU base zoning district is intended to provide a zoning classification for all portions of the county not presently characterized by urban uses, and primarily covers rural and relatively undeveloped areas with parcels or lots greater than 2 acres (Yavapai County, 2023b). Pursuant to the Solar Facility Use Permit, Solar Facilities are required to be located in the RCU zoning district.

2.5 Recreational Resources

Recreational resources are defined by Yavapai County as public and private lands and facilities intended for active recreational uses such as trails, athletic fields or courts, tracks, swimming pools, parks and ramadas, playgrounds, golf courses, outdoor riding arenas, group camps, and other designated recreational facilities (Yavapai County, 2024). Recreation activities specific to the Project Area range from outdoor activities on public lands, organized sports areas, and open space parks (Yavapai County, 2025c; State of Arizona, 2024).

The recreational areas within 5 miles of the Project, as shown in **Figure 5**, Recreational Areas, are described below.

The Agua Fria National Monument is located directly south of the Project. Hiking, camping, off-roading, and hunting are among the recreational activities available at the monument (BLM, 2025a). There are BLM roads and primitive roads throughout the monument as well, which would be commonly used by visitors (**Figure 5**). There are three BLM designated recreation sites in the Agua Fria National Monument within 5 miles of the Project: Riverbend Recreation Area located approximately 2.4 miles south of the Project Area, 1891 Schoolhouse located approximately 2.6 miles south of the Project Area, and Teskey Home Site located approximately 3 miles south of the Project Area (BLM, 2025b).

YAVAPAI CO.

Dugas Substation

Mayer

Spring Valley

Cordes Junction

Arcosanti

Cordes Lakes

Old Sycamore Rd

Cross L Rd

Dugas Rd

Orme Rd

FR 686

Agua Fria River

Little Ash Creek

Ash Creek

Sycamore Creek

17

69

800-20-041P
800-05-003G
800-01-018H
800-01-018G
501-31-002X
800-01-018J
500-25-005
800-20-041F
500-25-006
800-01-017Y
501-31-002Y
800-10-020J
500-25-008A
800-20-042G
501-31-002N
500-25-012
800-01-018K
800-20-056W
800-20-043U
800-05-004N
500-25-014B
800-20-043S
501-31-009A
800-20-056H
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800-20-056X
501-31-009B
800-20-056G
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800-20-044H
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501-31-005
800-05-012Y
800-20-044P
500-25-021K
800-05-012Z
800-20-044U
800-20-044V
800-05-014G
800-20-056J
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501-27-004
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800-05-004Z
800-09-001E
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800-20-046
501-27-009A
501-27-010
500-06-032
800-20-045W
500-04-008
501-27-011
800-05-005H

Legend

Proposed Project Components

- Gen-Tie Route
- Project Substation
- Project BESS Site
- Operation and Maintenance Building
- Agua Fria Solar and Storage Project Boundary

Other Components

- Existing Substation
- School
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Interstate Highway
- State Highway
- Road
- Watercourse
- Parcel

Yavapai County Land Use

- Agriculture
- Commercial
- Industrial
- Public
- Residential 0-1 du/acre
- Residential 1-4 du/acre
- Open Space

0 0.25 0.5 0.75 1
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: BLM, ESRI, YAVAPAI CO., USFS, USGS.

ARIZONA

Yavapai County

Map Extent

AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 3. Land Use

Map Extent: Yavapai County, AZ

Date: 7.8.25 | Author: ckvw

Dugas Substation

YAVAPAI CO.

Mayer

Spring Valley

Arcosanti

Cordes Junction

Cordes Lakes

Old Sycamore Rd

Cross L Rd

Ormo Rd

Dugas Rd

FR 686

Agua Fria River

Ash Creek

Little Ash Creek

Sycamore Creek

800-01-018H
800-01-018G
501-31-002X
800-01-018J
800-10-020J
501-31-002Y
501-31-002N
800-01-017Y
800-01-018K
800-20-041P
800-05-003G
500-25-005
800-20-041F
500-25-006
500-25-006A
800-20-042G
500-25-012
800-20-043U
800-05-004N
500-25-014B
800-20-043S
501-31-009A
501-31-009B
800-20-056H
500-25-017
800-20-056X
800-20-056G
800-20-044H
800-20-044M
500-25-014G
501-31-005
501-31-006B
800-05-012Y
800-20-044P
800-05-012Z
800-20-044U
800-20-044V
501-27-003
501-27-004
501-27-002
800-20-056J
800-05-014C
500-04-412C
800-20-044T
500-04-001
800-05-004Z
800-09-001E
501-27-007
800-20-053Z
500-06-033
800-20-044Z
501-27-009A
501-27-016A
800-05-008
800-20-046
500-06-032
501-27-010
500-04-008
800-20-045W
800-05-005H
501-27-011

69
17
17

Legend

Proposed Project Components

- Gen-Tie Route
- Project Substation
- Project BESS Site
- Operation and Maintenance Building
- Agua Fria Solar and Storage Project Boundary

Other Components

- Existing Substation
- School
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Interstate Highway
- State Highway
- Road
- Major Stream
- Parcel

Yavapai County Zoning Designations

- C1 - Commercial; Neighborhood Sales and Services
- C2 - Commercial; General Sales and Services
- M2 - Industrial; Heavy
- PAD - Planned Area Development
- R1 - Residential; Single Family
- R1L - Residential; Single Family Limited
- R2 - Residential; Multi-Family
- RCU - Residential; Rural
- RS - Residential and Services

0 0.5 1 1.5 Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: BLM, ESRI, YAVAPAI CO., USFS, USGS.

ARIZONA

Yavapai County

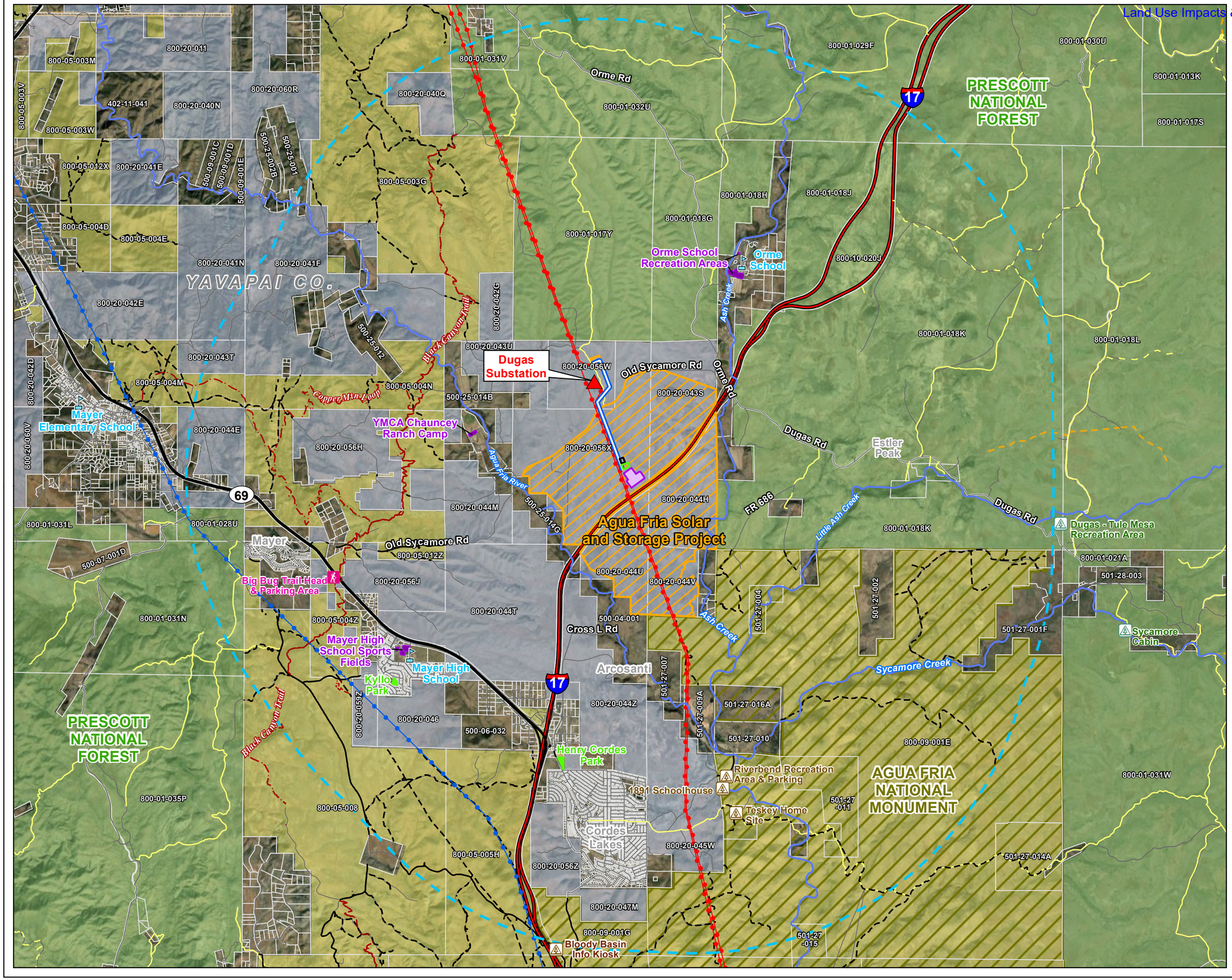
Map Extent

AGUA FRIA SOLAR AND STORAGE PROJECT

Figure 4. Zoning

Map Extent: Yavapai County, AZ

Date: 7.8.25 | Author: ckvw


YAVAPAI CO.
PRESCOTT NATIONAL FOREST
PRESCOTT NATIONAL FOREST
AGUA FRIA NATIONAL MONUMENT
Agua Fria Solar and Storage Project
Dugas Substation
Orme Rd
Old Sycamore Rd
Dugas Rd
Cross L Rd
Ash Creek
Sycamore Creek
Little Ash Creek
Agua Fria River
Black Canyon Trail
Copper Mtn Loop
FR 686
Estler Peak
Orme School Recreation Areas
Orme School
Mayer Elementary School
YMCA Chauncey Ranch Camp
Mayer
Big Bug Trail Head & Parking Area
Mayer High School Sports Fields
Mayer High School
Kyllo Park
Henry Cordes Park
Arcosanti
Cordes Lakes
1891 Schoolhouse
Riverbend Recreation Area & Parking
Teskey Home Site
Bloody Basin Info Kiosk
Dugas - Tule Mesa Recreation Area
Sycamore Cabin
69
17
800-20-011
800-05-003M
800-05-003V
800-05-003W
402-11-041
800-20-040N
800-20-060R
800-20-040Q
800-01-031V
800-01-032U
800-01-029F
800-01-030U
800-01-013K
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The Prescott National Forest is adjacent to the Project on the eastern Project boundary and located approximately 0.4 miles north of the northern Project boundary. Recreational activities associated with the forest include hiking, biking, camping, and related activities (USFS, 2025b). There is a USFS motorized trail located approximately 4 miles east of the Project, shown in **Figure 5**. National Forest Roads, both open and closed to motorized use, are found throughout the Prescott National Forest and are common routes for visitor travel (**Figure 5**) (USFS, 2025b).

Approximately 0.25 miles northwest of the Project is the YMCA Chauncey Ranch Camp, a 5,000 acre working ranch primarily utilized as a summer camp. Recreational facilities include campgrounds, a pond, field, and additional facilities. Activities related to these facilities include kayaking/canoeing, swimming, archery and various sports games.

Arcosanti, an experimental town integrating the design of architecture with respect to ecology, is located approximately 1 mile south of the Project (The Cosanti Foundation, 2024). Arcosanti offers tours, lodging, hiking trails, and various workshops which attract tourists and recreationists.

Black Canyon Trail, an 80-mile multi-use National Recreation Trail designated by the BLM, is located approximately 1.6 miles west of the Project. Although the trail is multi-use, it is primarily used for mountain biking (BLM, 2024a). Big Bug Trailhead, located approximately 3 miles southwest of the Project, just west of State Route 69, is the nearest access point for the Black Canyon Trail and is designed by the BLM as a recreation site (BLM, 2024a).

Copper Mountain Loop, an 8-mile connector loop off the Black Canyon Trail, is located approximately 2 miles west of the Project. As part of the Black Canyon Trail System, the Copper Mountain Loop is also a National Recreation Trail designated by the BLM and is primarily used for mountain biking (BLM, 2024b). Big Bug Trailhead is the nearest access point for the Copper Mountain Loop.

Henry Cordes Park is a county park with open space and recreational facilities including a playground, basketball court, trails, picnic tables, and barbeque grills (Yavapai County, 2025a). Henry Cordes Park is located approximately 2.3 miles southwest of the Project.

Approximately 2.7 miles southwest of the Project are the Mayer High School sports fields.

Kyllo Park, also located approximately 2.7 miles southwest of the Project, is a county park with open space and a variety of recreational facilities including a playground, basketball court, trails, picnic tables, barbeque grills, fenced dog park, and horseshoe pits (Yavapai County, 2025b).

Ash Creek is located along the eastern border of the Project boundary and crosses into the Project Area at the southeast corner of the Project boundary for approximately 0.65 miles. Ash creek is a popular fishing, hiking, and camping area in the community.

The Agua Fria River runs adjacent to the western border of the Project boundary. Recreational activities associated with the Agua Fria River include fishing and hiking, depending on water levels, and birding.

Estler Peak, a summit in Prescott National Forest, is located off Dugas Road approximately 2.5 miles east of the Project. Estler Peak is a hiking destination, with an off-trail route that is approximately 0.6 miles to the high point and back (AllTrails, 2025).

Dugas – Tule Mesa, a large area in the Prescott National Forest containing trails utilized for hiking, biking, horse riding, and camping is outside the 5-mile Project buffer, but is shown in **Figure 5** (USFS, 2025a). In addition, north of Dugas – Tule Mesa, is a USFS designated motorized trail in Prescott National Forest.

Outside the 5-mile buffer is Bloody Basin Information Kiosk, located off the Bloody Basin 1-17 exit. Visitors to the Agua Fria National Monument may visit here for information on recreational activities in the monument (BLM, 2016).

Sycamore Cabin, located approximately 6.2 miles east of the Project, is a historic ranger's residence available for guests to stay in. Sycamore cabin grounds include picnic facilities and an outdoor fire ring (USFS, 2025c).

3.0 Land Use Entity Correspondence

The Applicant has coordinated with the Yavapai County Development Services Department since the Project was acquired in 2024. The Applicant has held multiple meetings with the Yavapai County Development Services Department to provide project updates, discuss project design, and discuss the permitting process. The Development Services Department was also sent informational mailers, which included information about the Project, description of the CEC and County permitting process, contact information including a toll-free phone line and a link to the Project website, as well as invitations to attend the open houses and CEC Hearing for the Project.

The Arizona Power Plant and Transmission Line Siting Committee held a hearing to review the gen-tie line associated with the Project on March 17 and 18, 2025. The Project development team presented the gen-tie project and answered questions from the Committee, and held a site tour with the Committee members. The CEC for the gen-tie was unanimously approved by the Arizona Power Plant and Line Siting Committee on March 18, 2025, and then formally approved by the Arizona Corporation Commission on May 8, 2025.

The United States Bureau of Reclamation (Reclamation) is part owner of the Navajo Southern Transmission System (NSTS) at the Dugas Substation, therefore the Project's interconnection request at NSTS for the gen-tie line associated with the Project must be approved by Reclamation. Reclamation conducted public outreach to request input on the proposed interconnection from a large number of stakeholders including local, state, and federal agencies, Tribes, and the general public. Reclamation also conducted consultation under Section 106 of the National Historic Preservation Act (NHPA). No issues or concerns were raised during the public outreach or Section 106 NHPA consultation process. The State Historic Preservation Office concurred with a finding of No Adverse Effect to Historic Properties.

The Applicant met and corresponded with County Board Supervisor James Gregory on Project updates and design considerations before his resignation in February 2025. In addition, emails were sent to all County Supervisors in January 2025 to inform them of the upcoming open houses and project progress. The informational mailers were sent to the Yavapai County Board of Supervisors office. Supervisor Nikki Check attended the Project CEC hearing in March 2025 and the Project team was able to provide information about the Project at that time.

As the Project is located on ASLD Land, ASLD has been a key stakeholder in the Project. The Applicant has continued to coordinate with ASLD since acquiring the project in 2024. The Applicant has met and corresponded with ASLD to inform them on project updates, permitting schedule, upcoming open houses, and community engagement. In addition, they were sent informational mailers on the Project. The Applicant maintains a close relationship with ASLD as the lessee of their land and will continue to provide regular updates to ASLD.

The Project development team met with local ranchers, including several ranchers adjacent to the Project boundary prior to the ASLD solar lease auction. Since then, the Applicant has continued to meet with neighboring ranchers to provide project updates. The Project development team is also continuing to meet with ranchers that previously used the Project Area for grazing to engage on mitigation for any impacts to the land and grazing rights and continues to coordinate with them on Project design.

The Applicant has met with the USFS over the course of development, considering the Project is adjacent to the Prescott National Forest and an associated access road is located on Prescott

National Forest land. The USFS issued a road use permit for the project's use of a short segment of road on USFS property in 2023. In preparation for permitting activities, the applicant met in person with Chris Welker of the USFS in 2025 to review Project plans and permitting for the Project. The Prescott National Forest office and Prescott National Forest's supervisor were sent informational mailers on the Project and invitations to the Project public meetings.

The Applicant has corresponded with the BLM, as the Project is adjacent to the Agua Fria National Monument, managed by the BLM. Emails were sent to the BLM Arizona State Director and the Phoenix District Office / Hassayampa Field Office Field Manager to inform them of project updates and invitations to attend the open houses. In addition, they were also sent informational mailers on the Project.

The Applicant has met with the Arizona Game and Fish Department (AGFD) several times regarding Project updates and design considerations over the course of development. The Applicant has collaborated with AGFD throughout the Project design process on general best practices for the protection of wildlife including open space areas within the Project Area, wildlife friendly fencing, and a Post-Construction Monitoring Plan.

The Applicant has met with the US Fish and Wildlife Service (USFWS) over the course of development to provide project and permitting updates. Additionally, the Applicant has corresponded with USFWS to inform them of project updates and provide informational mailers on the project.

The Applicant has also coordinated with Friends of the Agua Fria National Monument, a group of citizens who act as stewards and advocates for the monument. Although this is not a government organization, the Applicant has corresponded with members to gather information on their interests and keep them informed on project updates and open houses.

Similarly, the Project has been in close coordination with the Upper Agua Fria Watershed Partnership (UAFWP). The Project development team attends the UAFWP monthly meetings and provides regular updates on the Project, including design updates and details on all public meetings.

The Orme Ranch Forever Conservation Easement, held by CALT, is located to the eastern boundary of the Project. Since the Applicant acquired the Project, they have continued to correspond with CALT regarding the status of the Project, including sending CALT representatives notices of open houses and informational mailers about the Project.

In addition to providing email, telephone, and mailed updates, the Applicant has met in person with the owners of the Orme Ranch on numerous occasions to inform them on project updates, permitting schedule, upcoming open houses, and community engagement. Paul Orme, the President of Orme Ranch, and his wife attended the Agua Fria open house and submitted a letter and comment expressing support for the Project.

With respect to the Orme School, the Applicant held an in-person presentation for Orme School faculty and students on solar energy, the Agua Fria Solar and Storage Project plans, and career opportunities in the energy industry. Orme School received informational mailers on the Project, and students and faculty attended the open house.

All land use entities discussed here are also formal stakeholders in the Project's Citizen Participation Plan and have been provided all Project notifications including informational mailers, open house invitations, and other project update communications. Coordination with wildlife agencies are further detailed in the Wildlife Protection Plan, in Section 1.4, *Wildlife Agency*

Coordination to Date. A summary of all agency and stakeholder meetings and interactions, including land use entities, can be found in the Citizen Participation Plan, in **Exhibit 3**, and copies of the Informational Mailers can be found in **Exhibit 2**.

4.0 Impacts and Mitigation

The Project is located entirely on ASLD Land controlled by the Applicant via a solar lease. The solar lease with the ASLD is already in place; the rent paid pursuant to this lease provides revenues to beneficiaries of the State Trust. The Project is consistent with the land use associated with the commercial solar lease with ASLD.

Access to the Project will be via existing roads and private easements. Primary access is anticipated to be provided via I-17 and Exit 268 onto Orme Road then to Old Sycamore Road. The southern portion of the site will be accessed via the existing Dugas Road and a private access easement, as well as an access road on USFS for which the Project has obtained a Road Use Permit from USFS. The private access easement includes a bridge crossing over Ash Creek on private land. The Project is not proposing to modify or improve existing county roads.

The Project is sited in the RCU-2A zoning district. The Project would convert the existing land use to an electrical generation use. Per the Yavapai County Solar Facility Use Permit, Solar Facilities are required to be located in the RCU zoning district. Thus, the Project is compatible with the Solar Facility Use Permit zoning requirements.

The surrounding area of the Project has a multitude of recreational opportunities, as described above. Ash Creek is the only recreational resource that is within the Project Area. The Applicant is aware of the recreational importance of Ash Creek to the local community and is committed to making the Project as minimally disruptive to recreational activities in the surrounding areas as possible. Ash Creek will be kept as is and will not be fenced into the Development Area in order to minimize impacts. The Project will meet or exceed the required setback of 500 feet for Ash Creek, as shown in the Development Plan. The Project has been designed to avoid Ash Creek, adhering to the setbacks set in section 608 of the ordinance, which will allow for the public to continue to use Ash Creek. Additionally, the Project will comply with all requirements from the Yavapai County Flood Control District to ensure that the historic drainage patterns of Ash Creek will be maintained between the existing and proposed conditions.

The Project will not prevent the use of nearby recreational facilities during construction or operation. Although there would not be a physical impact to the surrounding recreational resources, the Project would have visual impacts on the surrounding areas. The visual impacts to viewers from surrounding lands are described and analyzed in the Visual Impacts Analysis.

Additionally, it is not anticipated that the Project will affect the future siting of proposed recreational facilities. Given the presence of the existing transmission lines in the vicinity of the Project, current land use in this area is not expected to change and is not anticipated to support recreation.

The Project does not conflict with land uses in the Project vicinity. The proposed Project would be similar to and compatible with the high voltage transmission lines, the Dugas Substation, and transportation uses in the immediate area. Thus, the Project would not have significant impacts on land use.

The Project's design will mitigate potential land use impacts through the preservation of open space and sensitive placement of perimeter fencing. The Project plans to leave more than half of the leased acreage undeveloped. The Project would establish significant undeveloped open space within the Project Area, which would leave washes and adjacent habitat undisturbed to facilitate continued wildlife movement. The undeveloped open spaces throughout the Project Area

would maintain existing land use for more than half of the site. Further impacts and mitigation measures required by Section 608 of the ordinance are detailed within the companion reports for the Project.

5.0 References

AllTrails, 2025. Estler Peak. Accessed 6/25/25. Available at: https://www.alltrails.com/trail/us/arizona/estler-peak.

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Noise Technical Report for the Agua Fria Solar and Storage Project, Yavapai County, Arizona

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Abbreviations and Acronyms

Acronym	Definition
Applicant	Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona
ASLD	Arizona State Land Department
ASLD Land	Land managed by the Arizona State Land Department
BESS	battery energy storage system
Caltrans	California Department of Transportation
dB	decibel
dBA	A-weighted decibel
Gen-Tie	generation-tie line
Hz	hertz
I-17	Interstate 17
kHz	kilohertz
L_{eq}	equivalent sound level
L_{max}	maximum sound level
L_{min}	minimum sound level
L_{xx}	percentile-exceeded sound level
Project	Agua Fria Solar Project
rms	root-mean-square
SPL	sound pressure level

Executive Summary

The noise levels along much of the Project boundary would be below 50 dBA, with most of the Project boundary experiencing notably lower noise levels between 35 and 45 dBA 1-hour Leq. The only exception would be along I-17, which is not noise-sensitive because it is a highway. Thus, the Project complies with the applicable Yavapai County Planning and Zoning Ordinance Development and Performance Standards. In addition, these values represent worst-case predictions assuming all equipment is operating simultaneously and under conditions favoring sound propagation. In typical proposed conditions, actual noise levels are expected to be lower due to quieter operating modes, favorable weather, and topography, which were not included in the model.

By collocating the majority of the dominant noise sources, such as the BESS and the project substation, near the center of the Project Area and near existing noise sources, such as I-17 and the 500 kV transmission lines, the distances between those noise sources and the project boundaries are maximized. This configuration effectively limits off-site noise and helps control noise levels propagating to surrounding land uses.

Chapter 1
Introduction

1.1 Purpose of this Report

This Noise Technical Report for the Agua Fria Solar and Storage Project (Project) has been prepared by ICF on behalf of Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona (Applicant) to fulfill the following requirements under Section 608, Solar Facilities, of the Yavapai County Planning and Zoning Ordinance (Section 680.F.10).[1]

> **Subsection F.10: Development and Performance Standards**
>
> Noise: Operational noise impacts at the Project Boundary shall not exceed fifty (50 dBA) decibels where abutting residential or Planned Area Development use districts, identified wildlife corridors, or where abutting parcels with dwellings existing at the time of Board of Supervisors approval of the Solar Facility. This must be demonstrated by a noise analysis prepared by a qualified expert or by submission of manufacturer documentation showing noise level compliance with the fifty (50 dBA) decibels standard, as determined satisfactory by the Development Services Director.

As such, this report evaluates the potential for operational Project noise impacts and documents the assumptions, methodologies, and findings used to support the impact analysis.

1.2 Project Description

1.2.1 Project Location

The Project is located in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project vicinity, including several existing high voltage transmission lines, the existing Dugas Substation, as well as Interstate 17 (I-17), which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott. Figure 1-1 shows the Project location.

1.2.2 Project Components

The Project is an up to 450-megawatt nameplate capacity solar photovoltaic (PV) power plant. The Project consists of a solar field of PV modules (solar field), battery energy storage system (BESS), Project substation, operations and maintenance building, and ancillary facilities. The Project is located on Arizona State Land Department (ASLD) (ASLD Land) controlled by the Applicant through land lease and right-of-way approvals. The Applicant is a subsidiary of Longroad Development Company, LLC.

[1] Yavapai County Section 608 Solar Facilities available at: https://www.yavapaiaz.gov/files/sharedassets/public/v/1/development-and-permits/development-services/documents/news/sec-608-solar-facilities-approved-11-6-24-in-effect-12-4-24-watermarked.pdf

The Project Area is approximately 4,215 acres, bisected by I-17, which runs southwest to northeast through the approximate center of the Project Area. Within the Project Area, the Development Area would be on approximately 1,930 acres, the BESS would be approximately 35 acres, and the Project substation would be approximately 5 acres. In addition, there will be a generation tie (Gen-Tie) line associated with the Project to connect the power generated from the solar facilities to the grid at Dugas Substation. The Gen-Tie would be approximately 1.8 miles in length and sited within a corridor located north of I-17, south and east of the existing Dugas Substation, and directly east of the existing 500 kilovolt (kV) transmission line corridor. The Applicant received a Certificate of Compatibility (CEC) from the Arizona Corporation Commission for the Gen-Tie in May 2025.

1.3 Environmental Setting

The Project Area is a very sparsely populated area of Yavapai County, Arizona, surrounded primarily by vacant land. The primary noise source in the area is the I-17 freeway, which bisects the Project Area with two lanes in each direction. Localized noise is generated by electrical equipment at the existing Dugas Substation just north of the Project Area. There are no railroads, airports, major streets, or other substantial noise sources in the Project vicinity. Away from I-17, the existing noise environment in the Project vicinity is quiet.

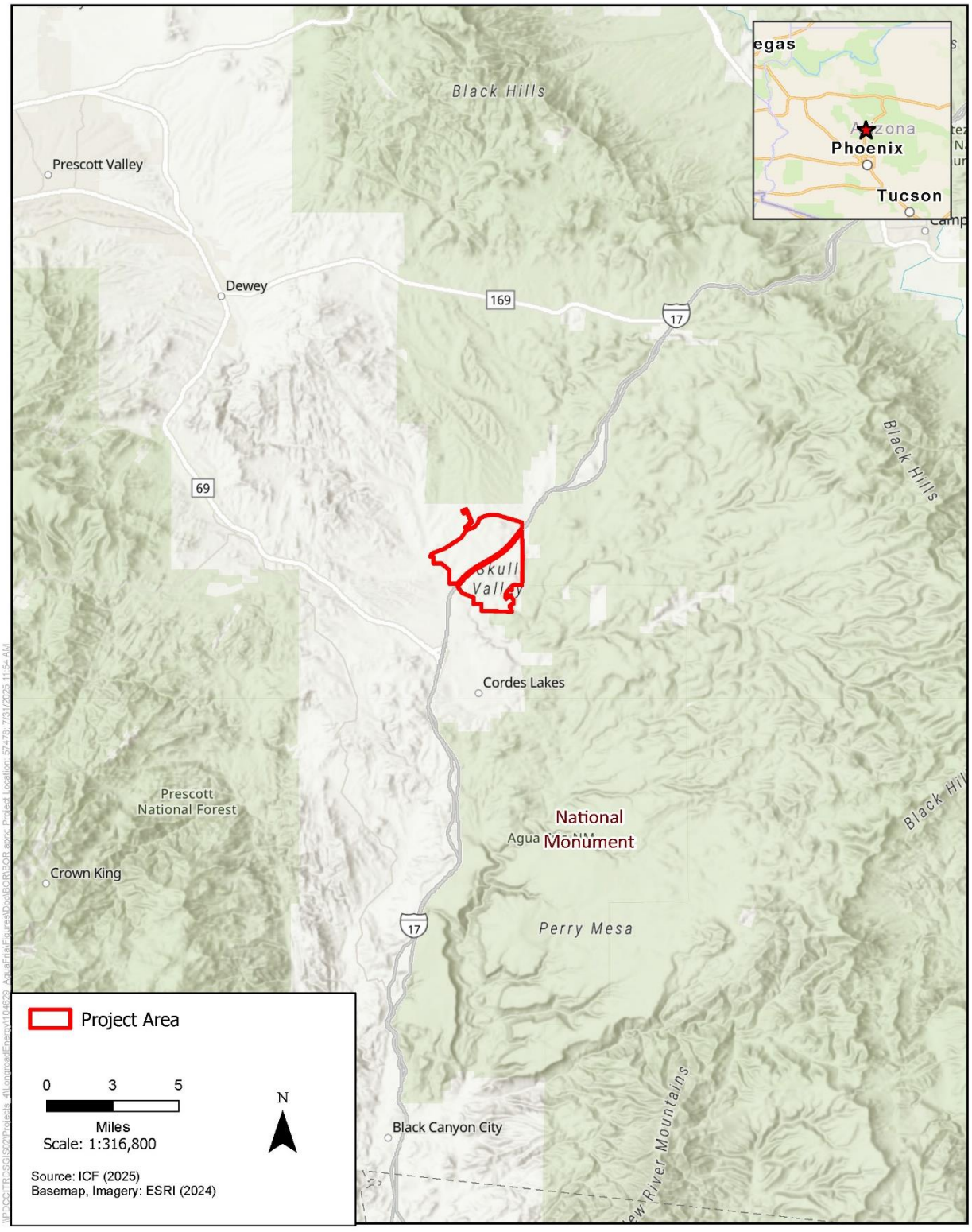


Figure 1-1
Agua Fria Solar Project
Project Location

Figure 1-1. Project Location

Chapter 2
Noise Fundamentals

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is often defined as sound that is objectionable because it is unwanted, disturbing, or annoying.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and the obstructions or atmospheric factors, which affect the propagation path to the receptor, determine the sound level and the characteristics of the noise perceived by the receptor.

The following sections provide an explanation of key concepts and acoustical terms used in the analysis of environmental and community noise.

2.1 Frequency, Amplitude, and Decibels

Continuous sound can be described by its *frequency* (pitch) and *amplitude* (loudness). A low-frequency sound is perceived as low in pitch; a high-frequency sound is perceived as high-pitched. Frequency is expressed in terms of cycles per second, or hertz (Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hz. The audible frequency range for humans is generally between 20 Hz and 20 kHz (20,000 Hz).

The amplitude of pressure waves generated by a sound source correlates with the loudness of that source. The amplitude of a sound is typically described in terms of *sound pressure level* (SPL), also referred to simply as the sound level. The SPL refers to the root-mean-square (rms)[2] pressure of a sound wave and is measured in units called microPascals. One µPa is approximately one hundred-billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to over 100,000,000 µPa. Because of this large range of values, SPL is rarely expressed in terms of µPa. Instead, SPL is expressed in decibels (dB), a logarithmic unit that compares the actual sound pressure to a reference pressure of 20 µPa. Specifically, an SPL, in dB, is calculated as follows:

$$SPL = 20 \times \log_{10}\left(\frac{X}{20\,\mu Pa}\right)$$

where *X* is the actual sound pressure and 20 microPascals is the reference pressure. The threshold of hearing for young people is about 0 dB, which corresponds to 20 µPa.

2.1.1 Decibel Calculations

Due to the logarithmic nature of the dB scale, SPLs cannot be added, subtracted, or averaged using ordinary arithmetic operations. A doubling of sound energy corresponds to a 3-dB increase in SPL. For instance, two identical noise sources, each producing 60 dB will combine to yield a total of 63 dB

[2] Root-mean-square (rms) is defined as the square root of the mean (average) value of the squared amplitude of the noise signal.

– not 120 dB. This principle applies to both unweighted and A-weighted (see Section 2.1.2) decibel measurements. Similarly, calculating an average SPL requires converting individual dB values to a linear scale, computing the arithmetic mean, and then converting the result back to decibels. This process, known as energy averaging, ensures an accurate representation of cumulative noise levels.

2.1.2 A-Weighting

The dB scale alone does not fully capture how humans perceive sound, as human hearing is influenced not only by sound amplitude but also by frequency. While amplitude is a physical measure, perceived loudness depends on the ear's sensitivity, which varies across frequencies. Humans are most sensitive to sounds between 1,000 and 5,000 Hz, and less responsive to sounds outside this range, even at the same amplitude. To account for this, sound levels are adjusted using frequency weighting, where the sound levels of individual frequency bands are weighted (i.e., adjusted) according to human sensitivity to those frequencies. The most common method, A-weighting, approximates the frequency response of the average young ear when listening to most ordinary sounds and results in sound levels expressed in A-weighted decibels (dBA). A-weighted levels correlate well with human judgments of loudness and annoyance, making them a standard metric in environmental noise assessments. Table 2-1 describes typical A-weighted sound levels for various noise sources.

Table 2-1. Typical A-Weighted Sound Levels

Common Outdoor Noise Source	Sound Level (dBA)	Common Indoor Noise Source
	— 110 —	Rock band
Jet flying at 1,000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower at 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher in next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2013.

2.2 Noise Descriptors

Because sound levels can vary markedly over a short period of time, various descriptors or noise "metrics" have been developed to quantify environmental and community noise. These metrics generally describe either the average character of the noise or the statistical behavior of the variations in the noise level. Some of the most common metrics used to describe environmental noise are described below.

- **Equivalent Sound Level (L_{eq})** is the most common metric used to describe short-term average noise levels. Many noise sources produce levels that fluctuate over time; examples include mechanical equipment that cycles on and off or construction work, which can vary sporadically. The L_{eq} describes the average acoustical energy content of noise for an identified period of time, commonly 1 hour. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustical energy over the duration of the exposure. For many noise sources, the L_{eq} will vary depending on the time of day. A prime example is traffic noise, which rises and falls depending on the amount of traffic on a given street or freeway.
- **Maximum Sound Level (L_{max})** and **Minimum Sound Level (L_{min})** refer to the maximum and minimum sound levels, respectively, that occur during the noise measurement period. More specifically, they describe the rms sound levels that correspond to the loudest and quietest 1-second intervals that occur during the measurement.
- **Percentile-Exceeded Sound Level (L_{xx})** describes the sound level exceeded for a given percentage of a specified period. For example, the L_{50} is the sound level that exceeds 50 percent of the time (such as 30 minutes per hour), and the L_{25} is the sound level that exceeds 25 percent of the time (such as 15 minutes per hour).

L_{eq} is the noise metric analyzed for the proposed Project.

2.3 Sound Propagation

As sound propagates over distance, its level and frequency content are altered (attenuated) by several environmental and physical factors. Key influences on noise attenuation include:

- **Geometric Spreading**: Sound from a point source radiates spherically, decreasing by 6 dBA with each doubling of distance. In contrast, line sources, such as highways, exhibit cylindrical spreading with a 3 dBA reduction per doubling of distance.
- **Ground Absorption**: The nature of the ground surface between the source and receptor affects sound attenuation. Hard, reflective surfaces (e.g., pavement or water) offer minimal absorption, while soft, absorptive surfaces (e.g., grass or soil) enhance attenuation.
- **Atmospheric Effects**: Wind, temperature gradients, humidity, and turbulence can significantly influence sound propagation. For example, downwind conditions and temperature inversions can increase noise levels at distant receptors.
- **Shielding by Natural or Built Features**: Terrain, vegetation, buildings, and constructed barriers can block or deflect sound. Effective barriers that break the line of sight can reduce noise by at least 5 dB, with higher reductions (up to 20 dB) possible depending on design and placement.

2.4 Sound Power

Sound power, also known as acoustic power, refers to the total amount of acoustic energy emitted by a sound source in all directions per unit time. Sound power is a physical characteristic of the noise source that describes the source's intrinsic noise-generating capability. Therefore, unlike SPL, which varies with distance, sound power is independent of distance and location.

Sound power is particularly important in the context of this report because it is the value used to describe the noise emissions of each noise source (e.g., BESS unit, inverter, transformer, etc.) considered in the analysis.

Chapter 3
Methodology and Assumptions

3.1 Noise Sources and Locations

The primary operational noise sources associated with the Project would be the BESS units, the BESS inverters, the PV inverters, the PV transformers, and the project substation. The Project would also include emergency generators that would be used only in emergency situations to provide backup power for cooling the BESS units. The equipment assumed throughout the model is based on the current Project design and available technology. The technology assumptions are representative and do not reflect the final design of the Project, as this will be finalized closer to construction.

The BESS units are assumed to be Fluence Gridstack™ Pro 5000, which include batteries and an integrated cooling system. All the BESS units and BESS inverters would be collocated at the BESS area at the approximate center of the Project Area, northwest of I-17. Diesel-powered emergency backup generators at the site would also be located at the BESS area. It is noted that the proposed generators would include the manufacturer's Level 1 acoustic enclosure with an integrated exhaust muffler. The project substation would be immediately north of the BESS area; the dominant noise source at the project substation would be three generator step-up transformers. The PV inverters and PV transformers would be collocated in pairs at equipment pads distributed around the Project Area among the PV panel arrays; the locations of these equipment pads are shown on the conceptual plans. Both the project substation and BESS are located internally to the Project Area, near the center of the site, adjacent to I-17 and an existing 500 kV transmission line. This will help maximize the separation between operational noise generation and any adjacent land uses.

The Project may utilize tracker technology to tilt the PV panels to follow the sun's course and potentially to stow the panels during adverse weather events. Intermittent noise would be generated by the operation of electrical tracker motors; however, its contribution to overall hourly and daily noise levels would be negligible, as noise levels would be very low and occur only periodically for brief durations throughout the daytime hours at the Project Area. Therefore, tracker noise is not included in the noise analysis.

3.2 Noise Modeling

To analyze noise from onsite operations, a three-dimensional computer noise model was developed using SoundPLAN software. The software can predict noise levels using various national and international noise calculation standards. For this analysis, SoundPLAN was set to implement all noise calculations based on the International Organization for Standardization standard 9613-2:2024 (Acoustics — Attenuation of sound during propagation outdoors, Part 2: Engineering method for the prediction of SPLs outdoors). The model considers many important variables, including the sound power of each noise source, the heights of the noise sources and receivers, the distance to noise-sensitive receivers, site topography, barrier effects of structures (e.g., buildings, walls) and terrain (e.g., slopes, hills), and local ground cover conditions. The geometry for the model was based on engineering and site plans from the Project engineers and publicly available aerial photography and mapping from Google Earth and OpenStreetMap. The acoustic characteristics of the ground were modeled with a *ground factor* of 0.6 to represent the partly vegetated conditions of

the ground in and around the Project Area. For context, the value for the ground factor can vary between ground factor = 0 for acoustically hard ground (asphalt, concrete, pavement, water) and ground factor = 1 for acoustically soft ground (vegetated soils such as agricultural, forest, lawn, or garden). The following simplifying assumptions were used in the model; both are conservative (i.e., will tend to over-estimate predicted noise levels):

- It was assumed that the terrain for the Project Area and all surrounding land was flat; this is a conservative assumption because it neglects any noise-reducing shielding effects that might be provided by the terrain.
- The equipment noise sources were modeled as simple point or area sources rather than as physical structures. The solar panel structures were also not included in the model. This means that any potential noise shielding or scattering effects caused by the physical structures of BESS units and other equipment are neglected in the model.

By default, the International Organization for Standardization 9613-2:2024 method predicts SPLs under meteorological conditions favorable to propagation from the noise source to the receiver. These conditions correspond to downwind propagation or propagation under a well-developed moderate ground-based temperature inversion, such as commonly occurs on clear, calm nights. These are conservative assumptions that ensure the model provides reasonable worst-case estimates of Project noise levels at all receivers.

The results of the noise modeling are displayed as colored noise contour maps that illustrate how noise levels vary across the Project Area and the surrounding area. The total analysis area is approximately 34 square miles or 22,000 acres, measuring approximately 6.0 miles (from west to east) by 5.6 miles (from north to south). The noise contour map is generated from the calculated noise levels at a grid of more than 880,000 receivers distributed across the analysis area. All calculated receiver points are at a height of five feet above the ground.

Two versions of the model were calculated. The first scenario was a peak-hour daytime scenario that assumed all equipment, except the emergency backup generators, would operate at 100 percent capacity. The second scenario added the simultaneous operation of 12 diesel-powered emergency generators.

3.3 Equipment Noise Levels

To evaluate the noise levels generated by the various onsite noise sources, acoustical data (i.e., source noise levels) for these items were derived from manufacturers' specifications sheets, equipment information provided by the Applicant, and published noise prediction algorithms. The SoundPLAN model used for the noise analysis requires source noise levels to be entered as sound power levels for each noise source. Where the sound power level was not specified directly in the equipment specifications, it was calculated based on the stated sound pressure level, measurement distance, and physical dimensions of the equipment. Table 3-1 summarizes the equipment considered in the noise analysis, along with its associated sound power.

Table 3-1. Agua Fria Solar Equipment Noise Levels

Equipment Area	Equipment Item[1]	Manufacturer's Stated Sound Pressure Level	Stated/ Calculated Sound Power per Unit (SWL)[2]	Total Number of Items
BESS	**BESS unit**: Fluence Gridstack™ Pro 5000 modular battery enclosure	70 dBA at 1 meter	91.5 dBA [3]	1,248
	BESS inverter: EPC Power M10 series	75 dBA at 1 meter	97.2 dBA [4]	312
	Emergency Generator: Generac Stationary Emergency Standby Generator, 1500kW Rating, 277/480V, 3 Phase, with Level 1 Acoustic Enclosure	84 to 86 dBA at 7 meters	113.4 dBA [5]	Up to 36 (up to 12 running simultaneously)
Substation	**Transformer**: 180MVA Power Transformer	N/A	105 dBA [6]	2
Equipment pads among the solar array	**PV inverter**: Sungrow SG4400UD inverter skid	N/A	90.9 dBA [7]	101
	PV transformer: 4,400 kVA transformer	N/A	84.8 dBA [6]	101

[1] All equipment throughout the model is assumed based on the current Project design and representative available technology, and does not necessarily reflect the final design of the Project. Actual equipment selections will be finalized closer to the start of construction.

[2] Sound power is a physical characteristic of the noise source and is independent of distance. Refer to Section 2.4 for more details.

[3] BESS enclosure SWL calculated based on the manufacturer's specification of 70 dBA at 1 meter and the dimensions of the enclosure.

[4] BESS inverter SWL calculated based on the manufacturer's specification of 75 dBA at 1 meter and the dimensions of the inverter.

[5] Emergency generator SWL calculated in SoundPLAN based on the manufacturer's reported SPL of 84 to 86 dBA at 7 meters from the generator.

[6] Transformer SWL estimated from kVA or MVA rating based on Industrial Noise Control and Acoustics. Chapter 5, Section 5.6 Transformer Noise (Barron 2003).

[7] PV inverter SWL stated by the manufacturer.

kVA= kilovolt-ampere; MVA = megavolt-ampere; N/A = not applicable; SWL = sound power level

Chapter 4
Results

The results of the noise analysis are illustrated in Figure 4-1 and Figure 4-2. As shown in the figures, Project noise levels beyond the Project Boundary are all predicted to be 50 dBA 1-hour L_{eq}, or lower. The only exception would be along I-17 between the north and south portions of the Project Area, where noise levels would exceed 50 dBA. However, because highways are not noise-sensitive land uses, the noise levels along the I-17 corridor would not be used to assess noise impacts. Furthermore, the noise levels along much of the Project boundary would be notably below 50 dBA, with many areas exposed to Project noise levels between 35 and 45 dBA 1-hour L_{eq}. Therefore, the Project complies with the applicable Yavapai County Planning and Zoning Ordinance Development and Performance Standards which state "Operational noise impacts at the Project boundary shall not exceed fifty (50 dBA) decibels where abutting residential or Planned Area Development use districts, identified wildlife corridors, or where abutting parcels with dwellings existing at the time of Board of Supervisors approval of the Solar Facility" (refer to Section 1.1 of this report for more details of the ordinance).

Under typical worst-case operational conditions (all equipment, except the emergency backup generators, operating at 100 percent capacity), the highest noise levels at the Project Boundary (excluding I-17) would be approximately 47 dBA 1-hour L_{eq}. These noise levels would occur along a portion of the northwest Project Boundary. The lowest noise levels (approximately 34 dBA 1-hour L_{eq}) would occur at the south Project Boundary. The noise levels along the remaining Project Boundaries (i.e., the north, east, and southwest boundaries) would range from approximately 36 to 44 dBA 1-hour L_{eq}.

With 12 emergency generators added to the operations, the highest noise levels at the Project Boundary (excluding I-17) would be approximately 50 dBA 1-hour L_{eq}. These noise levels would occur along a portion of the northwest Project Boundary. The lowest noise levels (approximately 40 dBA 1-hour L_{eq}) would occur at the south Project Boundary. The noise levels along the remaining Project boundaries (i.e., the north, east, and southwest boundaries) would range from approximately 41 to 47 dBA 1-hour L_{eq}.

For context, it is important to note that all of the reported noise levels represent worst-case noise level predictions that would only occur when all the equipment at the Project is operating simultaneously in its loudest mode and when meteorological conditions match the conservative assumptions used in the noise model. The overall noise from the Project would often be lower, such as when equipment turns off or operates in a quieter mode, or when more favorable meteorological conditions enhance noise attenuation between the Project and the surrounding land uses. The real-world topography in the study area, which was conservatively omitted from the modeling, would likely help to further reduce the noise levels. The design of the Project helps to substantially control noise levels propagating to surrounding land uses by collocating the majority of the dominant noise sources, such as the BESS area and the Project substation, near the center of the Project Area, thereby maximizing the distance between those noise sources and the project boundaries. Placing the project BESS and substation near existing noise sources (i.e., I-17 and the existing 500 kV transmission line) helps minimize the impact of new noise because of the already elevated noise levels. Overall, the results of this study indicate that the proposed Project is expected to comply with the applicable 50 dBA boundary noise limits and, in many cases, actual noise levels would be substantially lower.

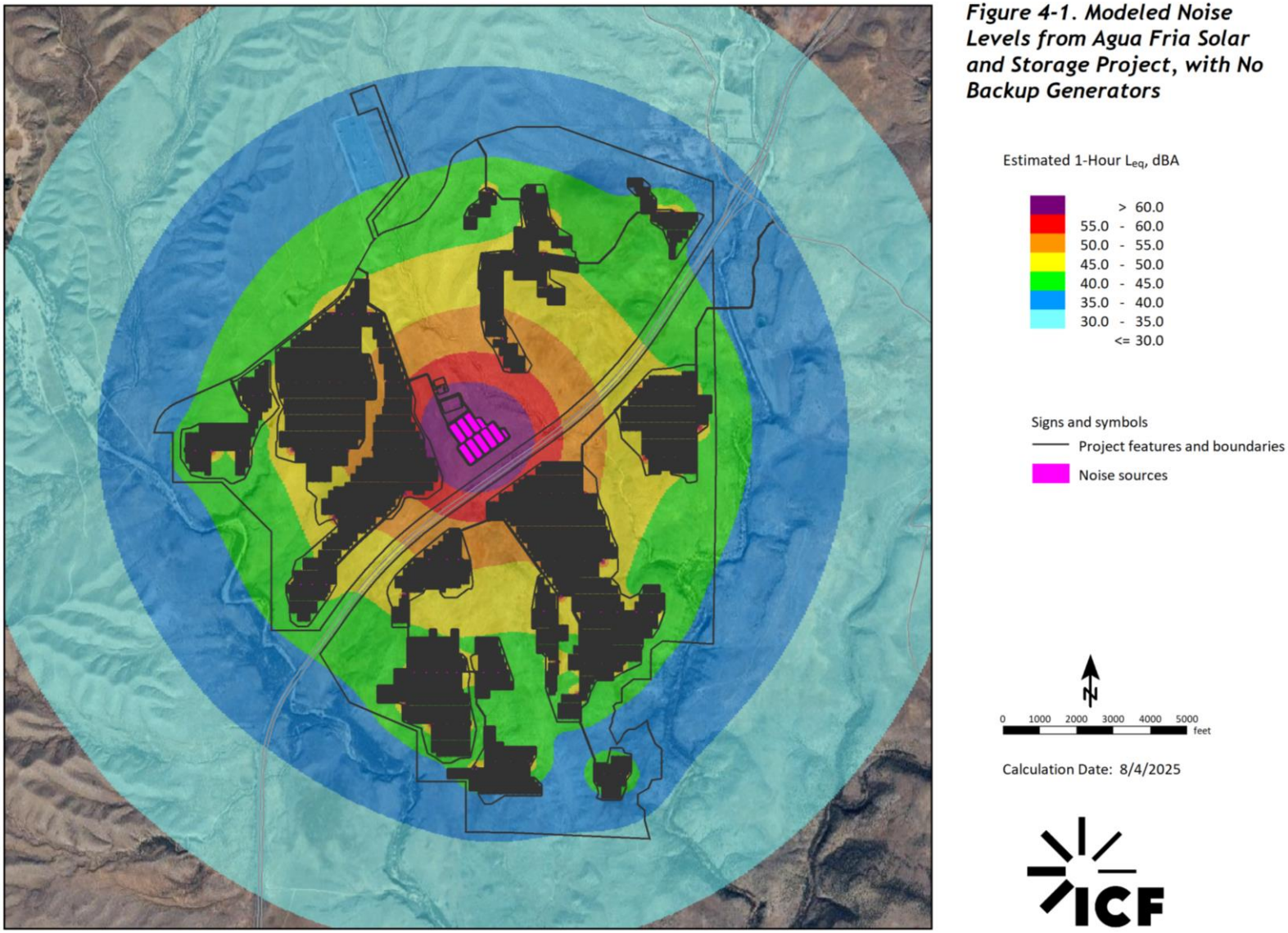


Figure 4-1. Modeled Noise Levels from Agua Fria Solar and Storage Project, with No Backup Generators

Figure 4-1. Modeled Noise Levels from Agua Fria Solar and Storage Project, with No Backup Generators

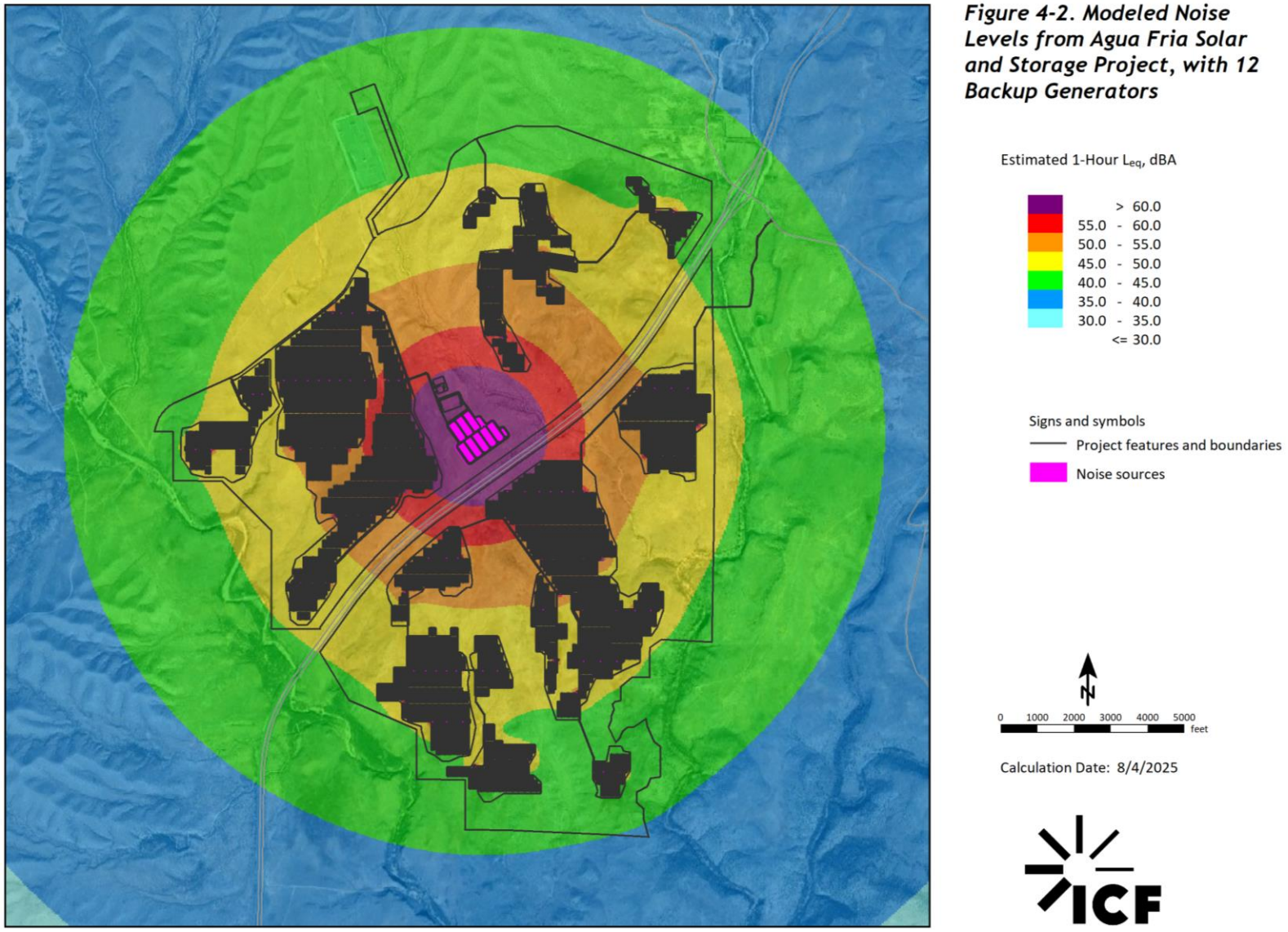


Figure 4-2. Modeled Noise Levels from Agua Fria Solar and Storage Project, with 12 Backup Generators

Chapter 5
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Chapter 6
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FINAL VERSION

PRELIMINARY DECOMMISSIONING PLAN FOR THE AGUA FRIA SOLAR AND STORAGE PROJECT, YAVAPAI COUNTY, ARIZONA

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August 2025



ICF, Sacramento, CA, August 2025: *Preliminary Decommissioning Plan for the Agua Fria Solar and Storage Project*. Prepared for Agua Fria, LLC, on behalf of Longroad Energy, Boston, MA.

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Acronyms and Abbreviations

Acronym	Abbreviation
AC	alternating current
Applicant	Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC
APS	Arizona Public Service
ASLD	Arizona State Trust Land
ASLD Land	land managed by the Arizona State Trust Land
BESS	battery energy storage system
DC	direct current
Development Area	the approximate 1,930-acre area where Project decommissioning activities are to take place, contained within the Project Area
gen-tie	generation tie
ICF	ICF Resources, LLC
LF	linear feet
MW	megawatts
MW-AC	megawatts-alternating current
O&M	operation and maintenance
PCS	power conversion station
Plan	Preliminary Decommissioning Plan
Project	Agua Fria Solar and Storage Project
Project Area	4,215-acre site located in Yavapai County, Arizona
Project Facility	the Agua Fria solar and storage facility including the PV solar arrays, Project substation, BESS, O&M building and gen-tie line
PV	photovoltaic
SCADA	supervisory control and data acquisition
W	watts

Chapter 1
Project Overview

Project Location

The Agua Fria Solar and Storage Project (Project) is in the southeastern portion of Yavapai County, Arizona. There are existing utilities and infrastructure in the Project vicinity including several existing high voltage transmission lines, the existing Dugas Substation, as well as Interstate 17 which bisects the Project. The Project is located approximately 1.3 miles north of the unincorporated community of Cordes Lakes and approximately 19 miles southeast of the city of Prescott.

Project Components

The Project is a nameplate capacity solar photovoltaic (PV) power plant of up to 450 megawatts alternating current (MW-AC), with a battery energy storage system (BESS) capacity of up to 3600 megawatt-hours. The Project consists of a solar field of PV modules, BESS, Project substation, operation and maintenance (O&M) building, and ancillary facilities. The Project would be located on Arizona State Trust Land (ASLD Land) managed by the Arizona State Land Department (ASLD) (see **Figure 1**), and controlled by Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona (Applicant) via a solar lease. The Applicant is a subsidiary of Longroad Development Company, LLC (Longroad).

The Project Area is approximately 4,215 acres. Within the Project Area, the Development Area includes approximately 1,930 acres, the BESS would be approximately 35 acres, and the Project substation would be approximately 5 acres. In addition, there will be a generation tie (gen-tie) line associated with the Project to connect the power generated from the solar facilities to the grid at Dugas Substation, located approximately 0.25 mile north of the Project Area. The gen-tie would be approximately 1.8 miles in length and sited within a corridor located north of Interstate 17, south and east of the existing Dugas Substation, and directly east of the existing 500-kilovolt transmission line corridor. The Applicant received a Certificate of Environmental Compatibility from the Arizona Corporation Commission for the gen-tie in May 2025.

Introduction

The Preliminary Decommissioning Plan (Plan) addresses the decommissioning of the Agua Fria Solar and Storage Project facilities including the solar PV arrays, Project substation, BESS, O&M building and gen-tie line (Project Facility). The Plan has been developed in accordance with the requirements of the Yavapai County Solar Ordinance Decommissioning Plan. The Project PV and BESS capacity is to be updated to reflect the final sizes in the Detailed Decommissioning Plan to be submitted prior to construction. In the Preliminary Decommissioning Plan, maximum potential capacities for PV and BESS have been assumed and, therefore, equipment and material quantities have been based on these capacities.

This Plan has been prepared based on requirements of ASLD lease which requires a posting for financial assurance to meet both Yavapai and ASLD requirements shown below.

> Prior to commencement of the Work to be Performed for the Initial Improvements, Lessee is to deposit with Lessor a bond (from an insurer with a Best's rating of not less than A, a letter

of credit from an Institutional Lender acceptable to Lessor, or a cash deposit to be placed in Lessor's suspense account (the Restoration Pond) to cover the cost of removal of Improvements and surface restoration of the premises pursuant to an estimate of the reasonable cost of removal as certified by an authorized officer of Lessee.

"Surface Restoration" is to include the removal of all subgrade Improvements and return of the ground surface to a clean, safe condition in compliance with any applicable state, county or local laws, rules and regulations, including those relating to dust control of abatement. "Institutional Lender" is to mean any bank, trust company, national banking associations, pension trust or insurance company or other lender: (i) in the business of providing financing for commercial real estate transactions through one or more loans which may be secured by an interest in Lessee's right, title and interest in the leasehold estate and/or Improvements: and (ii) existing under the laws of the Unites States or any state thereof, duly authorized to transact business in the State of Arizona and permitted by law and the provisions of all regulations issued by a regulatory agency having jurisdiction thereof to issue a letter of credit the amount of the proposed Restoration Bond. The amount of the Restoration Bond is to be adjusted upward or downward overtime as the Lessor may reasonably determine is necessary to assure the aforesaid estimated cost of removal of Improvements and surface restoration, at intervals of no less than five years unless new Improvements have been constructed in the interim.

In support of Yavapai County, Arizona permitting requirements, Longroad has retained ICF to develop a Preliminary Decommissioning Plan which includes an estimate of the cost for the decommissioning of all Improvements associated with the Project at the end of the useful life of the Project. ICF has prepared the Plan for the Project Facility which is to include all the requirements in the Yavapai County Solar Ordinance Preliminary Decommissioning Plan, including a detailed estimate of costs in 2025 dollars based on its experience with PV design and construction requirements, estimated labor, material quantities, recycling, disposal, and other reclamation costs. We have prepared the Plan to summarize the assumptions and conclusions of our review.

The Plan has been prepared by ICF, based on information and data provided by Longroad and reviewed by ICF. We have exercised professional and engineering judgment in reliance upon the data provided, and to develop and inform the Plan. The achievement of possible outcomes is dependent on risks and uncertainties, both known and unknown, which may result in actual outcomes that differ from those discussed in the Plan. The Plan is to be updated and submitted to Yavapai County for approval prior to the issuance of any construction permits, according to the requirements of Section 608.

ICF hereby confirms its consent for Longroad to distribute the Plan to a limited number of relevant stakeholders, as necessary, and for such stakeholders to receive the Plan on an AS IS basis with NO WARRANTY OF ANY KIND UNLESS AN ACCESS AGREEMENT IS ENTERED INTO BETWEEN ICF AND SAID STAKEHOLDERS.

1.1 Assumptions

During the preparation of this Plan and the technical opinions contained herein, we have made the following principal considerations and assumptions with respect to the Project, conditions and circumstances, and future events that may or may not actually occur. We believe the assumptions are reasonable but acknowledge events or circumstances that are unforeseen, and beyond our control,

may result in actual, future conditions varying from those assumed in the Plan and as such could affect the conclusions drawn herein.

- Current or future demolition and salvage companies will provide demolition and salvage services to the PV and BESS industry similarly to those provided to other industrial customers.
- There will be a metals recycling market at the time of decommissioning and the value of the steel, copper, and aluminum metal will increase over time, in line with the inflation rate.
- Labor will be available at the time of decommissioning timeframe and labor productivity will be nominally equivalent to that of labor in 2025.
- Decommissioning activities will encompass the Developed Area which is to include approximately 1,930 acres of the Project Area. The remaining, undeveloped 2,285 acres will remain as open space and not require any decommissioning.
- The useful life of the Project is approximately 40 years.
- The approximate 1,930-acre Development Area will be returned to as-found conditions via grading and leveling followed by revegetation.
- The Applicant will not encumber the Project Area with any hazardous materials during Project operation, and any other chemicals or liquids will be disposed of in accordance with local guidance prior to decommissioning.

1.1.1 Decommissioning Plan Compliance

This Plan conforms to the following criteria:

- Requirements of ASLD lease
- Requirements of Section 608 Yavapai County Solar Facilities Ordinance
- Lifespan of the Project: Applicant informs of 40-year design life for the Project Facility
- Decommissioning and Reclamation Plan
  - Soil Stabilization (Refer to Section 1.6.9)
  - Soil Preparation for reseeding and planting (Refer to Section 1.6.9)
  - Disposal and recycling materials and equipment (Refer to Section 1.7)
- Decommissioning and Reclamation Cost Estimate
  - Estimate Determination (Refer to Section 1.5)
  - Available salvage and scrap costs (Refer to Section 1.7)
  - Estimated Costs (Refer to Section 1.8)
  - Estimated Decommissioning Costs offset by available Scrap/Salvage (Refer to Section 1.9)

1.2 Project Background and Design

The Project Facility is to be constructed on approximately 1,930 acres of a nominal 4,215-acre site located in Yavapai County, Arizona (Project Area), as shown in Figure 1-1.

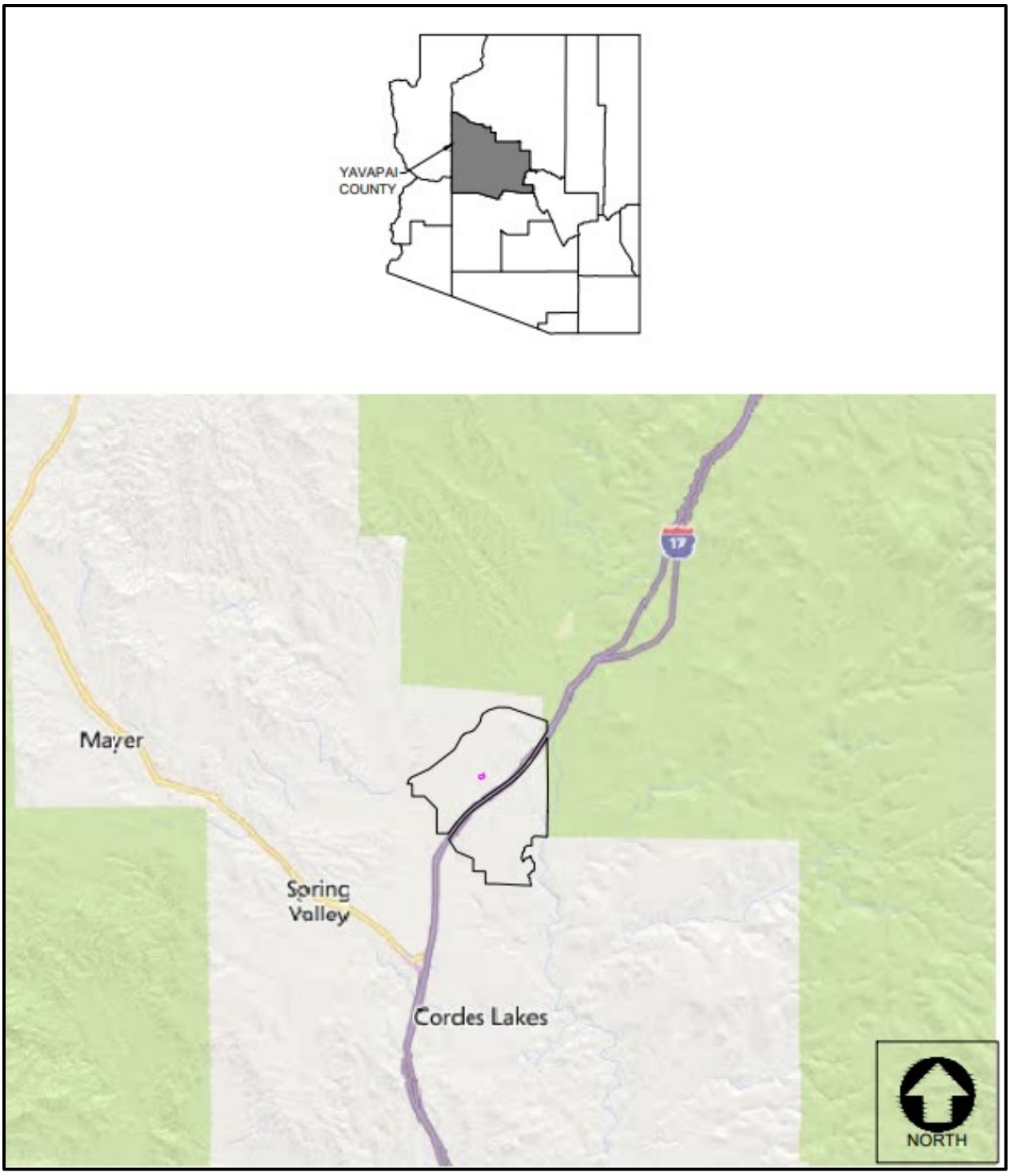


Figure 1-1. Agua Fria Solar and Storage Project Area Location

It is our understanding that the Project is permitted under a single Solar Facilities Use Permit and only the facilities included in the permit area are included in the Plan. See below Figure 1-2 which provides the layout of the Project Area.

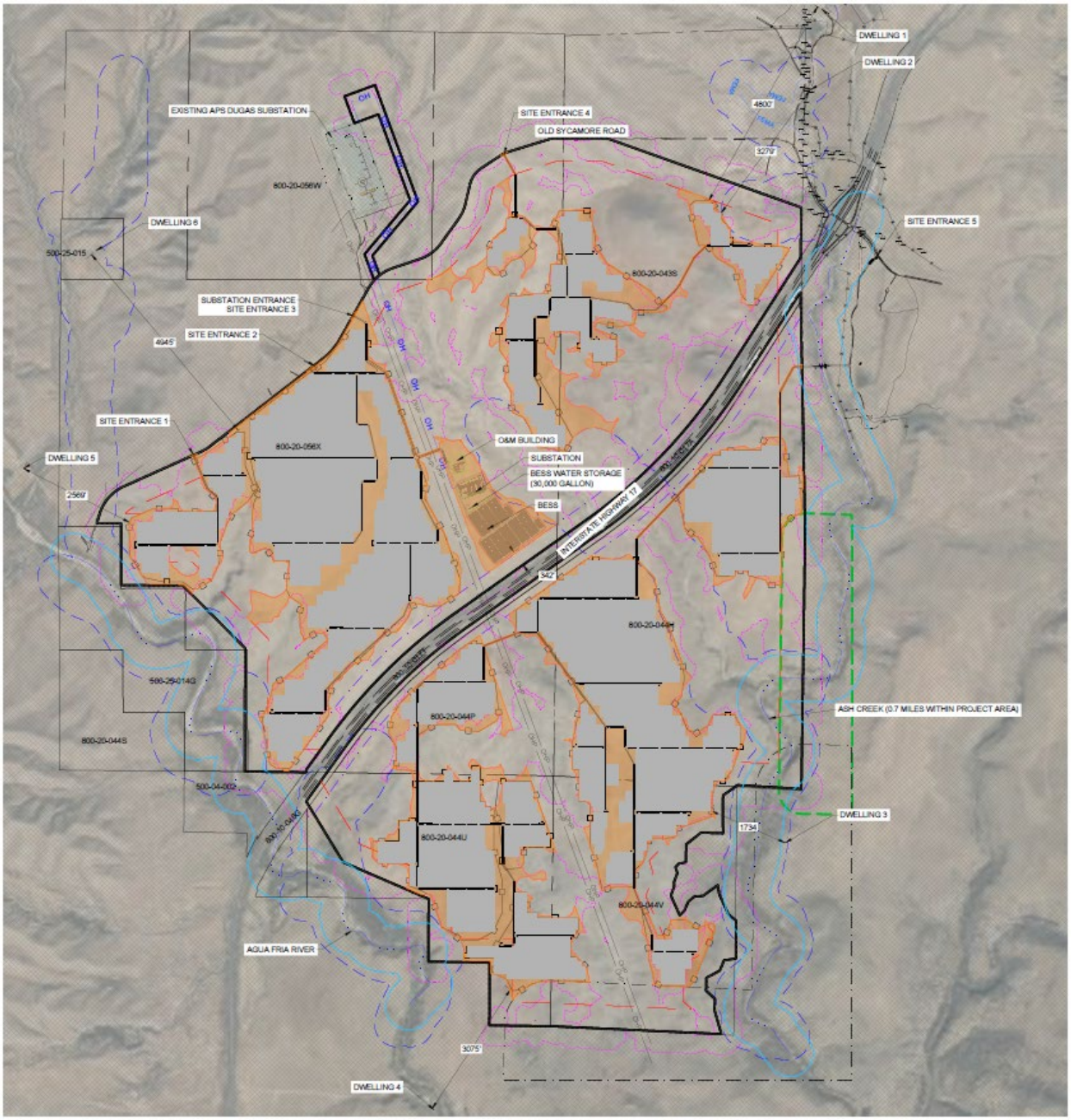


Figure 1-2. Agua Fria Solar and Storage Project Area Layout

Detailed Project design information including final equipment selection, foundation design, or other design information expected to affect the Project decommissioning costs is not yet available. Based on guidance provided by Longroad and our experience with preparation of reclamation plans and estimates of PV and BESS utility-scale facilities, we have assumed the preliminary design parameters in Table 1-1 to support the reclamation review for the Project Area.

Table 1-1. Agua Fria Solar and Storage Project Summary

Location	Yavapai County, AZ
Latitude – Longitude	(34.38491 degrees North) - (-112.09164 degrees West)
Agua Fria PV Capacity	up to 450 MW-AC
Agua Fria BESS Capacity	up to 3,600 MWh
Module Manufacturer	Jinko Eagle G7-B Crystalline
Inverter Manufacturer	Sungrow SG4400UD-MV-US
Tracker Manufacturer	NEXTracker
BESS Generators	Sun Stream
BESS Enclosures	Fluence GSP500
Agua Fria Components	Project Estimated Quantities: • 668,712 PV modules (20,061 tons) • 19,125 tons NEXTracker Tracker or Fixed Tilt Racking Components • 147,116 each driven-pile PV and BESS W6x9x12-foot piles (9,563 tons) • 86 skid-mounted power conversion stations, each includes an inverter & medium-voltage transformer (2,365 tons) • 312 each BESS M10 Inverter Skids (26'x10'x10" weighing 39,000 pounds each per skid (6,084 tons) • 1,248 Fluence GSP500 Gridstack Pro 5000 4 (4-hour+) enclosures (20'x8'x10') weighing 94,800 pounds each per enclosure (59,155 tons) • Total BESS System Components weight is 65,239 tons. • 2,000 each combiner boxes; Supervisory Control and Data Acquisition ("SCAD") and meteorological stations mounted on W6x9x12-foot piles (400 tons) • Estimated 700,000 LF of copper DC cable (175 tons) • Estimated 700,000 LF of direct-bury and overhead aluminum cable (175 tons) • Fencing consists of 8-foot game fence for arrays 155,000 LF, O&M and Substation chain link fencing of 2,000 linear feet, and BESS galvanized corrugated sheet metal fencing of 3,000 linear feet total of (170 tons of steel) • 1,930 acres (Development Area only) grading/leveling/BMPs and revegetation (flat balanced cut and fills site) • 50,000 LF of compacted gravel earth access roadways nominally 12 feet wide by 6-inch depth (35,000 tons) • Substation concrete foundations demolished and recycled (2,400 tons) • Substation steel and equipment (2,250 tons) • 5,000 LF of gen-tie line and structures (1 lot; 50 tons)

1.3 Present Use

Based on the Applicant's preliminary and ongoing site studies, the Project Area is desert-like, undeveloped and has historically been used for livestock grazing. The site is not currently irrigated or farmed and is bordered by the Agua Fria River to the west, and Ash Creek to the east. The Project Area

is located on Arizona State Trust Land and is bisected roughly east to west by Interstate 17, and roughly north to south by an existing 500-kilovolt transmission line corridor that connects to the existing Arizona Public Services Dugas Substation.

1.4 Future Use

For the purposes of preparing this Plan, ICF assumes that the Project Area is planned to be restored by the Applicant to pre-development condition and use after decommissioning or at the end of the 40-year useful life. The Project Area is sited on Arizona State Land through a commercial solar lease with a lease term of 30 years with an option for 4 additional 10-year extensions. Through the conditions of the ASLD lease, the Lessee is required to decommission the Project at the end of the lease term. There is an additional requirement within the lease for the Lessee to post a Restoration Bond prior to the commencement of work to be performed on site for the improvement of the site.

1.5 Decommissioning Basis and Scope

As a baseline, ICF generally considers decommissioning to include the following scope of work; (i) driven piles are to be deconstructed by pulling from the ground, (ii) all concrete foundations above and below ground are to be removed, (iii) all underground conduit and cabling is to be removed from the Project Area, (iv) all modules, racking, PV Substation, Gen-Tie line and equipment is be scrapped or disposed and removed from the Project Area, (v) fencing and gates are to scrapped and removed from the Project Area, (vi) access roadways are to be de-compacted and graded and leveled (vii) the overall approximate 1,930-acre disturbed areas is to be graded and leveled upon completion, and (viii) disturbed areas are to be revegetated and the site returned to pre-development condition. Reclamation is to comply with the Yavapai County Solar Ordinance Decommissioning Plan, the conditions of the ASLD Solar lease, along with any other federal, state, county and other local standards and all regulations in existence at the end of useful life at the time of reclamation.

Steel, aluminum, copper, aggregate, and concrete components of the PV, BESS and substation systems which are being decommissioned are reasonably expected to be recyclable and sold as scrap.

Modules consisting of absorber material; glass and aluminum have no salvage value. For this decommissioning plans and estimate, the modules are to be deconstructed, palletized and shipped to original equipment manufacturer (“OEM”) or recycling facility for disposal or recycling with no value.

Foundation piles and tracker components are made of steel, electrical cabling and components include copper, aluminum and steel and substation foundations are concrete which can be recycled along with substation structural steel and equipment made of steel and copper. Since this region of Arizona has numerous PV installations that are to be coming to the end of their respective design lives in 35–40 years, recycling should be readily available for all of the associated materials and equipment with exception of modules.

Costs for the work are estimated in 2025 dollars utilizing a composite burdened rate of $50 per hour. The $50 per hour composite rate is inclusive of hourly payments to employees, payroll taxes and insurance (“PTI”) paid by employer, fringes and benefits paid by employer, scheduled 10 hours overtime per week, company overhead and profit, and a per diem amount ranging between $100 and $150 per day.

The overall costs (labor/equipment/loading and hauling) for decommissioning throughout the Project lifetime and at the end of the usable life and for available recycle and scrap can be estimated by escalating the 2025 estimated costs by an applicable escalation rate for the date the Project Facility is to be decommissioned.

Based on directions included in the Yavapai County Solar Ordinance Decommissioning Plan, no consideration for scrap or salvage value has been included in the decommissioning estimate for the Project Facility. Estimated costs to load, transport, and haul materials and equipment to scrap yards or to a recycler have been included in the decommissioning estimates and an estimated available recycle/scrap amount has been provided should consideration be given for offsetting decommissioning costs with estimated recycle or scrap prices.

1.6 Project Components and Quantities

The Project Facility is to consist of a tracking or fixed-tilt system mounted on driven piles, to which PV modules are mounted. Direct-current (DC) above-ground and direct-bury cabling is to collect the power output from the PV modules and deliver it to skid-mounted power conversion stations (PCSs) that convert the power from DC to AC and step up the AC voltage at the skid-mounted medium-voltage transformer to 34.5 kilovolts. Each PCS power output is to be collected by above-ground and direct-bury cables and delivered to the Project substation where a gen-tie line is to connect to the Point of Interconnection at the APS Substation.

The BESS is to include skid-mounted, fully enclosed racks of lithium-ion battery banks connected via busbar to fully enclosed, bi-directional DC/AC inverters. Battery charge or discharge power is to be imported or exported via skid-mounted medium-voltage transformers (one per skid). The BESS power output is to be transported by above-ground cabling and delivered to the Project substation.

Based on the information provided, see below a listing and description of Project components and estimated quantities and weights.

1.6.1 Driven Piles

Tracking systems, PCS skids and BESS skids are typically supported by driven W6x9 or W6x12 galvanized steel piles approximately 12 feet overall length embedded to depth of approximately 7–9 feet into the ground. The Project has estimated 147,116 of these piles with an approximate weight of 130 pounds each, with an approximate overall weight of 9,563 tons.

1.6.2 Racking/Tracking System

Racking or tracking system tables span the driven-pile foundations and are to be mechanically bolted to the driven piles with racking or tracking steel support headers or torque tubes which support the PV modules. From previous experience on decommissioning plans and estimates, tracking or racking system weights are typically a factor of approximately 2.0 times the weight of the driven piles equating to an approximate overall weight of 19,125 tons for the Project Facility tracker or racking system steel components.

1.6.3 PV Solar Modules

Jinko Eagle G7-B crystalline modules each have an approximate area of 26.4 square feet, are nominally 79 inches tall by 48 inches wide, and weigh approximately 60 pounds. The Project Facility is to feature approximately 668,712 PV modules with an estimated overall weight of 20,061 tons. There is currently no market for recycling modules, but it is expected a market may open at the end of the design life of 40 years for the modules to be recycled. There is no salvage or scrap value assigned for the modules which are to be deconstructed, palletized and shipped to OEM or recycler with no scrap or recycling value.

1.6.4 Power Conversion Stations

Power conversion stations (PCSs) are to include inverters, switchgear and transformers which are to be shop-assembled and mounted on a skid frame nominally 8 feet wide by 30 feet long which, when assembled, is to have a weight of approximately 55,000 pounds each. The Project Facility includes 86 PCS skids. The PCS skids are assumed to be removed from foundations, loaded on trailers, and shipped to a recycler and sold for scrap. The overall weight of the 86 Agua Fria PCS skids is to be approximately 2,365 tons.

1.6.5 Combiner Boxes, Supervisory Control and Data Acquisition, and Meteorological Stations

Combiner boxes, supervisory control and data acquisition ("SCADA") and meteorological stations ("MET Stations") are expected to be mounted on driven-pile foundations with an approximate weight of 400 pounds. There is to be an estimated 2,000 of these at the Project Facility, with an overall weight of 400 tons, which are to be removed from support piles and loaded and shipped to a recycler and sold as scrap.

1.6.6 BESS Station Skids and BESS Enclosures

The 8-hour duration BESS system has not been designed at this point but is to consist of 312 BESS EPC M10 inverter skids of an approximate size of 25 'x 9.5 'x 10' each with a weight of 39,000 pounds each (total of 6,084 tons) and 1,248 GSP500 Fluence BESS Enclosures with weight of 94,800 pounds each sized at 19.9' x 8'x 9.5' (total of 59,155 tons).

The total weight for the BESS equipment is an estimated 65,239 tons which is to be removed from foundations and loaded on trailers and shipped to a recycler and sold as scrap steel. It is possible that, at the time of decommissioning, the BESS enclosures may be returned to the OEM for disposal; however, the estimate is based on selling at a scrap steel price.

1.6.7 Substation Foundations and Equipment

The Project substation is to consist of concrete foundations, main power transformers, high voltage circuit breakers, electrical equipment, structural steel supports, insulators, switches, static masts, dead end structures which are typical of substation design for utility-scale PV and BESS being developed in Arizona. Prior to any decommission activities, transformer insulation oil is to be drained and disposed of by others and costs are not included in this estimate. From previous experience

estimating the decommissioning of similar size substations, estimated quantities have been established based on MW-AC generation.

For the Project Facility, the AC generation capacity is to be up to 450 MW-AC. Based on the 450 MW-AC substation, concrete foundations to be demolished and processed for recycling are estimated to be 2,400 tons. Substation equipment and steel to be demolished and scraped is estimated to be 2,250 tons. The concrete is to be crushed and recycled and sold back to the concrete company. The steel and equipment are to be loaded on trucks and shipped to the steel recycler.

1.6.8 Project Fencing

The total Project fencing length is estimated to be 160,000 linear feet (LF) of 8-foot game fencing. The O&M and Substation fencing estimated to be 2,000 LF is to be an 8-foot chain link fabric topped with one foot of barbed wire. BESS fencing estimated at 3,000 LF is to be galvanized sheet metal. Game fencing 150,000 LF (chicken wire) weight is estimated to be three pounds per foot including posts. Substation and O&M chain link fencing estimated to be 2,000 LF is estimated at 12 pounds per foot including posts. BESS galvanized sheet metal fencing is estimated to be five pounds per foot for 3,000 LF. Posts are to be pulled, and chain link fabric, game fencing, and sheet metal is to be rolled up and loaded on trailer and shipped to recycler for scrap. The total estimated weight of game fence materials is estimated to be approximately 150 tons, O&M and Substation chain link fence materials to be approximately 12 tons and BESS Sheet Metal Fencing to be approximately eight tons for a total of approximately 170 tons to be loaded and shipped to recycler.

1.6.9 Site Restoration and Revegetation

The disturbed 1,930-acre area soils are to be stabilized after decommissioning per the ordinance including leveling and grading in some areas to maintain the pre-construction drainage pattern sheet flowing across the Project Area after the piles, underground, roadways and equipment are removed. Any drainage culverts or pipes are expected to be excavated, demolished, loaded, and hauled off. After piles are pulled and underground components removed, the disturbed areas of the site are to be stabilized and loosened by ripping or discing prior to native reseeding. The estimated disturbed area which is to be restored and revegetated to pre-development conditions is estimated to be 1,930 acres. Methods for stabilization and revegetation after decommissioning are to be consistent with the methods detailed in the Landscaping Plan, as submitted to Yavapai County as part of this application. Revegetation activities are to be completed within one year of the removal of the Solar Facility structures and equipment, in compliance with county requirements.

1.6.10 Access Roadways

The roadways in and around the Project Facility are estimated to be 50,00 LF of 6-inch-thick by 12-foot-wide compacted earthen roadway or, in heavily trafficked areas, 6-inch-thick by 12-foot-wide compacted gravel or aggregate roadways. As part of the Project Area reclamation, internal compacted earthen access roadways are to be de-compacted, leveled, and graded back to pre-construction conditions and compacted gravel or aggregate roads would have aggregate removed and recycled. The total estimated 35,000 tons of roadway removal and gravel recycling is based on 50,000 LF.

1.6.11 DC Collection System Cables

Above-ground and below-ground DC collection system cables are to be removed by excavation or by hydraulic pulling. The estimated Project DC copper collection system cables is 700,000 LF with an estimated weight of 175 tons with scrap copper to be loaded and hauled to a recycler and sold.

1.6.12 AC Collection System Cables

Above-ground and below-ground AC collection system cables are to be removed by excavation or by hydraulic pulling. The estimated Project AC collection system aluminum cables is 700,000 LF with weight of 175 tons with scrap aluminum loaded and hauled to a recycler and sold.

1.6.13 Gen-Tie Line

The gen-tie overhead power line of approximately 5,000 LF connects the Project substation to the APS DUGAS Substation and is routed in the new easement adjacent to existing high voltage power line easement. The gen-tie line is to consist of wood or steel poles with crossarms and insulators which support aluminum stranded conductors. The aluminum stranded conductor cables are to be removed, and aluminum loaded and recycled, and the poles are to be removed and recycled if steel or scrapped if wood. The estimated Project Facility gen-tie line components are estimated to be 50 tons and are to be recycled or scrapped.

1.6.14 Decommissioning Labor and Equipment

Decommissioning of a project facility is expected to include the following activities. The activities are expected to be performed by a demolition or specialty contractor familiar with the mechanical and electrical decommissioning and recycling of PV generation facilities. The anticipated steps and tasks include the following:

- Removal of PV modules, bundling and packaging and shipping to a recycler.
- Removal of module wiring, load, and ship to a recycler.
- Removal of the tracking system components, load, and ship to scrap recycler.
- Hydraulic pulling of the PV tracking system steel piles, load, and ship to scrap recycler.
- Removal of the underground direct-bury cables by excavation or hydraulic pulling, loading, and shipping to metal recycler.
- Removal of underground conduits and wiring by excavation or hydraulic pulling, loading, and shipping to steel recycler.
- Removal of PCS skids, load and ship to a steel recycler.
- Removal of BESS inverter skids and load and ship to a steel recycler or scrap vendor
- Removal of BESS enclosures and load and ship to a steel recycler or scrap vendor
- Removal of combiner boxes/panels and associated conduits and wiring, load and ship to a steel recycler.
- Removal of fencing posts, materials and gates, load and ship to a recycler.

- Site grading to level to pre-development conditions.
- Decompaction, ripping or discing of compacted areas followed by leveling and grading.
- Decompaction and deconstruct roadways followed by leveling and grading.
- Revegetation of disturbed areas.
- Load out onto trailers all decommissioned equipment and components and ship to a recycler.

1.7 Salvage/Scrap Value (not included in Project estimated decommissioning costs)

Typically, the costs to decommission a facility are assumed to be partially or fully offset by the salvage value of the equipment and materials that comprise the facility. In some cases, decommissioning projects are estimated to be of net positive value because the components can be sold on the resale market for more than the costs of decommissioning (labor, equipment, oversight, etc.). The raw materials that comprise the Project Facility may have substantial salvage value in today's market include copper, steel, aluminum, glass, and concrete. These may be sellable for net positive value.

While there is not currently an active resale market for solar modules or BESS equipment, it is anticipated that over the course of the Project's 40-year useful life, additional markets may develop for salvage/reuse of solar modules and BESS components, due to a confluence of market factors, including used equipment becoming available as large-scale facilities are expected to be decommissioned or repowered with new equipment and forecasted increasing power demand from renewable resources.

We understand that Yavapai County Solar Ordinance Decommissioning Plan does not allow salvage value to be incorporated into decommissioning estimates, including raw materials that have a demonstrated resale value such as copper and steel. ICF has prepared an estimate of the resale value of the components that comprise the Project Facility for informational purposes.

For the purposes of the Preliminary Decommissioning Plan, ICF has assumed that there is zero salvage or resale value for the PV modules and that the modules are to be deconstructed, bundled, loaded, and shipped to a recycler for reprocessing. However, the module salvage/resale value issue is still under review by ICF and may be updated in the Detailed Decommissioning Plan based on forthcoming analysis.

The Project salvage/scrap value estimate is shown below in Table 1-2 and reflects estimated tons of materials to scrap or recycle with scrap/recycle estimated price and total value that would be available to offset decommissioning costs for the Project Facility.

Average May 2025 national scrap values for copper, aluminum, and steel are utilized for the purposes of this estimate.

Table 1-2. Project Estimated Salvage/Scrap Value (2025$)

Component	Total Weight	Unit	2024 Scrap- Recycle ($)	Unit	Total Scrap Value
Modules	20,061	ton	No Value	ton	$0
Copper	175	ton	$3.20	pound	$1,120,000

Aluminum	175	ton	$0.50	pound	$175,000
Steel	99,162	ton	$0.05	pound	$9,916,200
Aggregate	35,000	ton	$4.00	ton	$140,000
Concrete	2,400	ton	$50.00	ton	$120,000
			Total Project Estimated Recycle/Scrap Value		$11,471,200
				Per W-DC	$0.025

1.8 Labor, Equipment, G&A, and Disposal Costs

Based on commercially available cost estimating data sources such as RS Means and published labor productivity rates in the western United States along with prior similar decommissioning estimates we have produced or reviewed, we estimate a 2025 decommissioning for the Project Facility should require approximately 129,131 manhours. The 2025 labor rates for Yavapai County were estimated to be $50 per hour and this estimate is included in the analysis below in Table 1-3, which summarizes the estimated decommissioning costs for the Project Facility.

Table 1-3. Project Facility Estimated Decommissioning Costs (2025$) 450 MW-AC

Item	Quantity	Weight	Labor Unit	Labor Hours	Labor $50/hour	Demo/Site Equipment	Load-Haul to Recycle	Total Estimate
Mob/Demobilization	1 lot	n/a	1,000	1,000	$50,000	$17,500	$0	$67,500
GCs/Supervision	26 weeks	n/a	250	6,500	$325,000	$113,750	$0	$438,750
Piles	147,116	9,563 tons	0.10	14,712	$735,580	$257,453	$478,127	$1,471,160
Trackers or Fixed Tilt	19,125 tons	19,125 tons	0.50	9,563	$478,127	$167,344	$956,254	$1,601,723
Modules	668,712 ea	20,061 tons	0.03	20,061	$1,003,068	$351,074	$1,003,050	$2,357,192
PCS Skids	86 each	2,365 tons	60.00	5,160	$258,000	$90,300	$118,250	$466,550
Combiner Box/SCADA	2,000 each	400 tons	1.50	3,000	$150,000	$52,500	$20,000	$222,500
BESS Inverter Skids	312 each	6,084 tons	5.00	1,560	$78,000	$27,300	$304,200	$409,500
BESS Enclosures	1,248 each	59,155 tons	5.00	6,240	$312,000	$109,200	$591,550	$1,012,750
Gen-Tie Line	5,000 LF	50 tons	0.30	1,500	$75,000	$26,250	$1,250	$102,500
Fencing/Gates	160,000 LF	170 tons	0.025	4,000	$200,000	$70,000	$8,500	$278,500
Site Restoration	1,930 acres	n/a	5.00	9,650	$482,500	$160,213	$0	$642,713
Revegetation	1,930 acres	n/a	3.00	5,790	$289,500	$96,128	$0	$385,628
Erosion Control BMPs	1,930 acres	n/a	1.50	2,895	$144,750	$48,064	$0	$192,814
Roadways	50,000 LF	35,000 tons	0.10	5,000	$250,000	$87,500	$50,000	$387,500
DC Copper Cabling	700,000 LF	175.0 tons	0.02	14,000	$700,000	$245,000	$8,750	$953,750
AC Aluminum Cabling	700,000 LF	175.0 tons	0.02	14,000	$700,000	$245,000	$8,750	$953,750
Substation Concrete	450 MW	2,400 tons	5.0	2,250	$112,500	$39,375	$120,000	$271,875
Substation Equip/Steel	450 MW	2,250 tons	5.0	2,250	$112,500	$39,375	112,500	$264,375
Subtotals				129,131	$6,456,525	$2,243,324	$3,781,181	$12,481,030
10% Contingency								$1,248,103
						Total Project Decommissioning Estimate		$13,729,133
						Per W-AC (based on 450 MW-AC)		$0.031

Note: LF = linear feet; MW = megawatt; n/a = not available; SCADA = supervisory control and data acquisition

1.9 Conclusion

Based on the design assumptions summarized in Table 1-1, the estimated costs for Project Facility decommissioning and Project Area reclamation are shown below in Table 1-4.

Table 1-4. Estimated Decommissioning and Reclamation Costs

Project	Manhours	Labor	Equipment	Load/Haul	Contingency	Total
Agua Fria	129,131	$6,456,525	$2,243,324	$3,781,181	$1,248,103	$13,729,133

The above total decommissioning cost estimate of $13,729,133 ($0.031/W-AC) does not include any estimated available scrap/recycle value of $11,471,200 ($0.025/W-AC) to offset decommissioning costs. If the estimated available recycle/scrap value of $11,471,200 were available for offsetting of the future decommissioning costs, the estimated costs taking account of available scrap value would be $2,257,933 ($0.005/W-AC).

All the estimated costs are 2025 dollars. We believe the 2025 estimated costs for the decommissioning and reclamation of the Project Facility and Project Area, respectively, as shown in Table 1-4, are reasonable and reflective for a utility-scale, solar PV/BESS facility in Yavapai County, AZ performed by a qualified PV installation or demolition contractor experienced in installation and decommissioning and site reclamation of PV renewable projects of this size and complexity.

The estimated costs in Table 1-4 are shown in 2025 dollars. Costs at the end of the assumed useful life can be estimated using an assumed annual escalation rate.

The Detailed Decommissioning Plan, to be submitted prior to construction, is to include the financial assurance means for the estimated costs of decommissioning and reclamation. ASLD also requires that financial assurance is posted by the Lessee prior to Improvements being made on the Project Area. This is detailed in the Solar Lease in Section 9.10(d). The ASLD lease requires that this Restoration Bond be posted as a bond, letter of credit or cash deposit. This aligns with the requirements in the Yavapai County Solar Ordinance. The Applicant requests that the Yavapai County Board of Supervisors allows the same financial assurance to be used to satisfy the requirements of both Yavapai County and ASLD. The final amount of the required financial assurance to be posted prior to construction is to be determined in the Detailed Decommissioning Plan, based on an updated estimate which should include the value of available recycling and scrap.

The Restoration Bond amount is to be adjusted every five years based on recalculated decommissioning and reclamation costs determined by an independent third-party Arizona-licensed engineer, following the requirements of Section 608 and current industry standards.

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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

KEVIN THOMPSON– CHAIR
NICK MYERS - VICE CHAIR
LEA MÁRQUEZ PETERSON
RACHEL WALDEN
REN§ LOPEZ

Arizona Corporation Commission
DOCKETED
MAY 12 2025
DOCKETED BY

IN THE MATTER OF THE APPLICATION OF AGUA FRIA SOLAR, LLC, IN CONFORMANCE WITH THE REQUIREMENTS OF ARIZONA REVISED STATUTES § 40-360, ET SEQ., FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AUTHORIZING THE AGUA FRIA GEN-TIE PROJECT, WHICH INCLUDES THE CONSTRUCTION OF A DOUBLE CIRCUIT CAPABLE 500 KILOVOLT(KV) TRANSMISSION GEN-TIE LINE LOCATED WITHIN YAVAPAI COUNTY, ARIZONA	**DOCKET NO. L-21350A-25-0025-00245** **CASE NO. 245** **DECISION NO.** 80881 **ORDER**

May 8, 2025
Open Meeting

BY THE COMMISSION:

Pursuant to A.R.S. § 40-360 et seq., after due consideration of all relevant matters, the Arizona Corporation Commission ("Commission") finds and concludes that the Certificate of Environmental Compatibility ("CEC") issued by the Arizona Power Plant and Transmission Line Siting Committee ("Siting Committee") is hereby approved as granted by this Order.

The Commission, in reaching its decision, has balanced all relevant matters in the broad public interest, including the need for an adequate, economical, and reliable supply of electric power with the desire to minimize the effect thereof on the environment and ecology of this state, and finds that granting the Project a CEC is in the public interest.

ACC Docketed Gen-Tie CEC Page 2 of 18

The Commission further finds and concludes that in balancing the broad public interest in this matter:

1. The Project is in the public interest because it aids the state in meeting the need for an adequate, economical, and reliable supply of electric power.

2. In balancing the need for the Project with its effect on the environment and ecology of the state, the conditions placed on the CEC effectively minimize its impact on the environment and ecology of the state.

3. The conditions placed on the CEC resolve matters concerning the need for the Project and its impact on the environment and ecology of the state raised during the course of proceedings and, as such, serve as the findings on the matters raised.

4. In light of these conditions, the balancing in the broad public interest results in favor of granting the CEC.

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THE CEC ISSUED BY THE SITING COMMITTEE IS INCORPORATED HEREIN AND IS APPROVED BY ORDER OF THE ARIZONA CORPORATION COMMISSION

CHAIRMAN THOMPSON

VICE CHAIRMAN MYERS

COMMISSIONER MARQUEZ PETERSON

COMMISSIONER WALDEN

COMMISSIONER LOPEZ

IN WITNESS WHEREOF, I, DOUGLAS R. CLARK, Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this 12th day of May, 2025.

DOUGLAS R. CLARK
Executive Director

DISSENT: _____

DISSENT: _____

BEFORE THE ARIZONA POWER PLANT AND TRANSMISSION LINE SITING COMMITTEE

IN THE MATTER OF THE APPLICATION OF AGUA FRIA SOLAR, LLC, IN CONFORMANCE WITH THE REQUIREMENTS OF ARIZONA REVISED STATUTES § 40-360, ET SEQ., FOR A CERTIFICATE OF ENVIRONMENTAL COMPATABILITY AUTHORIZING THE AGUA FRIA GEN-TIE PROJECT, WHICH INCLUDES THE CONSTRUCTION OF A DOUBLE CIRCUIT CAPABLE 500 KILOVOLT (KV) TRANSMISSION GEN-TIE LINE LOCATED WITHIN YAVAPAI COUNTY, ARIZONA.	DOCKET NO.: L-21350A-25-0025-00245 Case No. 245 **CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY**

A. INTRODUCTION

Pursuant to notice given as provided by law, the Arizona Power Plant and Transmission Line Siting Committee ("Committee") held public hearings on March 17, 2025, through March 18, 2025, in Mayer, Yavapai County, Arizona, in conformance with the requirements of the Arizona Revised Statutes ("A.R.S.") § 40-360 *et seq*. for the purpose of receiving evidence and deliberating on the February 6, 2025 Application of Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC, in Arizona ("Applicant") for a Certificate of Environmental Compatibility ("Certificate") in the above-captioned case.

The following members and designees of members of the Committee were present at one or more of the hearing days for the evidentiary presentations, public comment, and/or for the deliberations:

Adam Stafford	Chairman, Designee for Arizona Attorney General Kris Mayes
Gabby Mercer	Designee of the Chairman, Arizona Corporation Commission ("Commission")
David French	Designee for Director, Arizona Department of Water Resources

Nicole Hill	Designee for Director of the Governor's Energy Office
David Kryder	Appointed Member, representing agricultural interests
Margaret "Toby" Little	Appointed Member, representing the general public
Jon Gold	Appointed Member, representing the general public

The Applicant was represented by Bert Acken of Acken Law. No parties requested intervention pursuant to A.R.S. § 40-360.05.

At the conclusion of the hearing, the Committee, after considering the (i) Application, (ii) evidence, testimony, and exhibits presented by the Applicant, and (iii) comments of the public, and being advised of the legal requirements of A.R.S. §§ 40-360 through 40-360.13, upon motion duly made and seconded, voted 7 to 0, to grant Applicant, its successors and assigns, this Certificate for construction of the Agua Fria Generation Tie Line Project ("Project") as described below.

B. PROJECT DESCRIPTION

The Project consists of an approximately 1.8-mile, single circuit or double-circuit capable 500 kilovolt ("kV") transmission line and associated interconnection facilities to interconnect the Applicant's non-jurisdictional 450 megawatt ("MW") solar generation and 450 MW battery storage facility (the "Agua Fria Solar and Storage Project" or the "Generating Facility") to the regional electrical transmission grid at the Dugas Switchyard in Yavapai County.

All Project facilities will be located in a siting area as shown in **Exhibit A** (the "Siting Area"). The Project will originate at the non-jurisdictional Project Substation to be located within the boundaries of the Applicant's commercial lease with the Arizona State Land Department ("ASLD") for the Generating Facility and extend generally northwest for approximately 0.9 miles to the boundary of the Generating Facility. From the boundary of the Generating Facility, the Project will be routed generally northwest for approximately 0.9 miles, in a 250-foot corridor, until it reaches the point of interconnection, the Dugas Switchyard.

The final right-of-way width for the Project within the Siting Area will be 250 feet.

CONDITIONS

This Certificate is granted upon the following conditions:

1. This authorization to construct the Project, as either a single circuit or double-circuit capable 500 kV transmission line, shall expire ten (10) years from the date this Certificate is approved by the Commission, with or without modification. Construction of the Project shall be complete, such that the Project is in service within this ten-year timeframe. However, prior to the expiration of the time period, the Applicant may request that the Commission extend the time limitation. In the event that the Applicant constructs the Project using single-circuit structures, the Applicant may not construct a second circuit without prior authorization by the Commission.

2. In the event the Project requires an extension of the term(s) of this Certificate prior to completion of construction, the Applicant shall file such time extension request at least one hundred and eighty (180) days prior to the expiration of the Certificate. The Applicant shall use reasonable means to promptly notify the Board of Supervisors of Yavapai County, ASLD, all landowners and residents within a five (5) mile radius of the centerline of the Project, all persons who made public comment at this proceeding who provided a mailing or email address, and all parties to this proceeding. The notification provided will include the request and the date, time, and place of the hearing or open meetings during which the Commission will consider the request for extension. Notification shall be no more than three (3) business days after the Applicant is made aware of the hearing date or the open meeting date.

3. During the development, construction, operation, maintenance and reclamation of the Project, the Applicant shall comply with all existing applicable air and water pollution control standards and regulations, and with all existing applicable statutes, ordinances, master plans and regulations of any governmental entity having jurisdiction,

including, but not limited to, the United States of America, the State of Arizona, Yavapai County, and their agencies and subdivisions, including but not limited to the following:

a. All applicable land use regulations;

b. All applicable zoning stipulations and conditions, including but not limited to landscaping and dust control requirements;

c. All applicable water use, discharge and/or disposal requirements of the Arizona Department of Water Resources and the Arizona Department of Environmental Quality;

d. All applicable noise control standards; and

e. All applicable regulations governing storage and handling of hazardous chemicals and petroleum products.

4. The Applicant shall obtain all approvals and permits necessary to construct, operate, and maintain the Project required by any governmental entity having jurisdiction including, but not limited to, the United States of America, the State of Arizona, Yavapai County, and their agencies and subdivisions.

5. The Applicant shall comply with the Arizona Game and Fish Department ("AGFD") guidelines and recommendations for handling protected animal species, should any be encountered during construction and operation of the Project, and shall consult with AGFD or U.S. Fish and Wildlife Service, as appropriate, on other issues concerning wildlife. The Applicant commits to follow the mitigation measures recommended in Exhibit C, pages C-23 and C-24, and Exhibit D, pages D-3 and D-4, of the Application, as applicable and feasible.

6. The Applicant shall design the Project's interconnection facilities to incorporate reasonable measures to minimize electrocution of and impacts to avian species in accordance with the Applicant's avian protection program. Such measures will be accomplished through incorporation of Avian Power Line Interaction Committee guidelines

set forth in the current versions of *Suggested Practices for Avian Protection on Power Lines* and *Reducing Avian Collisions with Power Lines* manuals.

7. The issuance of a Certificate by the Commission is a state action pursuant to A.R.S. §§ 41-861 through 41-864, also known as the State Historic Preservation Act ("State Act") and is subject to review by the Arizona State Historic Preservation Office ("SHPO"). As a state agency, the Commission remains the responsible entity for compliance with the State Act.

A. The Applicant, on behalf of the Commission, shall consult with SHPO regarding the Project and its impacts on historic properties and construction shall not commence until SHPO has had an opportunity to review and comment.

B. If a Project involves federal funding, permitting, licensing, or approval pursuant to 36 CFR § 800.16(y), it may be a federal undertaking pursuant to Section 106 of the National Historic Preservation Act ("NHPA") (36 CFR Part 800). Section 106 of the NHPA requires SHPO concurrence on the adequacy of the federal agency's efforts to identify historic properties and establish an area of potential effects. If any part of the Project is a federal undertaking, the federal agency shall consult with SHPO directly. The Applicant will provide SHPO with notice of federal agency involvement if not known prior to issuance of this Certificate.

8. If any archaeological, paleontological, or historical site or a significant cultural object is discovered on state, county, or municipal land during the construction or operation of the Project, the Applicant or its authorized representative shall promptly report the discovery to the Director of the Arizona State Museum ("ASM"), and in consultation with the Director, shall immediately take all reasonable steps to secure and maintain the preservation of the discovery as required by A.R.S. §41-844.

9. The Applicant shall comply with the notice and salvage requirements of the Arizona Native Plant Law (A.R.S. §§ 3-901 *et seq.*) and shall, to the extent feasible, minimize the destruction of native plants during the construction and operation of the Project.

10. The Applicant shall make every reasonable effort to promptly investigate, identify and correct, on a case-specific basis, all complaints of interference with radio or television signals from operation of the Project addressed in this Certificate and where such interference is caused by the Project take reasonable measures to mitigate such interference. The Applicant shall maintain written records for a period of five (5) years of all complaints of radio or television interference attributable to operations, together with the corrective action taken in response to each complaint. All complaints shall be recorded to include notation on the corrective action taken. Complaints not leading to a specific action or for which there was no resolution shall be noted and explained. Upon request, the written records shall be provided to the Staff of the Commission. The Applicant shall respond to complaints and implement appropriate mitigation measures. In addition, the Project shall be evaluated on a regular basis so that damaged insulators or other line materials that could cause interference are repaired or replaced in a timely manner.

11. Encounters of Human Remains.

A. If human remains and/or funerary objects are encountered during the course of any ground-disturbing activities related to the construction or operation of the Project, the Applicant shall cease work on the affected area of the Project and notify the Director of the ASM as required by A.RS. § 41-865 for private land, or as required by A.R.S. § 41-844 for state, county, or municipal lands.

B. If human remains and/or funerary objects are encountered during the course of any ground-disturbing activities related to the construction or operation of the Project on federal land, the Applicant shall cease work on the affected area of the Project and notify the federal land manager as required by the National American

Graves Protection and Repatriation Act ("NAGPRA"); Public Law 101-601; 25 U.S.C. 3001-3013). The project shall not proceed without federal agency approval.

12. Within one hundred twenty (120) days of the Commission's decision approving this Certificate, the Applicant shall post signs in or near public rights-of-way, to the extent authorized by law, reasonably adjacent to the Project giving notice of the Project. Such signage shall be no smaller than a roadway sign. The signs shall advise:

a. The future site of the Project;

b. A phone number and website for public information regarding the Project; and

c. Refer the Public to the Docket.

Such signs shall be inspected at least once annually and, if necessary, be repaired or replaced, and removed at the completion of construction. The Applicant shall make every reasonable effort to communicate the decision either approving or disapproving the Certificate in digital media.

13. At least ninety (90) days before construction commences on the Project, the Applicant shall provide the Board of Supervisors for Yavapai County, ASLD, and known builders and developers who are building upon or developing land within one (1) mile of the of the centerline of the Project with a written description, including the approximate height and width measurements of all structure types, of the Project. The written description shall identify the location of the Project and contain a pictorial depiction of the facilities being constructed. The Applicant shall also encourage the developers and builders to include this information in their disclosure statements. Upon approval of this Certificate by the Commission, the Applicant may commence construction of the Project.

14. The Applicant shall use non-specular conductor and non-reflective surfaces for the transmission line structures on the Project.

15. The Applicant shall be responsible for arranging that all field personnel involved in the Project receive training as to proper ingress, egress, and on-site working protocol for environmentally sensitive areas and activities. Contractors employing such field personnel shall maintain records documenting that the personnel have received such training.

16. The Applicant shall follow the most current Western Electricity Coordinating Council ("WECC") and North American Electric Reliability Corporation ("NERC") planning standards, as approved by the Federal Energy Regulatory Commission ("FERC"), National Electrical Safety Code ("NESC") standards, and Federal Aviation Administration ("FAA") regulations.

17. The Applicant shall participate in good faith in state and regional transmission study forums to coordinate transmission expansion plans related to the Project and to resolve transmission constraints in a timely manner.

18. When Project facilities are located parallel to and within one hundred (100) feet of any existing natural gas or hazardous pipeline, the Applicant shall:

a. Ensure grounding and cathodic protection studies are performed to show that the Project's location parallel to and within one hundred (100) feet of such pipeline results in no material adverse impacts to the pipeline or to public safety when both the pipeline and the Project are in operation. The Applicant shall take appropriate steps to ensure that any material adverse impacts are mitigated. The Applicant shall provide to Staff of the Commission, and file with Docket Control, a copy of the studies performed and additional mitigation, if any, that was implemented as part of its annual compliance-certification letter; and

b. Ensure that studies are performed simulating an outage of the Project that may be caused by the collocation of the Project parallel to and within one hundred (100) feet of the existing natural gas or hazardous liquid pipeline.

The studies should either: (a) show that such simulated outage does not result in customer outages; or (b) include operating plans to minimize any resulting customer outages. The Applicant shall provide a copy of the study results to Staff of the Commission and file them with Docket Control as part of the Applicant's annual compliance certification letter.

19. The designation of the corridor/Siting Area in this Certificate, as shown in **Exhibit A,** does not authorize a right-of-way greater than 250 feet wide for the Project nor does it grant the Applicant exclusive rights within the corridor outside of the final designated transmission right-of-way. The maximum height of the structures shall not exceed 199 feet.

20. The Applicant shall submit a compliance certification letter annually, identifying progress made with respect to each condition contained in this Certificate, including which conditions have been met. The letter shall be submitted to Commission's Docket Control commencing on June 1, 2026. Attached to each certification letter shall be documentation explaining how compliance with each condition was achieved. Copies of each letter, along with the corresponding documentation, shall be submitted to the Arizona Attorney General's Office. With respect to the Project, the requirement for the compliance letter shall expire on the date the Project is placed into operation. Notification of such filing with Docket Control shall be made to the Board of Supervisors for Yavapai County, ASLD, all parties to this Docket, and all parties who made a limited appearance in this Docket.

21. The Applicant shall provide a copy of this Certificate to the Board of Supervisors for Yavapai County and ASLD.

22. Any transfer or assignment of this Certificate shall require the assignee or successor to assume, in writing, all responsibilities of the Applicant listed in this Certificate and its conditions as required by A.R.S. § 40-360.08(A) and R14-3-213(F) of the Arizona Administrative Code.

23. In the event the Applicant, its assignee, or successor, seeks to modify the Certificate's terms at the Commission, it shall provide copies of such request to the Board of Supervisors for Yavapai County, ASLD, all parties to this Docket, and all parties who made a limited appearance in this Docket.

24. The Certificate Conditions shall be binding on the Applicant, its successors, assignee(s) and transferees and any affiliates, agents, or lessees of the Applicant who have a contractual relationship with the Applicant concerning the construction, operation, maintenance or reclamation of the Project. The Applicant shall provide in any agreement(s) or lease(s) pertaining to the Project that the contracting parties and/or lessee(s) shall be responsible for compliance with the Conditions set forth herein, and the Applicant's responsibilities with respect to compliance with such Conditions shall not cease or be abated by reason of the fact that the Applicant is not in control of or responsible for operation and maintenance of the Project facilities.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

This Certificate incorporates the following Findings of Fact and Conclusions of Law:

1. The Project aids the state and the southwest region of the United States in meeting the need for an adequate, economical, and reliable supply of renewable electric power.

2. When constructed in compliance with the conditions imposed in this Certificate, the Project aids the state, preserving a safe and reliable electric transmission system.

3. During the course of the hearing, the Committee considered evidence on the environmental compatibility of the Project as required by A.R.S. § 40-360 *et seq*.

4. The Project and the conditions placed on the Project in this Certificate effectively minimize the impact of the Project on the environment and ecology of the state.

5. The conditions placed on the Project in this Certificate resolve matters concerning balancing the need for the Project with its impact on the environment and

ecology of the state arising during the course of the proceedings, and, as such, serve as findings and conclusions on such matters.

6. The Project is in the public interest because the Project's contribution to meeting the need for an adequate, economical, and reliable supply of electric power outweighs the minimized impact of the Project on the environment and ecology of the state.

7. The Project substation is not jurisdictional because the definition of a "transmission line" under A.R.S. § 40-360(10) only includes "new switchyards to be used therewith", not substations.

DATED this 24th day of March, 2025.

Adam Stafford
Assistant Attorney General
Chairman, Arizona Power Plant and
Transmission Line Siting Committee
2005 North Central Ave
Phoenix, Arizona 85004
Adam.Stafford@azag.gov

CERTIFICATION OF MAILING

ORIGINAL of the foregoing e-filed this 24th day of day of March, 2025, with:

Utilities Division – Docket Control
ARIZONA CORPORATION COMMISSION
1200 W. Washington St.
Phoenix, AZ 85007

COPIES of the foregoing e-mailed this 24th day of day of March, 2025, to:

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General Counsel
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007
lealdiv@azcc.gov
Counsel for Legal Division Staff

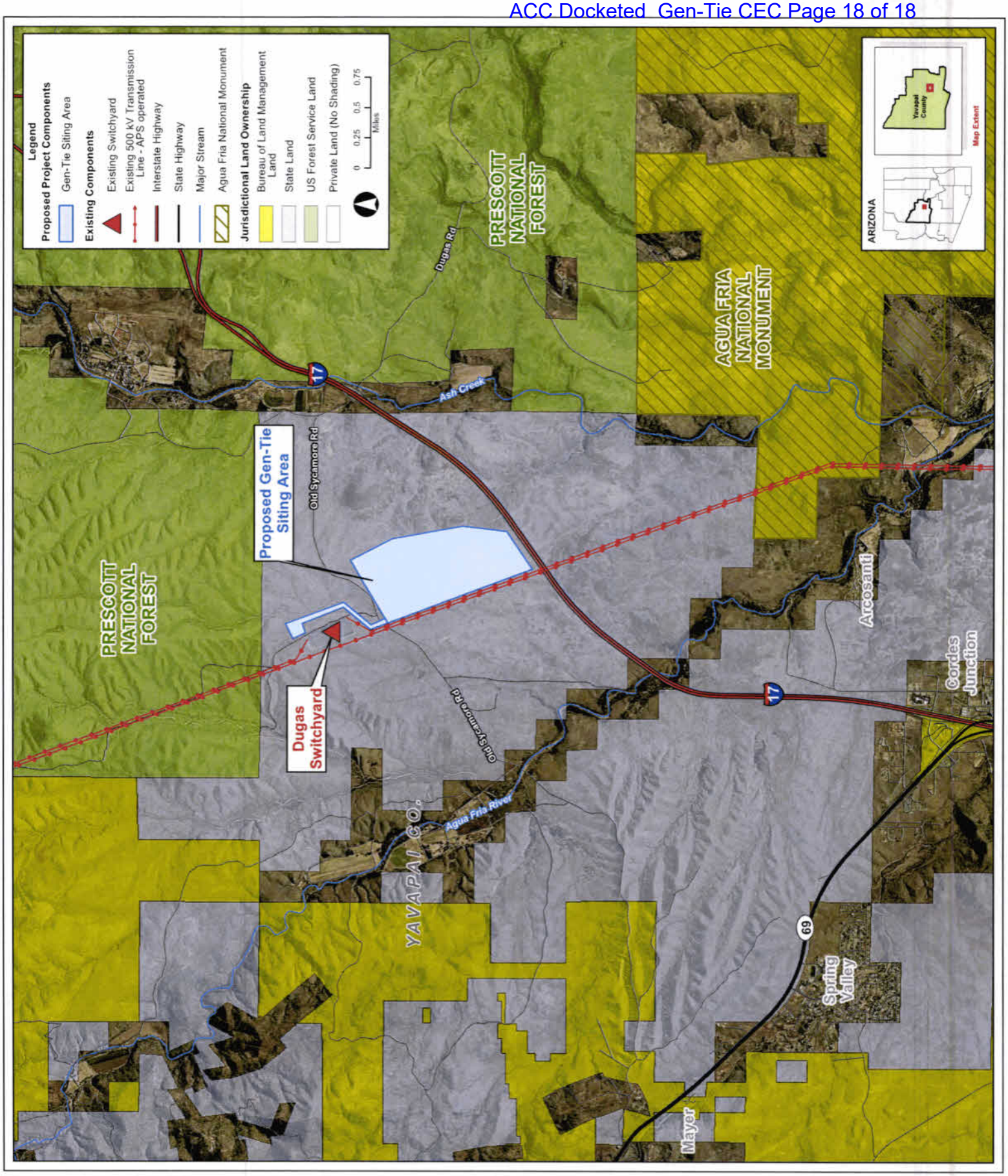
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Court Reporter

By: /s/ T. Brewer
CEC 245

EXHIBIT A


Legend
Proposed Project Components
Gen-Tie Siting Area
Existing Components
Existing Switchyard
Existing 500 kV Transmission Line - APS operated
Interstate Highway
State Highway
Major Stream
Agua Fria National Monument
Jurisdictional Land Ownership
Bureau of Land Management Land
State Land
US Forest Service Land
Private Land (No Shading)
0 0.25 0.5 0.75
Miles
ARIZONA
Yavapai County
Map Extent
PRESCOTT NATIONAL FOREST
AGUA FRIA NATIONAL MONUMENT
Proposed Gen-Tie Siting Area
Dugas Switchyard
Dugas Rd
Old Sycamore Rd
Ash Creek
Agua Fria River
YAVAPAI CO.
Arcosanti
Cordes Junction
Spring Valley
Mayer
17
69

longroad ENERGY

Agua Fria, LLC, a Delaware limited liability company
d/b/a Agua Fria AZ, LLC in Arizona
125 High Street
17th Floor High Street Tower, Suite 1705
Boston, MA 02110

Mayer Fire District
11975 S SR 69
Mayer, AZ 86333

Re: Request for Inclusion of Real Property into Mayer Fire District

November 19, 2025

Ladies and Gentlemen:

Agua Fria, LLC ("Agua Fria"), is the lessee of Commercial Lease No. 03-120951 (the "Lease") with the Arizona State Land Department ("ASLD"). Agua Fria will seek a Yavapai County Solar Facility Use Permit for a solar and battery energy storage project. After receiving such permit, and prior to the start of construction of a solar and battery energy storage project on the property under the Lease (the "Property"), an "Application for Voluntary Annexation into Mayer Fire District" in respect of the Property (the "Annexation Application") will be submitted (along with any necessary authorization from ASLD). Agua Fria hereby requests that the Property, which encompasses 4,215 acres and is owned by ASLD and is not located in any incorporated city or town, be included in the Mayer Fire District in Yavapai County, Arizona, and that the Mayer Fire District agree to approve the Annexation Application and the annexation of the Property into the Mayer Fire District.

Agua Fria hereby requests that the Mayer Fire District Board indicate their intent to approve the annexation of the Property into the Mayer Fire District, by countersigning this letter below.

Sincerely,

[signature page follows]

Agua Fria, LLC , a Delaware limited liability company
d/b/a Agua Fria AZ, LLC in Arizona

_____
By: Michael Alvarez
Title: Chief Operating Officer

Effective as of November 19, 2025, the Mayer Fire District hereby agrees to approve the annexation of the Property into the Mayer Fire District.

By: Tuan A. Tang
Title: Clerk of the Board

Agua Fria Solar and Storage Project
Citizen Participation Report

Prepared for:

Yavapai County Development Services

Prepared by:

Longroad Energy
Agua Fria, LLC

August 2025

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Exhibit 1: Mailing List and Stakeholder Table
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Exhibit 3: Summary of Individual, Stakeholder, and Agency Outreach
Exhibit 4: Website, Facebook Page, and Facebook Advertisement
Exhibit 5: Open House Presentation Materials and Summaries

Overview

Agua Fria, LLC, a Delaware limited liability company d/b/a Agua Fria AZ, LLC in Arizona (Applicant) is proposing the Agua Fria Solar and Storage Project (Project) located in unincorporated Yavapai County. The Applicant is a subsidiary of Longroad Development Company, LLC (Longroad). This Citizen Participation Report has been prepared in accordance with Section 209, Citizen Participation, of the Yavapai County Planning and Zoning Ordinance (Yavapai County, 2023) and will be submitted alongside the Solar Facility Use Permit Application. The Applicant received a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission (ACC) in May, 2025, for the 500 kilovolt (kV) generation tie (gen-tie) line to connect the Project's solar generation and battery storage facilities to the transmission grid.

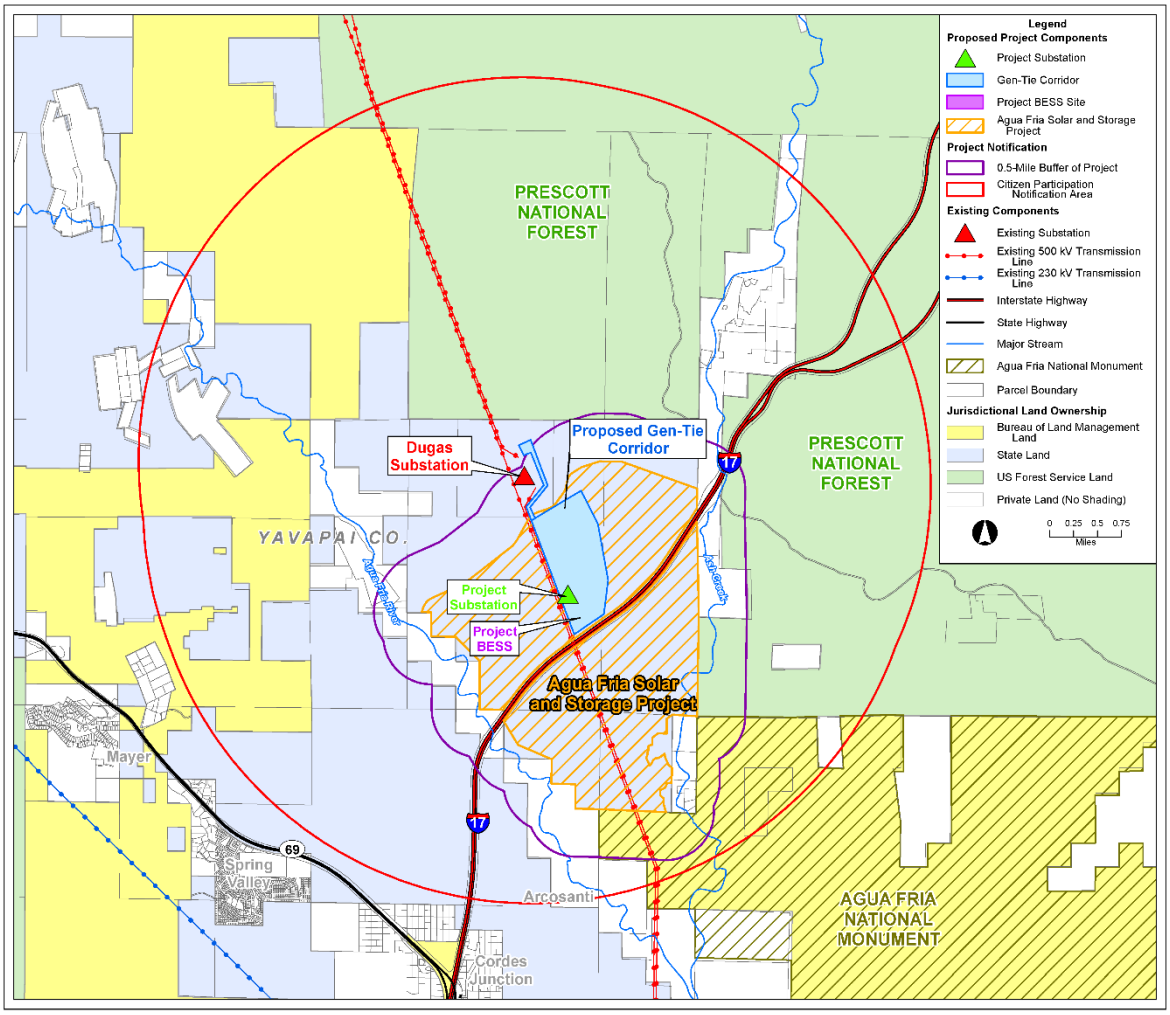
In preparation for the Yavapai County Solar Facility Use Permit filing, the Applicant met with county staff on January 10, 2025, in a preliminary planning meeting, and on June 10, 2025, in a pre-application meeting. As part of the application process, the Applicant has undertaken an extensive public process to engage the public and various stakeholders and regulators in a dialogue about the Project to understand and respond to concerns, comments and questions. The following report provides information about the Project's ongoing public process, materials shared with the public and public feedback received to date.

Public Involvement Methods

Notification Process

Per the Yavapai County Solar Facilities Ordinance, the notification range for the Solar Facility Use Permit Citizen Participation process must be a minimum of a half mile from the Project boundary. The notification range shall be extended to five miles from the Project boundary for stakeholders. The Applicant discussed the notification range and mailing list with the county staff at the preliminary planning meeting and developed a comprehensive list of property owners and stakeholders to ensure that the Project was sufficiently noticed. The Citizen Participation Notification Area for landowners was extended beyond the minimum of a half mile and ranges from 0.7-4.5 miles from the Project boundary. As shown in **Figure 1**, the Citizen Participation Notification Area fully encompasses the minimum of a half mile buffer from the Project boundary.

Figure 1.



The comprehensive list of property owners, governmental stakeholders and interested parties in the notification range is included in **Exhibit 1**. **Table 1** shows the stakeholders included in the public involvement process.

Table 1: List of Stakeholders

Name	Mailing Address	City	State	Zip
BUREAU OF LAND MANAGEMENT	ONE NORTH CENTRAL AVE STE 800	PHOENIX	AZ	85004
CORDES LAKES COMMUNITY ASSOCIATION	16357 CORDES LAKES DR	CORDES LAKES	AZ	86333
SPRING VALLEY VOLUNTEERS ASSOCIATION ATTN: BEKKI DUPRAS	17320 E MULE DEER DR	SPRING VALLEY	AZ	86333
UPPER AGUA FRIA WATERSHED PARTNERSHIP ATTN: MARY HOADLEY	HC 74, BOX 4136	MAYER	AZ	86333
COSANTI FOUNDATION ATTN: LINN WILLIAMS	13555 S CROSS L RD	MAYER	AZ	86333

YAVAPAI-PRESCOTT INDIAN TRIBE	530 E MERRIT ST	PRESCOTT	AZ	86301
YAVAPAI-APACHE NATION	2400 WEST DATSI AVE	CAMP VERDE	AZ	86322
ARIZONA STATE HISTORIC PRESERVATION OFFICE	1110 W WASHINGTON ST STE 100	PHOENIX	AZ	85007
MAYER FIRE DISTRICT ATTN: BRYAN SMITH	11975 S STATE ROUTE 69	MAYER	AZ	86333
CENTRAL ARIZONA FIRE & MEDICAL AUTHORITY ATTN: DARRELL TIRPAK	8603 E EASTRIDGE DR	PRESCOTT VALLEY	AZ	86314
STATE FIRE MARSHAL ATTN: CASSIE PETERS, FIRE MARSHAL	1110 W WASHINGTON ST STE 500	PHOENIX	AZ	85007
ARIZONA GAME & FISH DEPARTMENT ATTN: KELLY WOLFF	7200 E UNIVERSITY DR	MESA	AZ	85207
SIERRA CLUB - YAVAPAI GROUP ATTN: GARY BEVERLY	1219 GRANITE CREEK LN	CHINO VALLEY	AZ	86323
ARIZONA WILDLIFE FEDERATION ATTN: MICHAEL CRAVENS	PO BOX 1182	MESA	AZ	85211
TROUT UNLIMITED ATTN: NATE REES	40 S TWELVE OAKS BLVD	CHANDLER	AZ	85226
BACKCOUNTRY HUNTERS & ANGLERS ATTN: JUSTIN NELSON, ARIZONA CHAPTER	725 W ALDER STE 11	MISSOULA	MT	59802
YAVAPAI COUNTY BOARD OF SUPERVISORS: SUPERVISOR BROOKS L. COMPTON, DISTRICT 1 SUPERVISOR JAMES GREGORY, DISTRICT 2 SUPERVISOR CHRIS KUKNYO, DISTRICT 4 SUPERVISOR MARY MALLORY, DISTRICT 5	1015 FAIR ST	PRESCOTT	AZ	86305
SUPERVISOR NIKKI CHECK, DISTRICT 3	10 S SIXTH ST	COTTONWOOD	AZ	86326
YAVAPAI COUNTY DEVELOPMENT SERVICES MATTHEW BLAKE, PLANNING MANAGER	1120 COMMERCE DRIVE	PRESCOTT	AZ	86305
MAYER SCHOOL DISTRICT SUPERINTENDENT – TOM OPPELT	PO BOX 1059 12606 EAST MAIN ST	MAYER	AZ	86333
CENTRAL YAVAPAI METROPOLITAN PLANNING ORGANIZATION	1971 COMMERCE CENTER CIRCLE STE E	PRESCOTT	AZ	86301

EXECUTIVE DIRECTOR: VINCENT GALLEGOS				
CHAUNCEY RANCH CAMP	18970 E OLD SYCAMORE RD	MAYER	AZ	86333
OM MANUFACTURING	18900 E OLD SYCAMORE RD	MAYER	AZ	86333
TOWN OF DEWEY-HUMBOLT TOWN MANAGER: DANIEL FIELD TOWN CLERK: BETH EVANS	2735 SOUTH HIGHWAY 69, SUITE 12	HUMBOLDT	AZ	86329
TOWN OF CAMP VERDE	473 S MAIN ST	CAMPE VERDE	AZ	86322
ARIZONA STATE LAND DEPARTMENT COMMISSIONER: ROBYN SAHID	1110 W WASHINGTON ST	PHOENIX	AZ	85007
BUREAU OF LAND MANAGEMENT - PHOENIX DISTRICT OFFICE / HASSAYAMPA FIELD OFFICE FIELD MANAGER: JAMES HOLDEN	2020 E BELL RD	PHOENIX	AZ	85022
USFS PRESCOTT NATIONAL FOREST FOREST SUPERVISOR: SARAH CLAWSON	735 N HWY 89	CHINO VALLEY	AZ	86323
USFS TUSCON OFFICE MEAGHAN CONWAY	201 N. BONITA AVE, SUITE 141	TUCSON	AZ	85745
ARIZONA GAME AND FISH DEPARTMENT DIRECTOR: TOM P. FINLEY	5000 W. CAREFREE HIGHWAY	PHOENIX	AZ	85086-5000
ARIZONA GAME AND FISH DEPARTMENT DIRECTOR: TOM P. FINLEY	7200 E UNIVERSITY	MESA	AZ	85207
CENTRAL ARIZONA LAND TRUST (CALT) BECKY RUFFNER	PO BOX 1050	PRESCOTT	AZ	86302
ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY YAVAPAI COUNTY LIAISON: LAUREN HILDEBRAND	1110 W. WASHINGTON ST STE 160	PHOENIX	AZ	85007

Content Provided to the Public

Informational Mailers

The first contact the Applicant had with the public was in the form of an informational mailer, sent out on December 2, 2024 to all property owners within the Citizen Participation Notification Area and a number of governmental stakeholders. The mailer included information about the Project, a map of the Project location, description of the CEC process, contact information for the Project team including a toll-free phone line and a link to the Project website. The mailer featured an invitation to join an upcoming online open house to learn more about the project and ask questions

in an open format. A QR code was provided to allow for registration which facilitated a Zoom link to each registrant for participation. Individuals could also sign up via the website or the toll-free phone number. A copy of this mailer is included in **Exhibit 2**.

A second information mailer was sent out on January 14, 2025 to property owners within the Citizen Participation Notification Area and a number of governmental stakeholders. A table including the list of governmental stakeholders is above. The comprehensive list of property owners, governmental stakeholders and interested parties in the notification range is included in **Exhibit 1**. The mailer included up to date information about the Project, description of the County and CEC processes, a map and contact information for the Project team, including a toll-free phone line and a link to the Project website. The mailer also featured an invitation to attend an in-person open house or another session of online open houses during the week of January 27th. A QR code within the mailer allowed for registration for the events. Registration for the in-person open house was optional, however registration for the online open house was necessary to facilitate the sharing of a link to join the Zoom event. A copy of this mailer is attached in **Exhibit 2**.

Telephone Line

As noted above, mailings included a toll-free phone number to allow stakeholders and members of the public to call with questions or to request additional information. The Project phone number is 1 (833) 367-7889. All phone calls to the information line are included in **Exhibit 3.**

Project Email

The Project has a dedicated email address to allow stakeholders and members of the public to reach the development team with questions or to request additional information. The Project has received comments from the public via this email address, which are included in **Exhibit 3**. The Project email address will remain active throughout the life of the Project development. The Project email address is aguafria@longroadenergy.com, and is managed by the Development Manager.

Social Media and Website

A Facebook page was created for the Project on December 2, 2024. In addition to the Project page, two news feed advertisements were run on Facebook from December 6, 2024 through December 12, 2024, promoting the upcoming online open houses. The first news feed advertisement was promoted to all adults in Yavapai County and was created as a Facebook Event including a link to the sign-up page. The second news feed advertisement was promoted to all adults in Yavapai County with interests in renewable/solar energy and contained a link to the sign-up page. The advertisement statistics are listed below:

- **Post 1: All Yavapai County Adults**
  - Event Reponses: 18
  - Post engagements: 55
  - Link clicks: 30
  - Reach: 4,816 people

- **Post 2: All Yavapai County Adults with interest in renewable/solar energy**
  - Post engagements: 390
  - Link clicks: 376

- Reach: 17,259 people

From January 20 through January 30, 2025, a news feed advertisement was run again on Facebook. The advertisement was promoted to all adults in Yavapai County. The post contained a link to the open house events sign-up page. The advertisement statistics are listed below:

- **Post 1: All Yavapai County Adults**
  - Post engagements: 743
  - Link clicks: 794
  - Reach: 27,778 people

An additional Facebook event will be created and advertised prior to the CEC hearing. The link to the Facebook page is: https://www.facebook.com/aguafriasolar/.

The Applicant has established and maintained a Project website within the company's website. The Project website is maintained to notify the public of all hearing dates and technical information regarding the Project. Interested parties are able to visit and review materials at their convenience and submit comments and questions through an embedded comment form. Project related documentation will be added to the website as it becomes available. The link to the website is: https://www.longroadenergy.com/portfolio/agua-fria/. A visual sample of the Project website, Facebook page and Facebook advertising can be found in attached **Exhibit 4**.

Public Meetings

The first set of online open houses was held on December 12, 2024, at 12:00 pm and again at 5:30 pm. Registrants participated using a Zoom link sent to their email. Both open houses provided the same information, which consisted of a presentation on the Project and a question-and-answer session. A total of 42 members of the public registered ahead of time to attend the 12:00 pm session. Of those registrants, 21 people attended the meeting and 31 live chat questions were answered verbally by Project staff. A total of 31 people registered to attend the 5:30 pm session, and of those registrants 13 attended the online open house and asked 17 live chat questions which were responded to verbally by Project staff. At both sessions there were individuals who requested additional information, and the Project team reached out to them directly after the online open house. The open house presentation is included in **Exhibit 5**. The open house summary, which includes live chat questions and comments that were received, is also in **Exhibit 5**.

The in-person open house was held on Tuesday, January 28, 2025, at the Cordes Lakes Community Center from 4:30 pm – 6:30 pm. As noted in the mailer, registration was available but not required. The meeting was an open house/drop-in format where participants could view Project information boards and speak to Project resource specialists. The Project team including the Project Manager, Environmental Manager, Energy Storage Manager as well as five other team members were available throughout the event to answer questions and listen to comments. A total of 29 members of the public attended and 8 comment forms were submitted. **Exhibit 5**, provides copies of the public information boards that were used at the in-person open house.

On January 30, 2025, two additional online open house sessions were held at 12:00 pm and 5:30 pm. The meetings followed the same format as the previous online open houses, beginning with a presentation and followed by a question-and-answer session. A total of 7 members of the public registered for the 12:00 pm session and all 7 participated. These participants submitted a total of 26 live chat questions which were answered verbally by Project staff. A total of 3 people registered

to attend the 5:30 pm open house and all 3 joined the session. Because all 3 participants had also attended the 12:00 pm meeting, the presentation was abbreviated and the session moved quickly to the question-and-answer portion of the event. A total of 12 live chat questions were asked and all were responded to verbally by Project staff. The presentation provided at the online open house is attached in **Exhibit 5**.

Individual Stakeholder and Agency Outreach

Throughout the Project process, team members held meetings with local jurisdiction and agency representatives, including elected government officials, planning staff, and key stakeholders to relay information about the Project, answer questions, and request feedback. These meetings enabled the Project team to identify stakeholder issues and share information about Project developments. A summary of all agency and stakeholder meetings are included **Exhibit 3**. Key stakeholder correspondence is described below.

The Applicant has coordinated with the Yavapai County Development Services department since the Project was acquired in 2024. The Applicant has held multiple meetings with the Yavapai County Development Services department to provide project updates, discuss project design, and discuss the permitting process. The Development Services department was also sent informational mailers, which included information about the Project, description of the CEC and County Permitting process, contact information including a toll-free phone line and a link to the Project website, as well as invitations to attend the open houses and CEC hearing for the Project. In accordance with the Yavapai County Solar Facilities Ordinance, the Applicant met with county staff on January 10, 2025, in a preliminary planning meeting, and on June 10, 2025, in a pre-application meeting.

The Applicant met and corresponded with County Board Supervisor James Gregory on project updates and design considerations before his resignation in February 2025. In addition, emails were sent to all County Supervisors in January 2025 to inform them of the upcoming open houses and project progress. The informational mailers were sent to the Yavapai County Board of Supervisors office. Supervisor Nikki Check attended the associated gen-tie line CEC hearing in March 2025 and the Project team was able to provide information about the Project at that time.

The Arizona Power Plant and Transmission Line Siting Committee held a hearing to review the gen-tie line associated with the Project on March 17 and 18. The Project development team presented the gen-tie project and answered questions from the Committee, and held a site tour with the Committee members. The CEC for the gen-tie was unanimously approved by the Arizona Power Plant and Line Siting Committee on March 18, 2025, and then formally approved by the Arizona Corporation Commission on May 8, 2025.

As the Project is located on Arizona State Trust Land managed by the Arizona State Land Department (ASLD), ASLD has been a key stakeholder in the Project. The Applicant has continued to coordinate with ASLD since acquiring the project in 2024. The Applicant has met and corresponded with ASLD to inform them on project updates, permitting schedule, upcoming open houses, and community engagement. In addition, they were sent informational mailers on the Project. The Applicant maintains a close relationship with ASLD as the lessee of their land and will continue to provide regular updates to ASLD.

The Project development team met with local ranchers, including several ranchers adjacent to the Project boundary prior to the ASLD solar lease auction. Since then, the Applicant has

continued to meet with neighboring ranchers to provide project updates. The Project development team is also continuing to meet with ranchers that previously used the Project Area for grazing to engage on mitigation for any impacts to the land and grazing rights and continues to coordinate with them on Project design.

The Applicant has met with the USFS over the course of development, considering the Project is adjacent to the Prescott National Forest and an associated access road is located on Prescott National Forest land. The USFS issued a road use permit for the project's use of a short segment of road on USFS property in 2023. In preparation for permitting activities, the applicant met in person with Chris Welker of the USFS in 2025 to review Project plans and permitting for the Project. The Prescott National Forest office and Prescott National Forest's supervisor were sent informational mailers on the Project and invitations to the Project public meetings.

The Applicant has corresponded with the BLM, as the Project is adjacent to the Agua Fria National Monument, managed by the BLM. Emails were sent to the BLM Arizona State Director and the Phoenix District Office / Hassayampa Field Office Field Manager to inform them of project updates and invitations to attend the open houses. In addition, they were also sent informational mailers on the Project.

The Applicant has met with the Arizona Game and Fish Department (AGFD) several times regarding Project updates and design considerations over the course of development. The Applicant has collaborated with AGFD throughout the Project design process on general best practices for the protection of wildlife including open space areas within the Project Area, wildlife friendly fencing, and a Post-Construction Monitoring Plan.

The Applicant is in close coordination with the Mayer Fire Department as they will be providing emergency response services for the Project Area. The Applicant has met and corresponded with the Mayer Fire Department to inform them on project updates, permitting schedule, upcoming open houses, and community engagement. They were sent informational mailers on the Project. Members of the Mayer Fire Department attended the in-person open house, and the Project team were able to answer any questions they had. The Applicant met with the Mayer Fire Department on 7/11/25 to discuss the department's Project requests. In addition, a Project representative has attended the department's monthly meetings to provide Project updates. Throughout the life of the Project, the Applicant will work closely with Mayer Fire Department to ensure the site design and emergency response plan meet their safety standards. Furthermore, the Applicant will offer emergency responder training and has offered the Fire Department staff a site visit to an operational Longroad-owned project. The Applicant and Mayer Fire Department will determine the frequency and timing of all future training.

The Applicant has met with the US Fish and Wildlife Service (USFWS) over the course of development to provide project and permitting updates. Additionally, the Applicant has corresponded with USFWS to inform them of project updates and provide informational mailers on the project.

The Applicant has also coordinated with Friends of the Agua Fria National Monument, a group of citizens who act as stewards and advocates for the monument. Although this is not a government organization, the Applicant has corresponded with members to gather information on their interests and keep them informed on Project updates and open houses.

Similarly, the Project has been in close coordination with the Upper Agua Fria Watershed Partnership (UAFWP). The Project development team attends the UAFWP monthly meetings and provides regular updates of the Project, including design updates and details on all public meetings.

The Orme Ranch Forever Conservation Easement, held by CALT, is located to the eastern boundary of the Project. Since the Applicant acquired the Project, they have continued to correspond with CALT regarding the status of the Project, including sending CALT representatives notices of open houses and informational mailers about the Project.

In addition to providing email, telephone, and mailed updates, the Applicant has met in person with the owners of the Orme Ranch on numerous occasions to inform them on project updates, permitting schedule, upcoming open houses, and community engagement. Paul Orme, the President of Orme Ranch, and his wife attended the in-person open house and submitted a letter and comment expressing support for the Project.

With respect to the Orme School, the Applicant held an in-person presentation for Orme School faculty and students on solar energy, the Agua Fria Solar and Storage Project plans, and career opportunities in the energy industry. Orme School received informational mailers on the Project, and students and faculty attended the open house.

The Arcosanti community is located approximately 1 mile south of the Project. The Applicant has corresponded with members of Arcosanti to gather information on their interest and keep them informed of Project updates and open houses. Members of Arcosanti attended the in-person open house and the Project team was able to provide information about the Project at that time.

The United States Bureau of Reclamation (Reclamation) is part owner of the Navajo Southern Transmission System (NSTS) at the Dugas Substation, therefore the Project's interconnection request at NSTS for the gen-tie line associated with the Project must be approved by Reclamation. Reclamation conducted public outreach to request input on the proposed interconnection from a large number of stakeholders including local, state, and federal agencies, Tribes, and the general public. Reclamation also conducted consultation under Section 106 of the National Historic Preservation Act (NHPA). No issues or concerns were raised during the public outreach or Section 106 NHPA consultation process. The State Historic Preservation Office concurred with a finding of No Adverse Effect to Historic Properties.

Summary of Questions and Comments

Main Substance of Concerns

The following topics or questions were raised as concerns by stakeholders or members of the public via public meetings or individual outreach.

1. Impact to wildlife habitat and movement through the Project area
2. Accessibility of the Project Area for non-utility uses such as grazing, hiking or hunting
3. Impact to water levels and water usage
4. Will the panels be tracking and will they give off glare
5. Temperature changes in the area of the project
6. Consideration of a pathway around the perimeter of the Project for safer movement on foot near highway corridor and potential firebreak
7. Stormwater management

How Applicant Will Address Concerns

The following information has been provided during the citizen participation process in response to these concerns. Additional information is available on the Project website and in the attached open house materials.

1. With respect to wildlife habitat, more than half of the total acreage under lease for the solar project will remain natural and open to support wildlife in the area. This includes preservation of current natural habitat and openness of large open space areas through the Project Area to facilitate movement of larger animals through the site. Fencing will be limited to the areas where there are solar panels and will be of a type that allows for space at the bottom to facilitate movement of small animals under the fence and throughout the Project Area. The Applicant is coordinating with Arizona Game and Fish Department to determine optimal design for wildlife movement throughout the site.

2. The Applicant has an exclusive solar lease with the Arizona State Land Department (ASLD), meaning that no other uses can be authorized by the ASLD on the same site. Any specific requests for use will be considered on a case-by-case basis considering the safety of the site, workers and members of the public, as well as any potential for liability associated with requested use.

3. In general, solar farms use very little water. During construction, water will be used to dampen the ground for dust control. Once constructed, water usage is limited to periodic cleaning and maintenance. Any impact on water levels in the vicinity is expected to be negligible and the Applicant has committed to not take water from the nearby Ash Creek.

4. The solar panels used for the Project are made with an anti-glare coating as they are made to absorb the sun, not reflect it. Ongoing studies will assess any potential for glare but at this time it has not been shown to be a concern for similar projects.

5. The term “heat island” has been used in the past to describe the impact of urbanization, where excess concrete and asphalt absorb and recirculate heat causing local temperatures to rise. Solar farms do not have any similar effect when constructed. Studies have shown that any heating effect from panels is not measurable from 100 feet away, well within the buffer between the project and the surrounding area.

6. A pathway around the project perimeter is not currently part of the project design. However, for accessibility of the site traffic such as construction or maintenance vehicles must be able to freely move around the perimeter on dirt paths or roads. These are not intended for public use but do provide for a potential fire break in the area. The Project intends to use the existing exit from Interstate 17 and is not planning to construct a new interstate exit or underpass.

7. The Project design does provide for stormwater management within its design to contain anticipated run-off. The overall environmental compliance plan includes measures to ensure that the site will not have adverse impacts to the Agua Fria River or other nearby waterways. The Project will submit a detailed grading design and Stormwater

Management Plan in compliance with requirements as determined by the Yavapai County Flood Control.

Not Addressable Comments

To the extent feasible, the Applicant has made attempts to respond to questions and comments. Comments that are not addressable relate to stopping the project and abandoning the solar lease. Outside of this request, best efforts were made to consider feedback and address concerns. As noted above, the Applicant cannot commit to free and open access to the Project Area based on safety and liability concerns. We will continue to respond to questions and consider requests as we continue forward with the project.

Ongoing Citizen Participation

The Project is committed to continuing public engagement throughout the County permitting process and periodically updating the Yavapai County Planning and Development Review Division on the status of citizen participation efforts. The Project will update the Citizen Participation Plan with the results of the outreach conducted in the Citizen Participation Report provided at the time of Solar Facility User Permit application submittal. Additionally, the Project will continue to maintain the dedicated phone line, email address and website, and will address questions and concerns as they are received. Public mailers will be sent out to property owners and stakeholders within the Citizen Participation Notification Area as well as to any registered interested parties providing information on the date, time, and location of public meetings for the Project. The Applicant will continue to solicit public comments and update the Citizen Participation Plan until the Public Hearing begins.

Exhibit 1
Mailing List and
Stakeholder Table

APN	Name	Mailing Address	City	State	Zip	(Longroad) dwelling #
501-27-006B	HOWARD STEVEN (BD)	1446 E ADAMS ST	PHOENIX	AZ	850341348	
501-27-006	HOWARD STEVEN	PO BOX 21192	PHOENIX	AZ	850361192	(kml 7)
501-31-009B 501-31-002S 501-31-002N 501-31-009A 501-31-007C	ORME RANCH INC	HC 63 BOX 3042	MAYER	AZ	863339702	(kml 10-12)
500-25-015	SHETLER FAMILY TRUST SHETLER JADON RAY & CHARLENE KAY TTEES	9987 S CABIN RD	MAYER	AZ	863336019	(kml 1)
500-25-014A 500-25-014F 500-25-014C 500-25-014D 500-25-014G	YMCA OF PHOENIX & THE VALLEY OF THE SUN	350 N 1ST AVE	PHOENIX	AZ	850031513	(kml 2)
500-25-014B	BATEMAN IRREVOCABLE TRUST ROBBINS PETER TTEE	3300 N ASHTON BLVD STE 150	LEHI	UT	840435347	
500-04-002	MARTINO JENNIFER & LANG STEVEN D RS	2462 W VIA DONA RD	PHOENIX	AZ	850855724	
500-04-002	MARTINO JENNIFER & LANG STEVEN D RS	2462 W VIA DONA RD	PHOENIX	AZ	850855724	
800-01-018K 800-01-029E 800-01-018K 800-01-018G 800-01-017Y	PRESCOTT NATIONAL FOREST	344 S CORTEZ ST	PRESCOTT	AZ	86303	
800-09-001E	US DEPARTMENT OF INTERIOR NATIONAL MONUMENT (AGUA FRIA)	1849 C STREET, NW	WASHINGTON	DC	20240	
800-10-020J 800-10-017T 800-10-017A	STATE OF ARIZONA ROW	206 SOUTH 17TH AVE, MAIL DROP 100A	PHOENIX	AZ	85007	
800-10-046G	ARIZONA DEPARTMENT OF TRANSPORTATION	205 S 17TH AVE MD 612E	PHOENIX	AZ	850073212	

800-20-044V 800-20-044P 800-20-044H 800-20-043S 800-20-042G 800-20-044M 800-20-044G 800-20-043U 800-20-044U 800-20-044S 800-20-056X 800-20-056W 800-20-044T	STATE OF ARIZONA LAND	1616 W ADAMS ST	PHOENIX	AZ	85007
	BUREAU OF LAND MANAGEMENT	ONE NORTH CENTRAL AVE STE 800	PHOENIX	AZ	85004
	CORDES LAKES COMMUNITY ASSOCIATION	16357 CORDES LAKES DR	CORDES LAKES	AZ	86333
	SPRING VALLEY VOLUNTEERS ASSOCIATION ATTN: BEKKI DUPRAS	17320 E MULE DEER DR	SPRING VALLEY	AZ	86333
	UPPER AGUA FRIA WATERSHED PARTNERSHIP ATTN: MARY HOADLEY	HC 74, BOX 4136	MAYER	AZ	86333
	COSANTI FOUNDATION ATTN: LINN WILLIAMS	13555 S CROSS L RD	MAYER	AZ	86333
	YAVAPAI-PRESCOTT INDIAN TRIBE	530 E MERRIT ST	PRESCOTT	AZ	86301
	YAVAPAI-APACHE NATION	2400 WEST DATSI AVE	CAMP VERDE	AZ	86322
	ARIZONA STATE HISTORIC PRESERVATION OFFICE	1110 W WASHINGTON ST STE 100	PHOENIX	AZ	85007
	MAYER FIRE DISTRICT ATTN: BRYAN SMITH	11975 S STATE ROUTE 69	MAYER	AZ	86333
	CENTRAL ARIZONA FIRE & MEDICAL AUTHORITY ATTN: DARRELL TIRPAK	8603 E EASTRIDGE DR	PRESCOTT VALLEY	AZ	86314

(kml 4, 5)

	STATE FIRE MARSHAL ATTN: CASSIE PETERS, FIRE MARSHAL	1110 W WASHINGTON ST STE 500	PHOENIX	AZ	85007
	ARIZONA GAME & FISH DEPARTMENT ATTN: KELLY WOLFF	7200 E UNIVERSITY DR	MESA	AZ	85207

	SIERRA CLUB - YAVAPAI GROUP ATTN: GARY BEVERLY	1219 GRANITE CREEK LN	CHINO VALLEY	AZ	86323
	ARIZONA WILDLIFE FEDERATION ATTN: MICHAEL CRAVENS	PO BOX 1182	MESA	AZ	85211
	TROUT UNLIMITED ATTN: NATE REES	40 S TWELVE OAKS BLVD	CHANDLER	AZ	85226
	BACKCOUNTRY HUNTERS & ANGLERS ATTN: JUSTIN NELSON, ARIZONA CHAPTER	725 W ALDER STE 11	MISSOULA	MT	59802
	YAVAPAI COUNTY BOARD OF SUPERVISORS: SUPERVISOR BROOKS L. COMPTON, DISTRICT 1 SUPERVISOR JAMES GREGORY, DISTRICT 2 SUPERVISOR CHRIS KUKNYO, DISTRICT 4 SUPERVISOR MARY MALLORY, DISTRICT 5	1015 FAIR ST	PRESCOTT	AZ	86305
	SUPERVISOR NIKKI CHECK, DISTRICT 3	10 S SIXTH ST	COTTONWOOD	AZ	86326
501-31-005	BEELER FAMILY TRUST BEELER HOWARD C & JAN K CO-TTEES	HC 63 BOX 3061	MAYER	AZ	863339400
501-31-002Y 501-31-008	ORME SCHOOL	HC 63 BOX 3040	MAYER	AZ	863339700
500-25-008H	CORNELL REVOCABLE TRUST CORNELL GEORGE T & JANET H TRUSTEES	5610 E CHARTER OAK RD	SCOTTSDALE	AZ	852544311
500-25-018	LUCKYS ROCK FARM LLC	171 S STATE ROUTE 69 STE D	DEWEY	AZ	863279507
500-25-008J	MCGILLICUDDY PATRICK J & ZOSS BRIAN E (JT)	40636 N ECHO CANYON DR	CAVE CREEK	AZ	853318206
501-31-004	MORTON VRANGE ORME MEMORIAL CHAPEL	HC 63 BOX 3040	MAYER	AZ	863339700
501-31-002U	ORME CHARLES & BOLLINGER-ORME CHEQUAMEGON	HC 63 BOX 3040	MAYER	AZ	863339700
501-31-002G	ORME PAUL & SHAWN FAMILY TRUST	HC 63 BOX 3042	MAYER	AZ	863339702
501-31-002R	ORME SCHOOL INC	HC 63 BOX 3040	MAYER	AZ	863339700
501-27-005D	SOCIAL JUSTICE CHARITABLE FOUNDATION	309 BLOOM PL	PRESCOTT	AZ	863033354
501-27-006C	SOMMERER GLORIA TRUST	12221 N 30TH AVE	PHOENIX	AZ	850292314
500-25-009	ST PIERRE JILL	2601 WILLOW CREEK RD	PRESCOTT	AZ	863014174
501-27-003	TESKEY BERT THOMAS REV LIVING TR	PO BOX 224	MAYER	AZ	863330224
500-25-005	U-CROSS RANCH LLC	17121 W PEORIA AVE	WADDELL	AZ	853559655
501-27-004	UNITED STATES OF AMERICA	222 N CENTRAL AVE	PHOENIX	AZ	850042203
	Yavapai County Development Services Matthew Blake, Planning Manager	1120 Commerce Drive	PRESCOTT	AZ	86305
	Mayer School District Superintendent - Tom Oppelt	PO Box 1059 12606 East Main St	MAYER	AZ	86333
	Central Yavapai Metropolitan Planning Organization Executive Director: Vincent Gallegos	1971 Commerce Center Circle Ste E	PRESCOTT	AZ	86301
	Chauncey Ranch Camp	18970 E Old Sycamore Rd	MAYER	AZ	86333
	OM Manufacturing	18900 E Old Sycamore Rd	MAYER	AZ	86333

(kml 9) (County) dwellings

	Orme School	1000 E. Orme School Road	MAYER	AZ	86333
	Town of Dewey-Humbolt Town Manager: Daniel Field Town Clerk: Beth Evans	2735 South Highway 69, Suite 12	HUMBOLDT	AZ	86329
	Town of Camp Verde	473 S Main St Campe Verde, AZ 86322	CAMP VERDE	AZ	86322
	Arizona State Land Department Commissioner: Robyn Sahid	1110 W Washington St	PHOENIX	AZ	85007
	Bureau of Land Management - Phoenix District Office / Hassayampa Field Office Field Manager: James Holden	2020 E Bell Rd	PHOENIX	AZ	85022
	USFS Prescott National Forest Forest Supervisor: Sarah Clawson	735 N Hwy 89	CHINO VALLEY	AZ	86323
	USFS Tuscon Office Meaghan Conway	201 N. Bonita Ave, Suite 141	Tucson	AZ	85745
	Arizona Game and Fish Department Director: Tom P. Finley	5000 W. Carefree Highway	PHOENIX	AZ	85086-5000
	Arizona Game and Fish Department Director: Tom P. Finley	7200 E University	MESA	AZ	85207
	Mayer Fire District Chief: Bryan Smith	11975 AZ-69	SPRING VALLEY	AZ	86333
	Central Arizona Land Trust (CALT) Becky Ruffner	PO Box 1050	PRESCOTT	AZ	86302
	Arizona Department of Environmental Quality Yavapai County Liaison: Lauren Hildebrand	1110 W. Washington St Ste 160	PHOENIX	AZ	85007

Exhibit 2
Informational Mailers

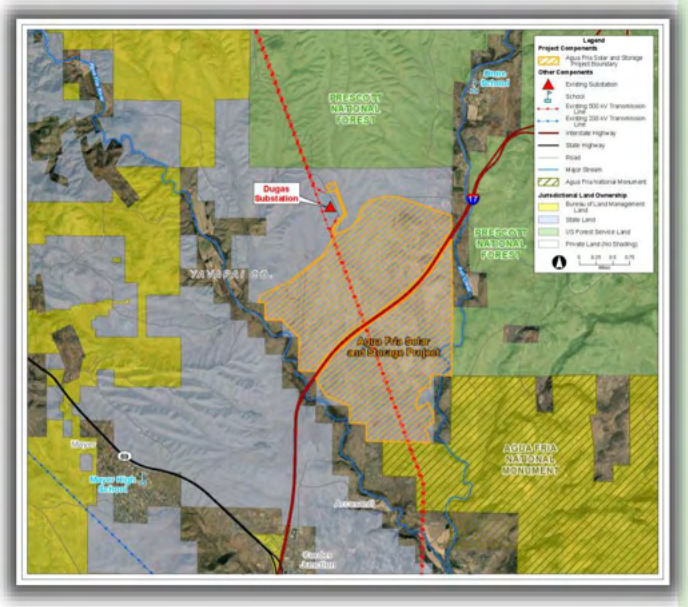
Agua Fria Solar and Gen-Tie Project

Longroad Energy is developing the proposed Agua Fria Solar and Gen-Tie Project (Project) which includes an approximately 1-mile 500 kV transmission line gen-tie that will connect the Agua Fria Solar and Storage Project to the regional grid at the existing Dugas Substation.

The Project will transmit renewable energy from the proposed Agua Fria Solar and Storage Project to the regional transmission grid. The storage component will also provide ancillary grid services which will support system reliability.

Longroad Energy is initiating the permitting process and is hosting virtual open houses to invite the public to learn about the Project and provide input on the Project.

If required, Longroad Energy will be preparing an application seeking a Certificate of Environmental Compatibility (CEC) for the gen-tie to be filed with the Arizona Corporation Commission (ACC). The CEC process includes public hearings with the Arizona Power Plant and Transmission Line Siting Committee before seeking final approval from the ACC. Hearings before the Line Siting Committee would occur in March 2025.



See details on the back.

longroad ENERGY

*Please visit **longroadenergy.com/agua-fria***
*or call **1 (833) 367-7889** for more information.*

280 Melba Rd
Encinitas, CA 92024

LIVE Virtual Open House
December 12, 2024
There are two virtual open houses which will present the same information:
12:00 p.m. and 5:30 p.m.
This will be a Zoom meeting, and registration is required to receive the meeting link.

To sign up, please scan the QR Code below
or visit the website at: *longroadenergy.com/agua-fria*

Register by phone at 1-760-273-5007.

Information about the project, the permitting process, and the public hearings will be posted to the website as information becomes available.

*Please visit **longroadenergy.com/agua-fria***
*or call **1 (833) 367-7889** for more information.*

Stamp

Address Label

Agua Fria Solar, Storage and Gen-Tie Project

Longroad Energy is developing a proposed project in your area called the Agua Fria Solar, Storage and Gen-Tie Project (Project). This proposal includes a 450-Megawatt Solar Farm, battery storage system and a 500 kV transmission Gen-Tie-line of approximately 1.8 miles to connect the Project to the current transmission grid at the existing Arizona Public Service (APS) Dugas Substation.

This Project will transmit renewable energy to the regional electric system. The Project will also have a battery storage component to provide support to the grid and improve system reliability.

Longroad Energy is beginning the permitting process and anticipates filing an application with Yavapai County for a Solar Facility Use Permit as well as with the Arizona Corporation Commission (ACC) for a Certificate of Environmental Compatibility (CEC).

Per the Yavapai County Process, ***this letter is an introductory notification to request feedback that will be taken into consideration before a potential applicant makes the decision to move forward. An application has NOT been submitted for this project. Please send any questions or comments directly to the address/contact information provided in this letter. All responses will be logged and presented to Yavapai County Development Services as a part of this Citizen Participation process. The County will send formal notices in advance of any public hearings on this matter if a formal application is submitted. You will be informed about the opportunity to provide public comment on the application at that time.***

Your feedback is important to this process. There are many ways you can engage with our team at Longroad Energy. Please see the inside of this newsletter for information on our **upcoming virtual and in-person open houses.**

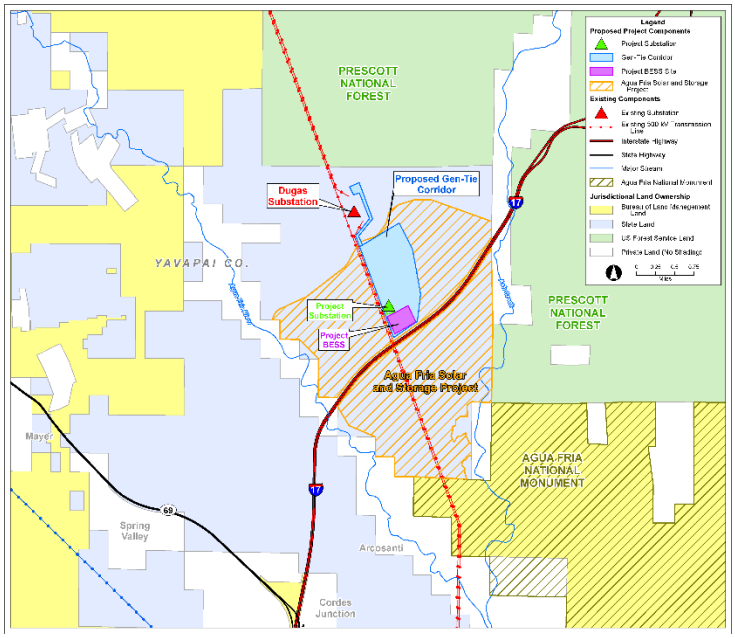
Information is also available:

Website:
www.longroadenergy.com/agua-fria.

Email:
aguafria@longroadenergy.com

Mail:
Agua Fria Project,
PO Box 1687
Higley, AZ 85236

Information Line:
1-833-367-7889



We look forward to working with you as we move forward with the application process and continue to develop this important Project.

See Inside for Additional Information

Frequently Asked Questions

Q: ***Is this project compatible with Yavapai County land use plans?***

A: This project is sited on Arizona State Trust Land, which is owned and managed by the Arizona State Land Department. A lease has been granted to Longroad for this project and the proceeds of that lease will go to the State and will benefit Arizona Public Schools. The Project site will be limited in use to the solar array, battery storage system, generation tie line and associated facilities. The County has designated the Project area as Residential within its Comprehensive Plan and zoning. Per the new County Solar Ordinance, Longroad will file an application for a Solar Facility Use Permit which, if approved, would determine the project compatible.

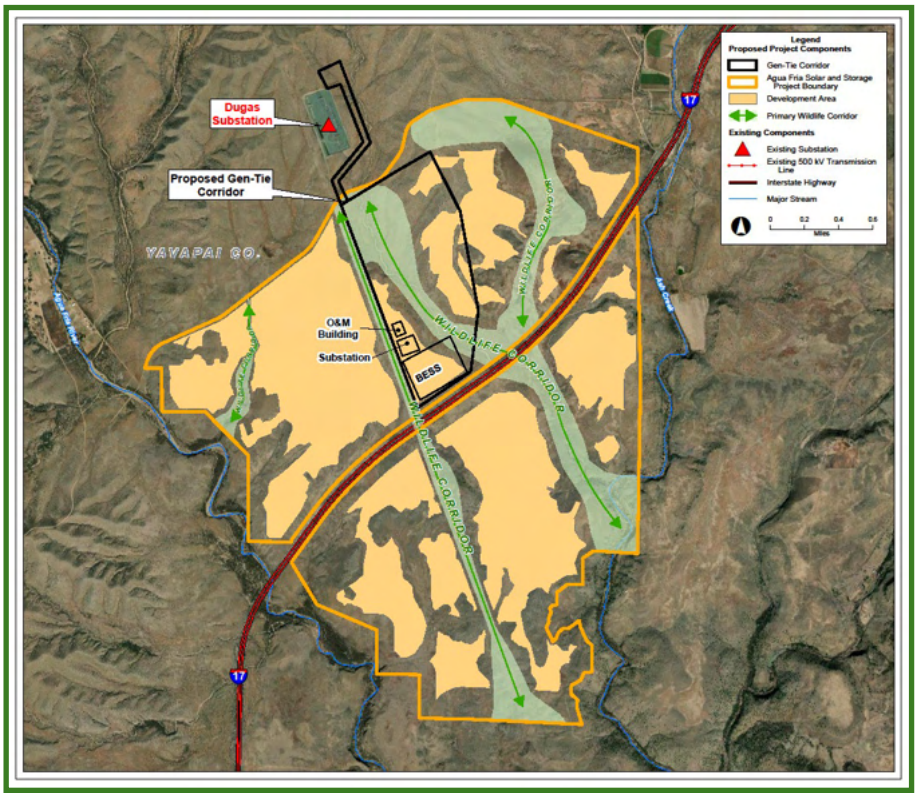
Q: ***How might the construction and operation of the solar project impact the community?***

A: During construction, which is anticipated between 2026 and 2028, there will be regular traffic and activity, with approximately 300-400 construction workers on site. Longroad will work with Yavapai County to ensure compliance with all permits and requirements such as traffic control plans and dust mitigation. Once constructed, the Project will have little impact beyond the visible addition of new infrastructure. There will be periodic maintenance activity, but generally the Project will be quiet and have minimal traffic to the site.

Q: ***How will Longroad Energy mitigate impacts during and after construction?***

A: Longroad will work with Yavapai County and regulatory agencies throughout the permitting process to address concerns and create construction plans that mitigate impacts of construction activity. These include, but are not limited to, using water to dampen the ground to control dust, creating traffic plans that best route direct vehicle traffic, limiting construction hours due to noise limitations and other measures that may be requested by the County. Longroad is committed to leaving portions of the site undisturbed by maintaining naturally vegetated buffers, wetlands and wildlife corridors. We will discuss visual impact mitigation with the county which could include minimum setbacks or maintenance of existing vegetative screening where appropriate.

Project Site Plan



Arizona CEC Process

The Arizona Corporation Commission CEC process applies to the Gen-Tie portion of this Project. The Arizona Power Plan and Transmission Line Siting Committee will hold public hearings and makes a recommendation to the ACC. The ACC then has final authority to approve the Project Gen-Tie line.

Longroad Energy files an application for a CEC …… **Early February, 2025**

Arizona Power Plant and Transmission Line
Siting Committee Hearing ……..…….... **Begins March 17, 2025**

Public Comment evening session of the hearings……. **March 17, 2025**

ACC Decision……... **April/May 2025**

More information about the hearing and public comment process and times will be provided and posted on the Project site. The hearing and public comment session will be held at the Mayer Recreation Center located at 10001 S Wicks Ave, Mayer, AZ.

Yavapai County Process

The Project will take public feedback into consideration and prepare a full application based on the Solar Ordinance which became effective in December 2024. The Project expects to submit this application in early 2025. The County Board of Supervisors will have final authority to approve the project as a permitted land use. The County permitting process is expected to take 6-9 months.

In-Person Open House Meeting

January 28, 2025
4:30 – 6:30 PM
Cordes Lakes Community Center
16357 S Cordes Lakes Dr, Cordes Lakes, AZ 86333
This will be an open house format and registration for this event is encouraged, but not required.

LIVE Virtual Open House

January 30, 2025
These are two virtual open houses which will present the same information:
12:00 PM and 5:30 PM
This will be a Zoom meeting, and registration is required to receive the meeting link.

To sign up, please
scan the QR Code
visit the website or call the
toll-free phone number
provided below.

longroad ENERGY

*Please visit **longroadenergy.com/agua-fria***
*or call **1 (833) 367-7889** for more information.*

You're Invited to Learn More about the Agua Fria Solar Project

Important Information About Upcoming Public Meetings Inside

Agua Fria Project,
PO Box 1687
Higley, AZ 85236

STAMP

ADDRESS

longroad ENERGY

Please visit longroadenergy.com/agua-fria or call 1 (833) 367-7889 for more information.

Exhibit 3
Summary of Individual, Stakeholder and Agency Outreach

Stakeholder Group	Contact	Who Contacted	Interaction Type	Interaction Date	Discussion/Comments
Stakeholder Meetings and Outreach					
Upper Agua Fria Watershed Partnership	Mary Hoadley	Alyssa Menzel and Rebecca Kelly	In Person Visit	8/27/2024	Introduction to Longroad; project updates
Yavapai County Development Services	Matthew Blake and Susan Hebert	Alyssa Menzel and Rebecca Kelly	In Person Visit	8/28/2024	Introduction to Longroad; project updates
Orme Ranch	Paul Orme	Alyssa Menzel and Rebecca Kelly	In Person Visit	8/28/2024	Introduction to Longroad; project updates
Arcosanti	Scott Riley and Ivan Fritz	Alyssa Menzel and Rebecca Kelly	In Person Visit	8/28/2024	Introduction to Longroad; project updates
Yavapai County	Supervisor James Gregory	Rebecca Kelly	Virtual meeting	9/3/2024	Introduction to Longroad; project updates
Upper Agua Fria Watershed Partnership	Mary Hoadley, et al	Dave Iadarola	Meeting	9/3/2024	Attended monthly UAFWP meeting and provided project updates.
Upper Agua Fria Watershed Partnership	Mary Hoadley, et al	Dave Iadarola	Meeting	10/1/2024	Attended monthly UAFWP meeting and provided project updates.
Yavapai County Development Services	Matthew Blake	Alyssa Menzel	Call and Email	10/15/2024	Discuss project design and coordination with Yavapai County Flood Control
Yavapai County Development Services	Matthew Blake	Alyssa Menzel	Call	10/23/2024	Call to discuss project permitting and county ordinance
Yavapai County Flood Control District	Eric Sparkman, Lynn Whitman	Alyssa Menzel, EVS Engineering	Virtual Meeting	10/28/2024	Discuss project design and code requirements for flood control
Yavapai County	Supervisor James Gregory	Alyssa Menzel	Virtual Meeting	10/31/2024	Meeting to discuss project updates and design considerations
Audobon Society	Garry George, Jon Belak, Haley Paul, Tice Supplee	Ashley Groeneveld, Lindsey Kester, Deron Lawerence	Meeting	10/31/2024	Meeting to inform of Project and discuss high level overview of environmental conservation strategies.
Upper Agua Fria Watershed Partnership	Mary Hoadley, et al	Dave Iadarola	Meeting	11/5/2024	Attended monthly UAFWP meeting and provided project updates.
Cordes Lakes Community Association	Cordes Lakes Community Association	Tom Thurman	In Person Meeti	11/14/2024	Attending Cordes Lakes Community Association monthly meeting and provided public update on project status
Orme Ranch/Cattle Grazer	Enoch Malooff	Dave Iadarola	Phone	11/26/2024	Called Enoch regarding geotech and to check in regarding project
Yavapai County Development Services	Matthew Blake	Alyssa Menzel	Email	11/27/2024	Informing about upcoming virtual open house and permitting timeline
Arizona State Land Department	Rhonda Buss	Alyssa Menzel	Email	11/27/2024	Informing about upcoming virtual open house and permitting timeline
Yavapai County	Supervisor James Gregory	Alyssa Menzel	Email	11/27/2024	Informing about upcoming virtual open house and permitting timeline
Orme School	Natasha Diamond	Rebecca Kelly	Email	11/27/2024	Information about CEC permit and upcoming virtual open house
YMCA/Tonto Creek	Tim Magill	Dave Iadarola	Email	12/2/2024	Email to inform ownership group of upcoming open house
Central AZ Land Trust	Becky Ruffner and Sharma Torrens	Rebecca Kelly	Email	12/2/2024	Information about CEC permit and upcoming virtual open house
Orme Ranch/Cattle Grazer	Enoch Malooff	Dave Iadarola	Phone	12/2/2024	Called Enoch to inform him of virtual open house
Upper Agua Fria Watershed Partnership	Mary Hoadley	Dave Iadarola	Email	12/2/2024	Provided information about the upcoming virtual meeting
YMCA/Tonto Creek	Tim Magill/Bryan Madden	Dave Iadarola	Email	12/3/2024	Email to introduce Dave to Bryan and inform Bryan of upcoming open house.
Orme Ranch/Cattle Grazer	Enoch Malooff	Dave Iadarola	Email	12/3/2024	Dave Followed up phone conversation with email of newsletter and information on the open houses.
Upper Agua Fria Watershed Partnership	Mary Hoadley, et al	Dave Iadarola	Meeting	12/3/2024	Attended monthly UAFWP meeting and provided project updates.
Upper Agua Fria Watershed Partnership	Upper Agua Fria Watershed Partnership	Rebecca Kelly	Virtual Meeting	12/3/2024	Informing about upcoming virtual open house and permitting timeline; respond to questions
Arizona State Land Department	Rhonda Buss	Alyssa Menzel	In Person Visit	12/5/2024	In person meeting to discuss project updates and timeline and to answer questions
Yavapai County Development Services	Matthew Blake	Alyssa Menzel	Call	12/9/2024	Call to discuss project permitting
Yavapai County Board of Supervisors	Mary Mallory	Tom Thurman	Phone	12/23/2024	Phone call to provide project status update
Arizona Game and Fish Department	Arizona Game and Fish Department	Ashley Groeneveld, Lindsey Kester, Alyssa Menzel	Meeting	1/6/2025	Meeting to review updated design and wildlife corridors with AFGFD
Yavapai County Development Services	Yavapai County Development Services	Project Team	Hybrid meeting	1/10/2025	In person pre-application

Stakeholder Group	Contact	Who Contacted	Interaction Type	Interaction Date	Discussion Comments
Orme School	Orme School students and faculty	Rebecca Kelly	In Person Visit	1/13/2025	In-person presentation about solar projects, Agua Fria project plans, and career opportunities in energy industry
Upper Agua Fria Watershed Partnership	Mary Hoadley, et al	Dave Iadarola	Meeting	1/13/2025	Attended monthly UAFWP meeting and provided project updates.
Upper Agua Fria Watershed Partnership	Mary Hoadley	Dave Iadarola	Email	1/14/2025	Requested contact information for one of the UAFWP members representing the Audoboun. Mary responded with the contact information.
Arizona State Land Department	Rhonda Buss and Ray Moore	Alyssa Menzel	Email	1/15/2025	Email notifying Supervisor Gregory of scheduled in person open house
Yavapai County	Supervisor James Gregory	Alyssa Menzel	Email	1/16/2025	Email notifying Supervisor Gregory of scheduled in person open house
Arizona Game and Fish Department	Jessica Potter	Ashley Groeneveld	Email	1/16/2025	Email to inform of upcoming in-person open house
Bureau of Land Management - Arizona State Office	State Director: Raymond Suazo	Ashley Groeneveld	Email	1/16/2025	Email to inform of upcoming in-person open house
Bureau of Land Management - Phoenix District Office / Hassayampa Field Office	Field Manager: James Holden	Ashley Groeneveld	Email	1/16/2025	Email to inform of upcoming in-person open house
Bureau of Reclamation - Local Office	Jeremy Welch, Dominic Graziani	Ashley Groeneveld	Email	1/16/2025	Email to inform of upcoming in-person open house
Arizona Game and Fish Department	Jessica Porter, RE Lead	Ashley Groeneveld	Email	1/16/2025	Email to inform of upcoming in-person open house
Arizona Department of Environmental Qua	Yavapai County Liaison: Lauren Hildebran	Ashley Groeneveld	Email	1/16/2025	Email to inform of upcoming in-person open house
Friends of the Agua Fria National Monume	President: Mary Grant; Secretary: Tim Floo	Ashley Groeneveld	Email	1/16/2025	Email to inform of upcoming in-person open house
AFNM - Tim Flood	Tim Flood	Ashley Groeneveld	Email	1/16/2025	Email to inform of upcoming in-person open house
Audobon Society - National	Garry George, Jon Belak	Ashley Groeneveld	Email	1/16/2025	Email to inform of upcoming in-person open house
Audobon Society - Prescott	Paul Glaves	Ashley Groeneveld	Email	1/16/2025	Email to inform of upcoming in-person open house
USFWS - AZ Ecology Tucson Office	Meghan Conway	Ashley Groeneveld	Email	1/16/2025	Email to inform of upcoming in-person open house
USACE - AZ Branch Chief	Sallie Diebolt	Ashley Groeneveld	Email	1/16/2025	Email to inform of upcoming in-person open house
Bert Teskey	Bert Teskey	Tom Thurman	Phone	1/16/2025	Phone call to inform neighbors of the open house and to offer in-person meeting with Longroad team
Steven Howard	Steven Howard	Tom Thurman	Phone	1/16/2025	Phone call to inform neighbors of the open house and to offer in-person meeting with Longroad team
Central AZ Land Trust	Becky Ruffner and Sharma Torrens	Rebecca Kelly	Email	1/17/2025	Email to inform Central AZ Land Trust of in-person and virtual open houses, and answer questions about the project
Orme Ranch	Paul Orme	Rebecca Kelly	Email	1/17/2025	Email to inform of upcoming in-person open house
Arcosanti	Scott Riley and David Turnbull	Alyssa Menzel	Email	1/17/2025	Email to inform Arcosanti of project status and upcoming open house
YMCA/Tonto Creek	Bryan Madden	Dave Iadarola	Email	1/21/2025	Email to provide ownership group with newsletter and information regarding in-person and virtual open house
Orme Ranch/Cattle Grazer	Enoch Malooff	Dave Iadarola	Phone	1/21/2025	Called Enoch to check in and inform him about upcoming in-person and upcoming open houses.
Orme Ranch/Cattle Grazer	Enoch Malooff	Dave Iadarola	Email	1/21/2025	Dave Followed up phone conversation with email of newsletter and information on the open houses.
Upper Agua Fria Watershed Partnership	Mary Hoadley	Dave Iadarola	Email	1/21/2025	Dave emailed Mary the project newsletter with the open house information and offered a separate meeting for Mary to ask questions about the project.
Mayer Fire Department	Bryan Smith	Kevin Hutchinson	Email	1/23/2025	Email to inform Mayer Fire District of upcoming open house and to make introductions to Longroad Battery Energy Storage staff
Upper Agua Fria Watershed Partnership	Mary Hoadley	Dave Iadarola	Email	1/24/2025	Mary confirmed receipt of open house information and indicated she would follow up regarding a separate meeting.
Yavapai County	Vice-Chairman L. Brooks Compton	Alyssa Menzel	Email	1/24/2025	Email to inform County Supervisor of upcoming Open House and project updates

Stakeholder Group	Contact	Who Contacted	Interaction Type	Interaction Date	Discussion/Comments
Yavapai County	Supervisor Mary Mallory	Alyssa Menzel	Email	1/24/2025	Email to inform County Supervisor of upcoming Open House and project updates
Yavapai County	Supervisor Chris Kuknyo	Alyssa Menzel	Email	1/24/2025	Email to inform County Supervisor of upcoming Open House and project updates
Yavapai County	Supervisor Nikki Check	Alyssa Menzel	Email	1/24/2025	Email to inform County Supervisor of upcoming Open House and project updates
U.S. Forest Service	Chris Welker	Rebecca Kelly	In Person Visit	1/27/2025	In-person meeting to review Agua Fria project plans, upcoming permitting, and road use permit
Arizona State Land Department	Rhonda Buss	Alyssa Menzel	Phone	1/30/2025	Phone call to report on how the open house went and provide project updates
Upper Agua Fria Watershed Partnership	Mary Hoadley, et al	Rebecca Kelly	Meeting	2/4/2025	Attended monthly UAFWP meeting and provided project updates.
Arcosanti	Linn Williams	Rebecca Kelly, Ashley Groeneveld	Email	2/4/2025	Data on biological resources that have been surveyed in the vicinity of the project discussion.
Arcosanti	Linn Williams	Courtney Van Winkle	Email	2/6/2025	Sent Linn the link to the CEC Application on the ACC docket per her request at the In-Person Open House.
AFNM - Tim Flood	Tim Flood	Ashley Groeneveld	Email	2/6/2025	Email exchange about concerns on wildlife corridors, washes, grassland, invasive species, potential for range fire, and cultural features.
Upper Agua Fria Watershed Partnership	Mary Hoadley, et al	Rebecca Kelly	Meeting	3/4/2025	Attended monthly UAFWP meeting and provided project updates.
Brad McLaughlin	Brad McLaughlin	Rebecca Kelly	Meeting	3/17/2025	Rebecca met in person to discuss viewshed concerns
Arizona Game and Fish Department	Jessica Potter	Ashley Groeneveld	Meeting	4/2/2025	Meeting to discuss Pronghorn data and our proposed project and fencing options.
Arizona State Land Department	Rhonda Buss	Alyssa Menzel	Virtual Meeting	4/4/2025	Meeting to discuss Project updates and future Development Agreement required by the County
Arcosanti	Linn Williams and Scott Riley	Rebecca Kelly, Ashley Groeneveld	Email	4/7/2025	Discussion on the Project in relation to grazing and potential fencing types and locations in the project's open space areas
Arizona Wildlife News from Arizona Wildlife Federation	Loyd Barnett	Ashley Groeneveld	Email	4/9/2025	Loyd came to the in-person open house in January and requested some Project maps for his quarterly report in the Arizona Wildlife News from Arizona Wildlife Federation, which mentions the Agua Fria Solar and Storage Project. He sent his draft for LR review before publication.
Arcosanti	Linn Williams	Rebecca Kelly, Ashley Groeneveld	Email	4/24/2025	Meeting with Linn Williams and Scott Riley to discuss Project fencing.
Upper Agua Fria Watershed Partnership	Mary Hoadley, et al	Rebecca Kelly, Dave Iaderola	Meeting	5/6/2025	Attended monthly UAFWP meeting and provided project updates.
Steven Lang	Steven Lang	Alyssa Menzel	Phone	5/22/2025	Phone meeting to discuss project updates and hear concerns
Paul Orme	Paul Orme	Rebecca Kelly	Phone	6/9/2025	Meeting to discuss project updates and Orme School closure
Yavapai County Development Services	Matthew Blake and Susan Hebert	Project Team	Hybrid meeting	6/10/2025	Pre-application meeting to review the documents submitted in the pre-application submittal.
Yavapai County Flood Control District		Project Team	Hybrid meeting	6/10/2025	Pre-application meeting to review the documents submitted in the pre-application submittal.
Arizona Game and Fish Department	Arizona Game and Fish Department	Ashley Groeneveld, Lindsey Kester, Alyssa Menzel	Meeting	6/12/2025	Meeting to review updated design with fencing changes
Upper Agua Fria Watershed Partnership	Mary Hoadley	Alyssa Menzel, Dave Iaderola	Meeting	7/1/2025	Attended monthly UAFWP meeting and provided project updates.
Mayer Fire Department	Bryan Smith, Jason LaGreca, Anthony Tuni	Alyssa Menzel, BESS Team	Meeting	7/11/2025	Disscussed Fire Department requests for the Project design and the County Application
Bureau of Reclamation - Local Office	Dominic Graziani	Lindsey Kester, Maeve Hogan	Meeting	7/23/2025	Meeting to review BOR EA, DOI memo, and NEPA updates

Stakeholder Group	Contact	Who Contacted	Interaction Type	Interaction Date	Discussion/Comments
Arizona Game and Fish Department	Arizona Game and Fish Department	Lindsey Kester, Alyssa Menzel, Maeve Hogan	Meeting	7/31/2025	Meeting to discuss joint monitoring opportunities
Mayer Fire Department	Mayer Fire Department	Tom Thurman	In Person Meeti	Recurring	Regular project updates provided during Fire Department monthly meeting, held on the 3rd Wednesday of each month
Mayer School District	Mayer School District	Tom Thurman	In Person Meeti	Recurring	Regular project updates provided during School District monthly meeting, held on the 2nd Wednesday of each month
Public Comment via Information Line/Website/Project Email					
Spud Ranch	Jeremy Cordova	Website Comment	Website comm	12/8/2024	Back off your solar project and yavapai county because you are not welcome here. Your project is retarded and will raise our energy prices while destroying our land. I hope you go out of business. Also have a great rest of your sunday :)
n/a	Karl Karren	Information Line	Phone	12/9/2024	He works with OM Manufacturing. His questions had to do with where the solar arrays and fences would be located within the project boundary and impact grazing lands.
n/a	Mary Hadley	Information Line	Phone	12/11/2024	The caller wanted help signing up for the Open House and also had some questions.
n/a	Jorge Sommerer	Information Line	Phone	1/27/2025	Wanted to attend the Zoom Open House but had computer issues. He was informed of the In-Person Open House and encouraged to come and was provided the venue location information. We registered him for the 01/28/25 OH and the 01/30/25 Virtual OH through Sign Up Genius.
n/a	Stacie Priest	Project Email	Email	1/28/2025	Please see attached feedback regarding Agua Fria Solar Project Dugas Substation. Thank you for allowing the public feedback. Attacged document listed reasons to oppose the Agua Fri Solar, Storage, and Gen-Tie Project.
n/a	Arlene Rheinfelder	Project Email	Email	1/30/2025	I would like to be notified of any hearings regarding the proposed solar project on I-17 near Dugas. I am opposed to the project. The proposed site is antelope habitat. It's a beautiful area that should not be destroyed to put in solar panels. Solar panels, although they are recyclable. are rarely recycled making them a landfill nightmare when they outlive their useful life. Please confirm that you will provide notice of future hearings.
n/a	Lynn Malouff	Project Email	Email	1/30/2025	We are strongly opposed to this project. We have ranched this parcel since 1987. There are numerous native sites in the included area which has been disregarded. We feel the integrity of the Agua Fria River will be greatly compromised with your proposed grading. Not to mention the eye sore and loss of open space which will affect wildlife including but not limited to Gila Monsters & other lizards, deer, pronghorns, javelins, rabbits & elk. The loss of this great grass lands is sad for the state AZ. Respectfully submitted,

Stakeholder Group	Contact	Who Contacted	Interaction Type	Interaction Date	Discussion Comments
n/a	L. Hamilton	Project Email	Email	1/31/2025	I am Againest this project and it's location. You will be ruining good habitat and grazing land. When we have normal winters that area is where I have seen large herds of Mule deer grazing. I've hunted quail and Javelina where you want to do the wildlife corridors. It will be a eyesore to look at driving from Cordes heading north on the 17. Why can't you install panels over large parking lots, on roofs of commercial buildings ? Why must you tear up 1800 acres of land that will never be restored to what it is now? Talking to you all at the meeting did not say how solar would benefit us the homeowners in the area. Will it lower our energy bills? I've been told it would benefit our school district. However I know that money you pay State is controlled by the state. All that money should stay in Yavapai County but it won't so we don't want a Solar farm here. Finally non of you from the company live here. You live in Colorado, California and other places. Go build your Solar Farm near your houses not ours. Strongly oppose Agua Fria Solar
n/a	Cindy Sue Hunter	Project Email	Email	1/31/2025	I want to be notified about this proposed solar farm project, please. Thank you,
n/a	Daniel Blanton	Project Email	Email	2/1/2025	As an Arizona resident I'm opposed to this initiative. The environmental impact of large scale solar on wildlife is too great.
n/a	Christina Eade	Project Email	Email	2/1/2025	Good Morning, I would like to express my concerns and dissatisfaction with the proposed solar farm out near Cordes Lakes in AZ. This area has been a huge influence in so many lives and utilized by my family for generations. I'm a fifth generation outdoorsman in the area and I grew up hunting out here with my grandfather. This land has far better uses than the proposed solar farm that will cause immense impacts to not only the landscape, wildlife, and public who use it but, it could permanently alter the climate in this region. We ask that this please be stopped and the proposal be debited. PLEASE!!!
n/a	Jeremy Zeko	Project Email	Email	2/1/2025	Hello, The solar facility off old Sycamore/Chauncey Road would take away wildlife habitat that is increasingly being developed in the west. As someone who uses this area to hunt/recreate, I do not want this land developed into a solar facility. Thank you
n/a	Daniel Lee	Project Email	Email	2/1/2025	Please build some where else closer to Prescott valley in side where aren't taking wildlife habitat!
n/a	James Wagner	Project Email	Email	2/2/2025	Wants to be sent info on any meetings/open houses etc.
Spud Ranch	Jeremy Cordova	Kenda Pollio	Phone	2/4/2025	Follow-up call to his website comment. He was very appreciative of the follow-up. He expressed that he did not think it was a good use of the open space.

Stakeholder Group	Contact	Who Contacted	Interaction Type	Interaction Date	Discussion Comments
n/a	Kevin Scheer	Project Email	Email	2/13/2025	I oppose this project due to the location of this project. This is excellent quail habitat and home to many coveys. The building of a solar farm will destroy the habitat and will hurt the environment around here. Also, it is irresponsible to build this near the Agua Fria river which provides resources for so many animals. This needs to be built further north and not this area. Thanks
n/a	Steven Lang	Alyssa Menzel	Email	2/19/2025	Email sent to neighbor Steve Lang to introduce Longroad and offer a meeting/discussion
n/a	Brad McLaughlin	Alyssa Menzel	Email	2/19/2025	Email sent to neighbor to propose in person meeting to discuss viewshed concerns
n/a	Steven Lang	Alyssa Menzel	Email	5/22/2025	Follow-up call to discuss concerns and project updates
Comments at Open Houses					
n/a	Steven Howard	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Will, and if so when, will Longroad be in contact with neighboring land owners?
n/a	Patricia Betzhold	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Are these 4,215 acres flat and if not what kind of terrain is it and what kind of grades are you running into?
n/a	Jonathon Finley	Virtual Open House	Submitted during Virtual Open House	12/12/2024	How will this affect the various antelope herds that roam that area? Fenced vs open for roaming and grazing within the panel areas?
n/a	Stephen Cook	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Do you have a firm understanding with APS as to what I believe are called Open Access Transmission Tariffs? I've heard rumors of APS wanting $100 million from Candela in this regard for this project...
n/a	Patricia Betzhold	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Will the solar panels be visible from the 17?
n/a	Patricia Betzhold	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Why is the Project BESS site so large?
n/a	Steven Howard	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Candella promoted a minimally invasive installation process. Will Longroad be adopting these methods?
n/a	Jessica Potter	Virtual Open House	Submitted during Virtual Open House	12/12/2024	How far along in the solar facility design is Longroad? Has Longroad made any changes to the design since the project was bought?
n/a	Steven Howard	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Will a copy of this slide deck be available to share to others unable to attend today?
n/a	Patricia Betzhold	Virtual Open House	Submitted during Virtual Open House	12/12/2024	You didn't share any detail about the Wildlife Conservation Plan - when will you share that?

Stakeholder Group	Contact	Who Contacted	Interaction Type	Interaction Date	Discussion Comments
n/a	Bobby Lamoureux	Virtual Open House	Submitted during Virtual Open House	12/12/2024	What is the reasoning for including portions of Ash creek within the proejct footprint? This reach does have portions of perenial water and is an important movement corridor for wildlife too easily access the AFNM.
n/a	Patricia Betzhold	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Will your report include existing water, water movement, etc. and how the solar field will interact with those elements.
n/a	Stephen Cook	Virtual Open House	Submitted during Virtual Open House	12/12/2024	I've heard lots of anti-solar Fear mongering at meetings related to Yavapai County Ordinance. Two Questions here: 1) are you considering finding alternatives to lithium batteries. Might you work with Boston based Form Energy in using their promising iron-air technology? 2) Can you do your vegetation management with herbicides?
n/a	Bobby Lamoureux	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Do you plan on doing a pronhorn antelope presence survey?
n/a	Patricia Betzhold	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Who are the environmental consultations that you have hired?
n/a	Steven Howard	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Will the panels be stationary?
n/a	Steven Howard	Virtual Open House	Submitted during Virtual Open House	12/12/2024	vs. tracking..
n/a	Brad Mclaughlin	Virtual Open House	Submitted during Virtual Open House	12/12/2024	I have seen Candela make note of Antelope migration on this project, but as someone thatunfortunately lives within sight of this project, there are no Antelope.
n/a	Don Steuter	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Is any offsite mitigation being considered for lost wildlife habitat?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Candela discussed minimal site disturbance; vegetation management with sheep; little or no herbicide use.
n/a	Stephen Cook	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Given the story in the AZ Mirror earlier in week, might the Trump Administration trying to kill the IRA subsidies for renewable energy seriously impact financing this project of yours in Yavapai County and its moving ahead?
n/a	Patricia Betzhold	Virtual Open House	Submitted during Virtual Open House	12/12/2024	We will want large wildlife to have access to the water resources within the project area.
n/a	James Gregory	Virtual Open House	Submitted during Virtual Open House	12/12/2024	How will Long Road engage with the local community throughout the project. Will there be any in person community engagement with the community.

Stakeholder Group	Contact	Who Contacted	Interaction Type	Interaction Date	Discussion Comments
n/a	Karl Karren	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Where can we get a copy of the new county grading ordinance
n/a	Stephen Cook	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Will your PV arrays be able to sense the approach of dangerous thunderstorms with damaging hail and move them safely out of the way?
n/a	Patricia Betzhold	Virtual Open House	during Virtual Open House	12/12/2024	This is a very large area, will small wildlife be able to transverse the entire panel area?
n/a	Steven Howard	Virtual Open House	during Virtual Open House	12/12/2024	Are sensitive archeological sites being identified and protected?
n/a	Karl Karren	Virtual Open House	Submitted during Virtual	12/12/2024	Send ordinance to Karl@om.com
n/a	Steven Howard	Virtual Open House	during Virtual Open House	12/12/2024	Please provide the county ordinance: showard@azcec.us
n/a	Brad Mclaughlin	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Is there any media available that might show what a facility like this looks like in the afternoon since since these will be tracking panels? My property is directly in line with the setting sun and the facility.
n/a	Steven Howard	Virtual Open House	during Virtual Open House	12/12/2024	Thank you.
n/a	Zoe Gentry	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Some of my thoughts: - Agua Fria National Monument contains rich Yavapai history, and this adjacent area is part of their homelands as well. I would like to hear about your work with the Yavapai-Apache Nation, Ft. McDowell Yavapai Nation, Yavapai-Prescott tribe, or others. - I am curious if this can be a multi-use landscape-- maybe land conservation under or adjacent the panels. - I am interested in impacts to viewsheds at Arcosanti and the mesa tops at AFNM. - I would love to hear the general thoughts/feelings of others you've gathered so far, especially the Audubon.
n/a	Tim Flood	Virtual Open House	Submitted during Virtual Open House	12/12/2024	How will the size of the AF project compare with other Longroad projects in AZ, in the US?
n/a	Tim Flood	Virtual Open House	Submitted during Virtual Open House	12/12/2024	How long will it take to build the project? Will it be constructed in phases?
n/a	Tim Flood	Virtual Open House	Submitted during Virtual Open House	12/12/2024	The landscape on the mesas is susceptible to promulation of exotic and invasive plant species such as mustard, brome, oats, and stinknet. These in turn promote wildfire. What is the plan to control that risk?
n/a	Tim Flood	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Could the GenTie be constructed in such a way to facilitate a wildlife corridor(s) and to reduce the risk of a massive fire across the landscape?
n/a	Sarah Andrews	Virtual Open House	Submitted during Virtual Open House	12/12/2024	How does this benefit the people of Yavapai county? APS gets a break, y'all get paid, and the people of Yavapai county lose more of their public land and still pay high premiums.

Stakeholder Group	Contact	Who Contacted	Interaction Type	Interaction Date	Discussion Comments
n/a	Tim Flood	Virtual Open House	during Virtual Open House	12/12/2024	What you see today's drought impacted landscape is very different than the amount of vegetation that occurs during a normal wet year.
n/a	Sarah Andrews	Virtual Open House	during Virtual Open House	12/12/2024	Just schools within Yavapai benefit or all of arizona?
n/a	Sarah Andrews	Virtual Open House	during Virtual Open House	12/12/2024	Still no benefits directly to the community then
n/a	Tim Flood	Virtual Open House	during Virtual Open House	12/12/2024	carried. They also serve as important wildlife corridors. How wide will the corridors be?
n/a	Zoe Gentry	Virtual Open House	during Virtual Open House	12/12/2024	Will there be opportunities for members of the general public to visit the grounds? on tours etc.
n/a	Tim Flood	Virtual Open House	during Virtual Open House	12/12/2024	Will grassland wildlife and bird surveys be conducted in the various seasons to gain an appreciation for the variety of species?
n/a	Sarah Andrews	Virtual Open House	during Virtual Open House	12/12/2024	Has aps released on how they're going to use this power or any relief efforts for the communities for their already high premiums?
n/a	Zoe Gentry	Virtual Open House	Submitted during Virtual Open House	12/12/2024	I appreciate your time and thought in all of this. It's hard to see change coming to a landscape I care for very much, but I am trying to think about it as an opportunity as well. I am interested to see how things develop, especially as you and your partners experiment with different management strategies.
n/a	Tim Flood	Virtual Open House	Submitted during Virtual Open House	12/12/2024	The AFNM is a dark sky monument. WIll there be light pollution issues associated with the project?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	12/12/2024	The new Ordinance caps individual projects at 3,000 acres. Will Longroad use just 3,000 acres of the 4200 for panels, BESS and maintenance buildings?
n/a	Tim Flood	Virtual Open House	Submitted during Virtual Open House	12/12/2024	Thx for holding this open house!
Arcosanti	Michael Bittman	In-Person Open House	Comment Card	1/28/2025	Very well presented with everyone informed on sending people to the expert of each subject – good visual presentation
Orme Ranch Inc	Shawn Orme	In-Person Open House	Comment	1/28/2025	Excellent & informative!
Orme Ranch Inc	Paul Orme	In-Person Open House	Comment	1/28/2025	Very well-conceived project which we support
n/a	Jorge Sommerer	In-Person Open House	Comment Card	1/28/2025	We have the property that is in the right lower corner of the map for the proposed solar field. 1 What temperature changes can we expect from the heat from panels (thermodynamics) 2 What effect will the project have on our properties water level? Never run dry in recorded history. 3 What effects will the questions above have on the animals and endangered species that are on the property
n/a	Brad	In-Person Open House	Comment	1/28/2025	Glare from house
Arcosanti	Linn Williams	In-Person Open House	Comment Card	1/28/2025	Due to riparian habitat, please consider disturbance to wildlife and timing of construction to mating times of birds, or migration of wildlife such as pronghorn
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	How many solar panels are anticipated?

Stakeholder Group	Contact	Who Contacted	Interaction Type	Interaction Date	Discussion Comments
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Will wildlife corridors, buffers areas be accessible to the public for hunting, hiking, grazing
n/a	Tim Flood	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Are you able to share the tentative project maps with us at this time?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Will panel areas be graded or left as naturally vegetated?
n/a	Tim Flood	Virtual Open House	Submitted during Virtual Open House	1/30/2025	tjflood@att.net
n/a	Don Steuter	Virtual Open House	Submitted during Virtual Open House	1/30/2025	What is your prognosis for the likelihood of pronghorn survival in the area?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Will panels follow contours or will the panel areas be terraced to provide flat panel installation?
n/a	Tim Flood	Virtual Open House	Submitted during Virtual Open House	1/30/2025	will the ground be scraped clean to place the panels?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Candela explored sheep for vegetation control under the panels. Is this strategy being considered?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Waht about hunting or hiking in the none panel areas?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Is there potential improvement of the Agua Fria as a wildlife corridor by vegetation management on buffer areas on either side of I-17?
n/a	Eileen Baden, AICP	Virtual Open House	Submitted during Virtual Open House	1/30/2025	My suggestion for the solar development is that a multi-use pathway open to the public is developed outside of the project fence line, around the perimeter of the project and where it follows along the I-17 North and South. Pathways can help improve access for emergency responders, serve as a firebreak, and protect public access to public lands. If a vehicle fire started on the I-17, or in the other natural areas surrounding the site, the paths could also help protect the solar company's investment. This is also very important due to the high-quality cultural resources in Agua Fria National Monument. I highly recommend the movie "Fire in Paradise" on Netflix. Paradise, CA is building pathways that can withstand the weight of emergency vehicles for improved access and to serve as a firebreak after the devastating Camp Fire caused over 85 deaths.

Stakeholder Group	Contact	Who Contacted	Interaction Type	Interaction Date	Discussion/Comments
n/a	Eileen Baden, AICP	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Late last year a teenage boy passed away from being hit by a car in Prescott Valley, it was along a stretch of Arizona State Trust Land: https://www.12news.com/video/news/local/arizona/prescott-valley-teens-death-renews-calls-for-safer-pathways-for-pedestrians-bicyclists/75-c9dee85f-9730-4fa7-a5c5-34e8c7103f9d Pathways are one of the top items of support from members of the public according to a statistically significant public survey done recently by Arizona State Parks for the Statewide Comprehensive Outdoor Recreation Plan. Has a pathway around the perimeter of the site and along the I-17 N and I-17 S outside of the project fence line been considered?
n/a	Tim Flood	Virtual Open House	Submitted during Virtual Open House	1/30/2025	A biologist I know says sheep often introduce exotic plant species.
n/a	Don Steuter	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Are you aware of any other contemplated solar projects on state trust land in the area?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	repeat with corrections: What about hunting or hiking on non panel areas?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Currently there is public road access under the 500 kv lines. Will these be closed of?
n/a	Don Steuter	Virtual Open House	Submitted during Virtual Open House	1/30/2025	How much additional capacity does the 500KV transmission line have once this project is on line?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Can you answer if panels will follow contours or be placed on flat terraces?
n/a	Tim Flood	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Will you be considering impacts caused by placing the GenTie line into the Dugas substation? (It is outside the Project Site Plan).
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Will i-17 underpasses be improved in the wildlife corridors?
n/a	Eileen Baden, AICP	Virtual Open House	Submitted during Virtual Open House	1/30/2025	As this area is being taken out from public use for hiking, etc. and people usually can have access to with an ASLD lands with their recreational permit, I think an approximate 10-ft wide DG pathway, outside the project fenceline along the perimeter and both sides of the I-17, seems reasonable to protect future connectivity, serve as a firebreak, and improve emergency access.
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Where will Longroad access east side of project?

Stakeholder Group	Contact	Who Contacted	Interaction Type	Interaction Date	Discussion Comments
n/a	Eileen Baden, AICP	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Is there any federal funding? Is a National Environmental Policy Act document being required?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Can you share the comments that are not questions?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	earthhous@aol.com Thank you
n/a	Emily DeGrasse	Virtual Open House	Submitted during Virtual Open House	1/30/2025	That's funny don't waste time on me have a good night
n/a	Emily DeGrasse	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Seems like good news to me
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Doed Longroad need a permit for preliminary site work?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Will there be fencing around the entire project boundary?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	If a Class III Cutural Resources Survey identifies sites eligible for designation under the National Historic Preservation Program, Criterion D, will Longroad leave them undisturbed?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Isn't fencing around panelws only porous to small animals?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Is Longroad placing cameras on the completed fenced arrays to research impacts on wildlife?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Regarding Stormwater Protectin, willl there be holding basins for high runoff?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Is there concern that seeding of graded areas might not be successful due to low annual rainfall?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	How will invasive species be handled? On disturbed land?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Will there be a wildfire management plan?
n/a	Mary Hoadley	Virtual Open House	Submitted during Virtual Open House	1/30/2025	Will the panels be recycled at the end of their service?

Exhibit 4

Website, Facebook Page and Facebook Ad



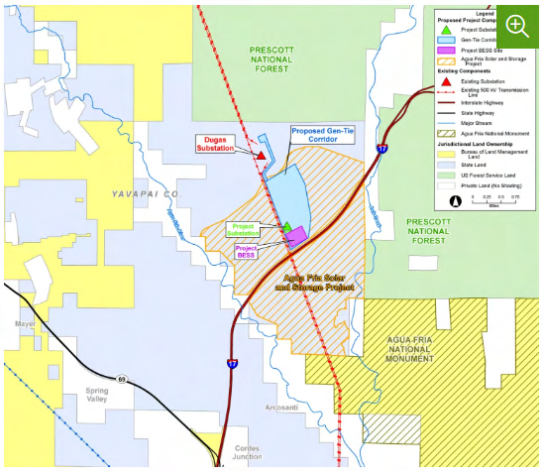
Agua Fria Solar, Storage and Gen-Tie Project

Arizona

Longroad Energy is developing the proposed Agua Fria Solar, Storage and Gen-Tie Project, which includes an approximately 1.8 mile 500 kV transmission line gen-tie that will connect the Agua Fria Solar and Storage Project to the regional grid at the existing Dugas Substation.

The Project will transmit renewable energy from the proposed Agua Fria Solar and Storage Project to the regional transmission grid. The storage component will also provide ancillary grid services which will support system reliability.

General Area Map



Longroad Energy has initiated the permitting process and hosted in-person and virtual open houses in December 2024 and January 2025 to invite the public to learn and provide input on the Project.

Arizona CEC Gen-Tie Permitting Process

On Thursday, February 6, 2025, the Certificate of Environmental Compatibility (CEC) was filed with the Arizona Corporation Commission (ACC). A link to the CEC application is in the Supplemental Project Materials tab. On Tuesday, March 18, 2025, the Arizona Power Plant and Transmission Line Siting Committee voted unanimously to approve the Certificate of Environmental Compatibility (CEC) for the Agua Fria Gen-Tie Project.

The ACC voted to approve the CEC for the Agua Fria Gen-Tie Project on May 8, 2025.

Yavapai County Process

The Project will consider public feedback and prepare a full application based on the Solar Ordinance which became effective in December 2024. The Project expects to submit this application in early 2025. The County Board of Supervisors will have final authority to approve the project as a permitted land use. The County permitting process is expected to take 6-9 months.

Supplemental Project Materials +

Submit Comments

Contact us at aguafria@longroadenergy.com or by calling 1-833-367-7889.



Agua Fria Solar and Gen-Tie Project

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Intro

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Agua Fria Solar and Gen-Tie Project created an online **event**.
15m ·



Mon, Jan 27 - Jan 30
In person and virtual Open Houses
1 person going

Like | Comment | Share

Agua Fria Solar and Gen-Tie Project created an online **event**.
December 2, 2024 ·



Thu, Dec 12, 2024
LIVE Virtual Open House
16 people interested

Like | Comment | Share

Agua Fria Solar and Gen-Tie Project
December 2, 2024 ·

Longroad Energy is developing the proposed Agua Fria Solar and Gen-Tie Project (Project) which includes an approximately 1-mile 500 kV transmission line gen-tie that will connect the Agua Fria Solar and Storage Project to the regional grid at the existing Dugas Substation.

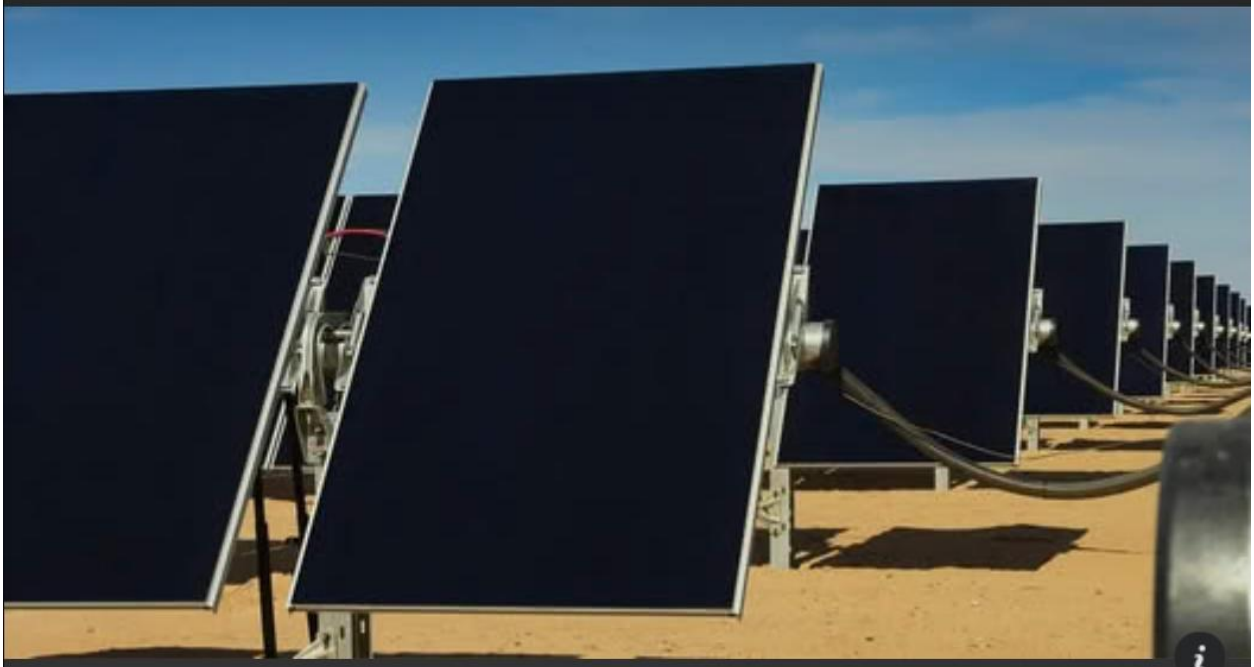
The Project will transmit renewable energy from the proposed Agua Fria Solar and Storage Project to the regional transmission grid. The storage component will also provide ancillary grid services which wil...
See more



Agua Fria Solar and Gen-Tie Project's Post

Agua Fria Solar and Gen-Tie Project
January 28 at 11:22 AM ·

Longroad Energy invites you to one of three upcoming Open Houses for the Agua Fria Solar and GenTie Project. On Tuesday, January 28, join us in person at the Cordes Lakes Community Center (4:30 p.m.), or on Thursday, January 30, for one of two virtual meetings (Noon and 5:30 p.m.). Please tap/click the link below to sign up for this opportunity to learn more about the project.



SIGNUPGENIUS.COM
Agua Fria Solar, Storage and Gen-Tie Project - Longroad Energy
Longroad Energy is developing the proposed Agua Fria Solar and Gen-Tie Project (...

Sign up

See insights and ads

Boost post

14

Like Comment Send Share

Exhibit 5

Open House Presentations Materials and Summaries

Agua Fria Solar and Gen-Tie Project

Open House

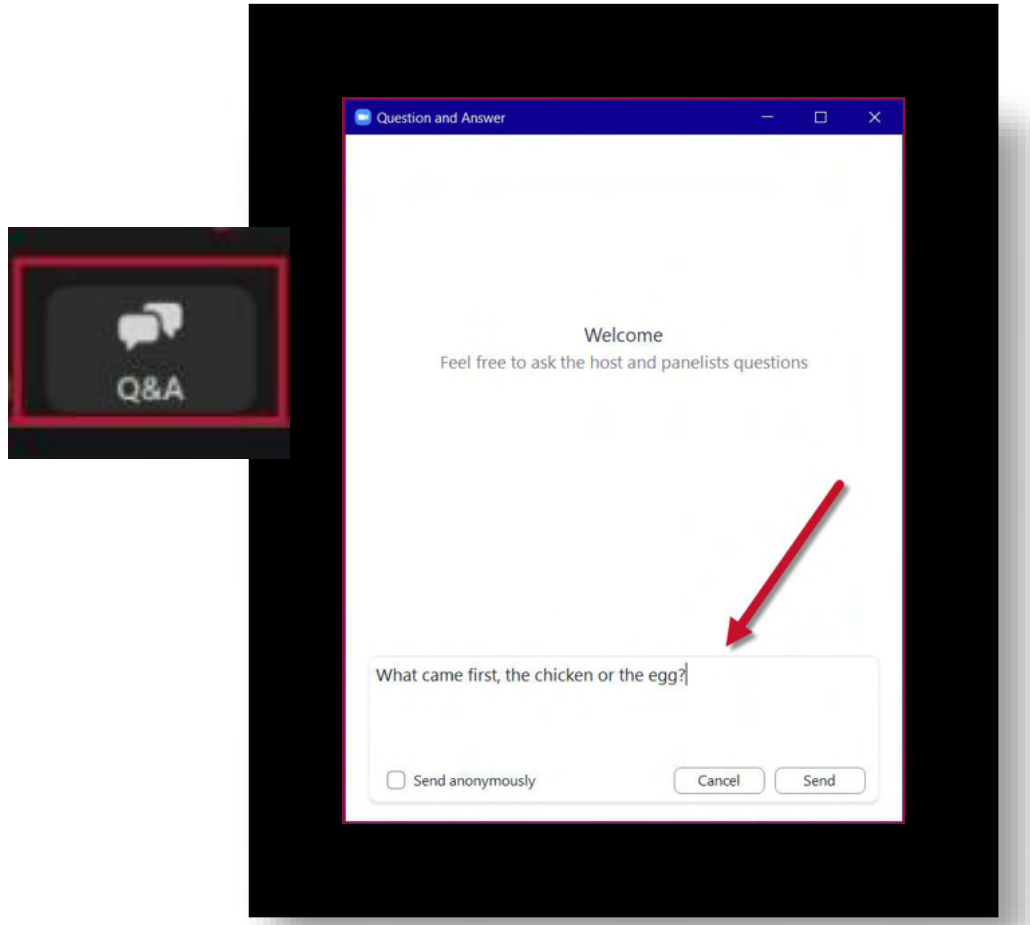
Agenda

- Introduction to Longroad Energy
- Project Description
- Environmental and Permitting Process
- Q&A

Questions

- Use the Q&A Feature to type in questions
- Can ask questions throughout the presentation
- We will respond to as many questions as we can

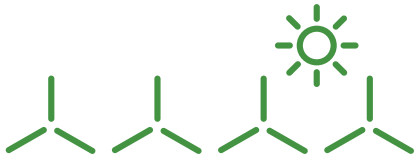
Click "Q&A" at bottom of screen



Who are we?

LONGROAD ENERGY

We are developers, owners and operators of renewable energy with a proven track record



EXPERTISE

Core team has **worked together for more than 15 years**

Developed **20+ renewable energy projects totaling 4.9 GW**

We have signed **4 GW of corporate and utility PPAs** within last five years

Long history of raising third-party capital, Longroad has raised over $14.6 B from more than 20 institutions



SUPPORT

Backed by **experienced and committed** investors with long-term goals

Longroad's is principally funded by four groups that **collectively manage over $400 billion**
- **New Zealand Super Fund**
- **Infratil**
- **MEAG**
- **Longroad Energy Partners**

We have the knowhow to bring all projects to completion and **ensure long-term operation**



OPERATIONS

We **own and operate projects** in more than 10 states

We built a world class operations and asset management 24/7/365 **Remote Operations Center (ROC) in Portland, Maine**

We manage the entire scope: Our ROC **works around the clock**, backed by experienced asset management, on-site technical support, and full back-office support.

Longroad brings an **owner's mindset** to the management of all projects, including those owned by third-parties. We manage 3.5 GW of Longroad-owned project, and 1.9 GW on behalf of third-parties



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Longroad Energy in Arizona

- US-based developer, owner and operator of large utility scale solar and battery energy projects in Arizona
- In 2024, Longroad successfully completed construction of a 285 MWdc solar project in Maricopa County. Longroad has 3 additional large-scale renewable projects under construction in Maricopa, Pinal and Pima counties.
- Longroad has more than 5,000 acres of land under lease from the Arizona State Land Department. The revenue from these leases directly benefits Arizona public schools.



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Project History

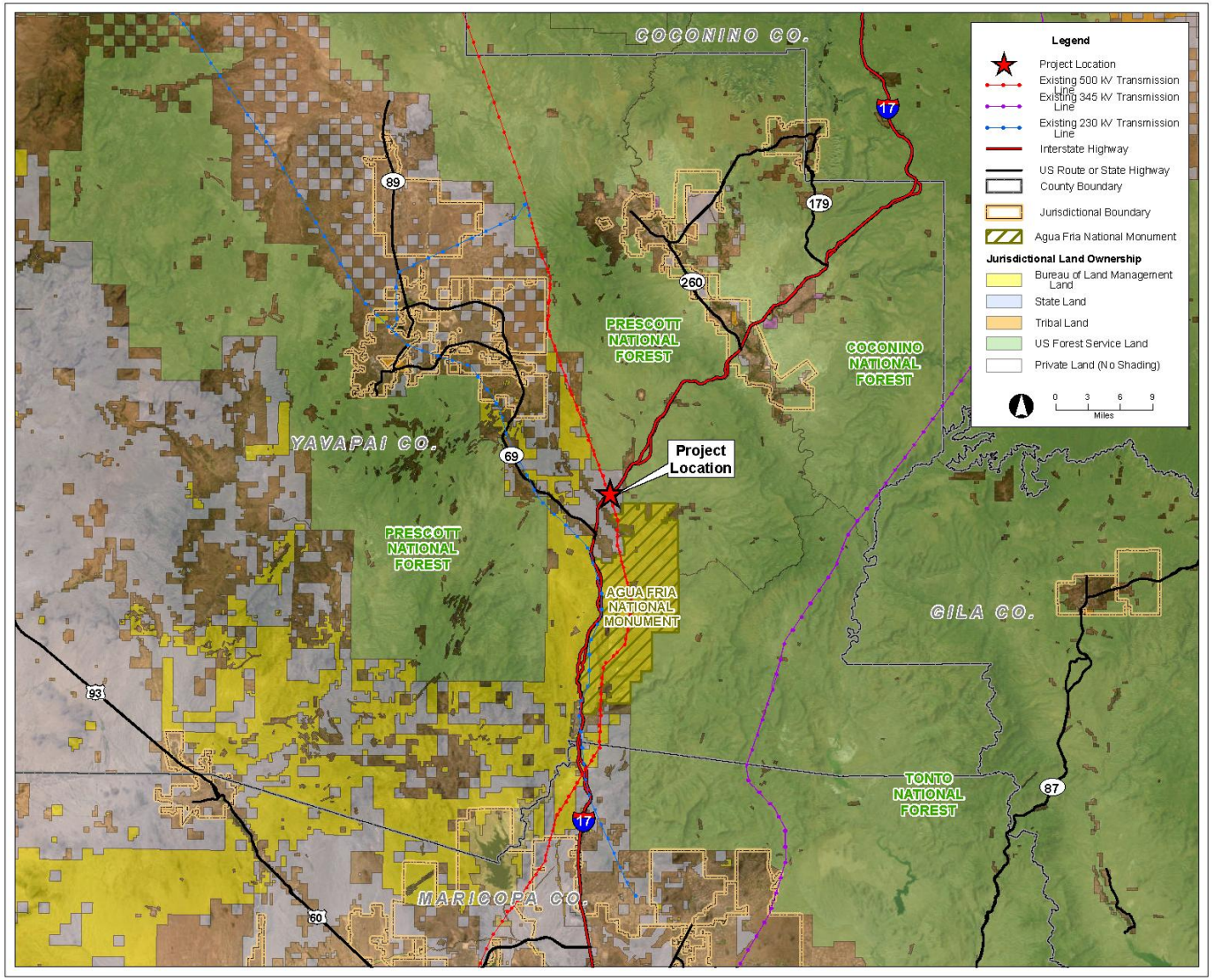
Project Timeline

- 2020 – Project development initiated
- November 2023 - Solar Lease signed with Arizona State Land Department
- August 2024 - Longroad acquired the Project from Candela
- 2025 – Permitting process with the ACC and Yavapai County
- 2026-2028 – Anticipated start of construction

Project Description

Agua Fria Solar and Storage Project

- Located in unincorporated Yavapai County
- ~ 4,215 acres of Arizona State Land under lease
- Project will connect to existing 500 kV facilities in the Project Area via a short gen-tie line
- The Project will transmit **renewable energy** to the regional grid & support **grid reliability**



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Project Components

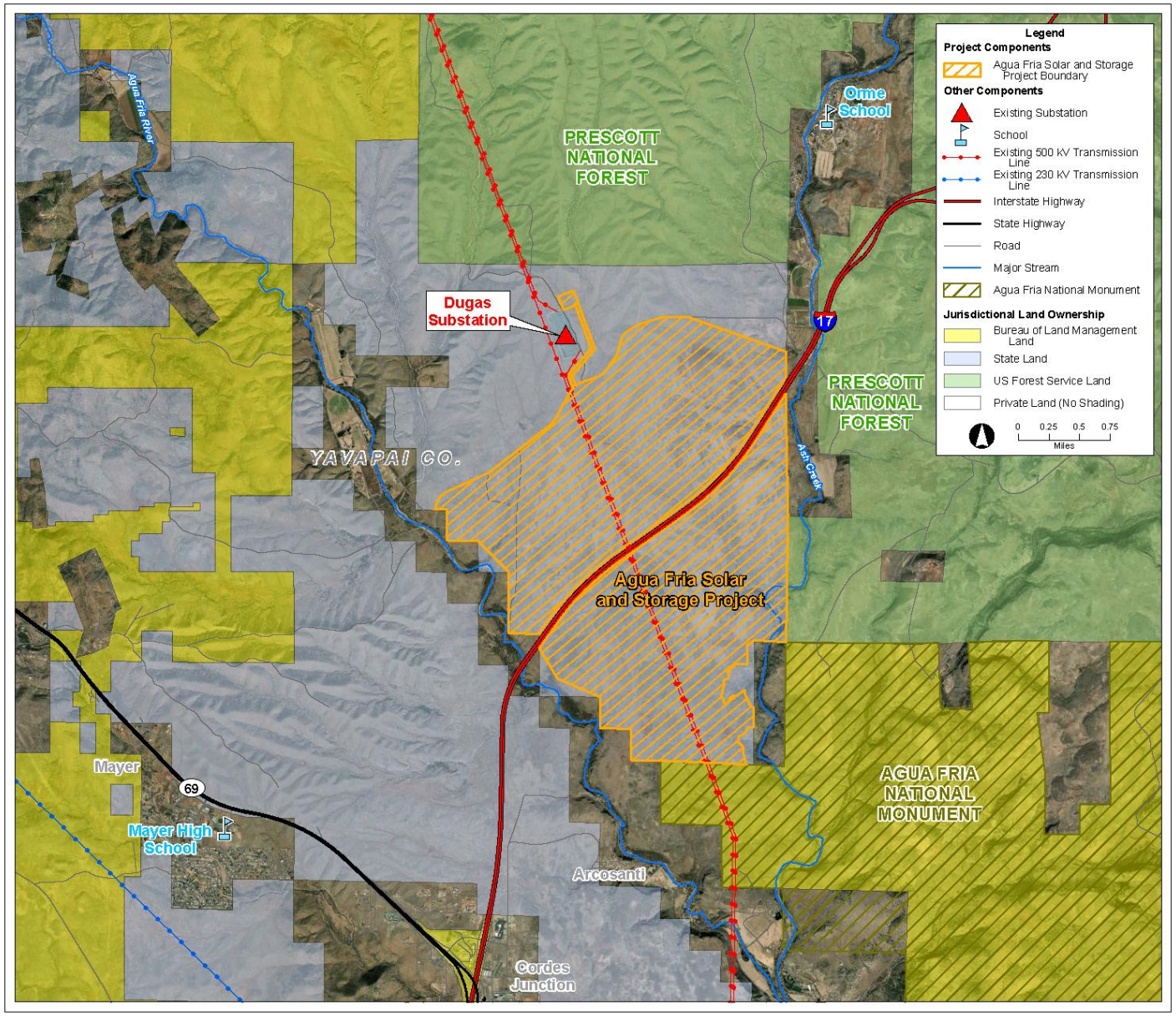
CEC Jurisdictional Component

- **Gen-tie to connect the Project substation to the existing transmission network**

Additional Components

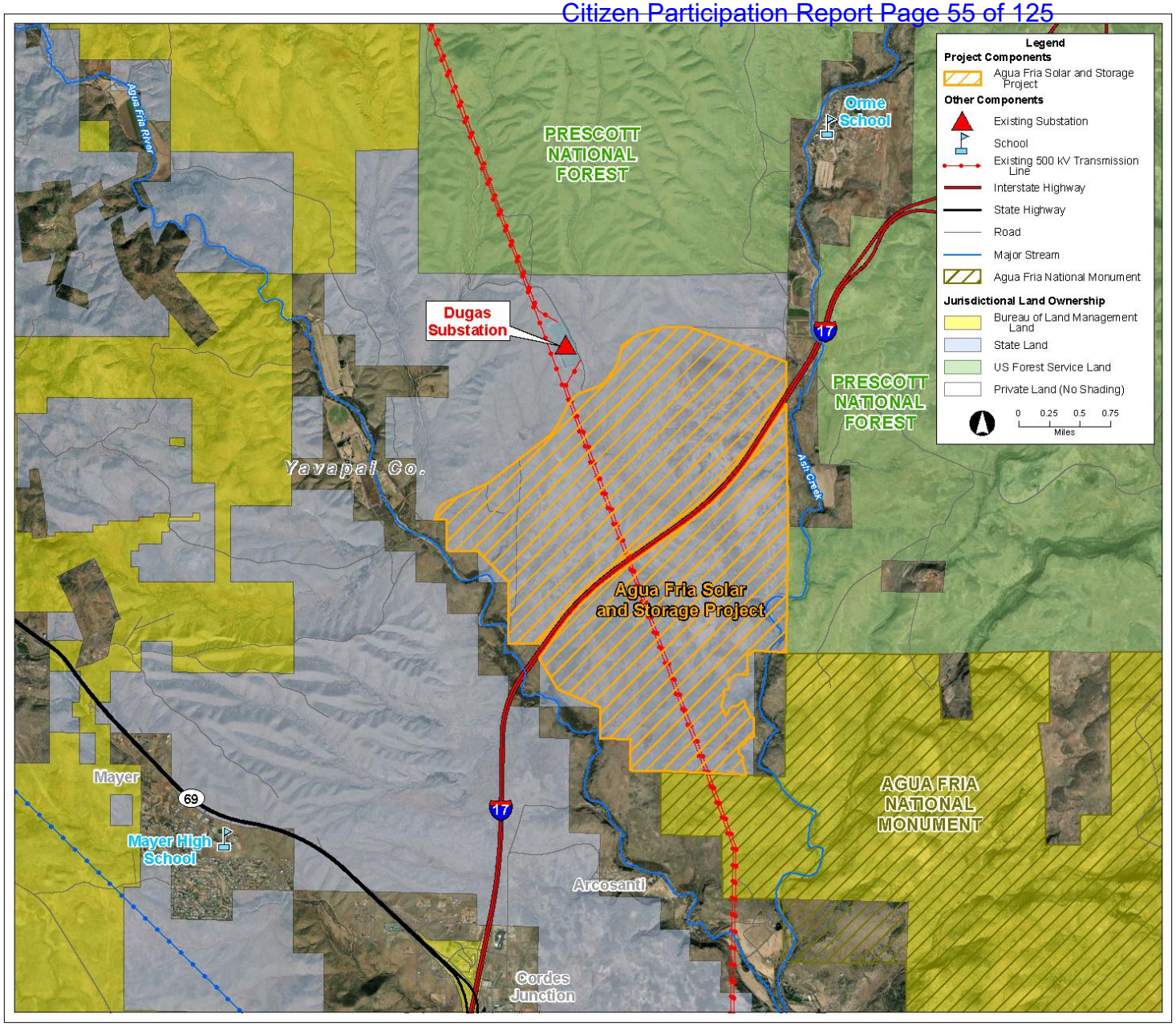
- Solar field of photovoltaic modules
- Inverters and medium voltage collection lines
- On-site Project substation
- Battery energy storage system (BESS)
- Operation and maintenance building

Project Extent



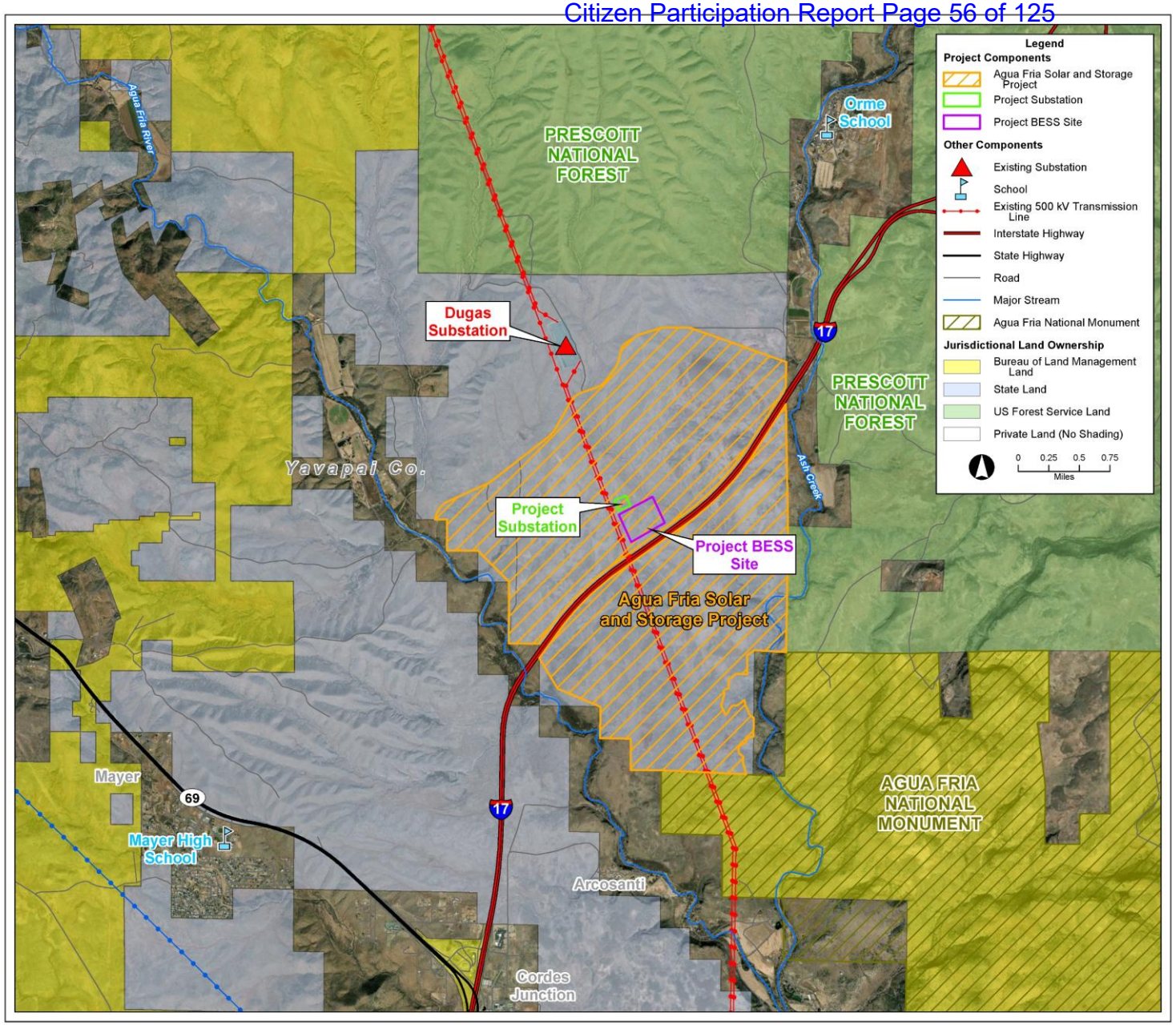
Solar Area

- Field of photovoltaic modules with medium voltage collection lines
- Will produce up to 450 MW of clean solar power
- Solar PV area is within Yavapai County jurisdiction and will submit permit applications to the County in compliance with the County's new Solar Ordinance process
- Project is sited on Arizona State Land under a solar lease
- Approximately $36 million in revenue will be paid to Arizona public schools over life of project



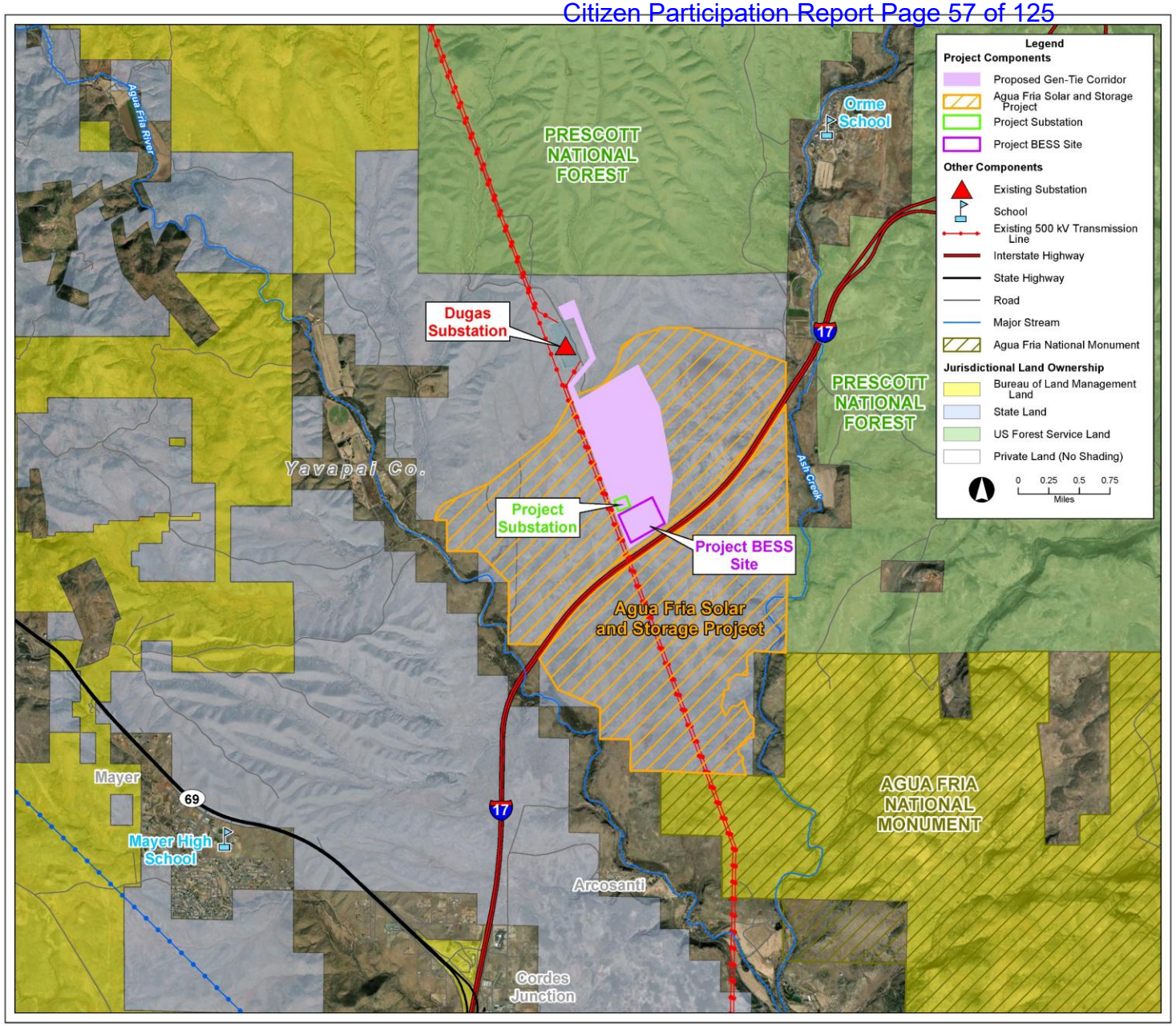
Additional Components

- On-site Project Substation
- Battery Energy Storage System (BESS)
  - Will provide 450 MW of energy storage capacity
  - Improve energy grid reliability



Gen-Tie

- Generation Tie Line (Gen-Tie)
  - 500 kV overhead gen-tie line
  - Co-located with existing transmission lines
  - Will connect the Project to the existing regional energy grid at APS Dugas Substation
  - APS is the service provider for all of Yavapai County



Environmental

Commitment to the Environment

- Natural, cultural, social assessments for all Longroad projects
- Coordinating with Audubon Society
- Coordinating with Arizona Game and Fish, US Fish and Wildlife Service
- Environmental consulting expert reviews
- Identify potential impacts during risk assessment
- Design best management practices for construction and operation
- Commitments are included in construction contracts
- Every project has a wildlife conservation plan (WCS)

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Detailed Studies

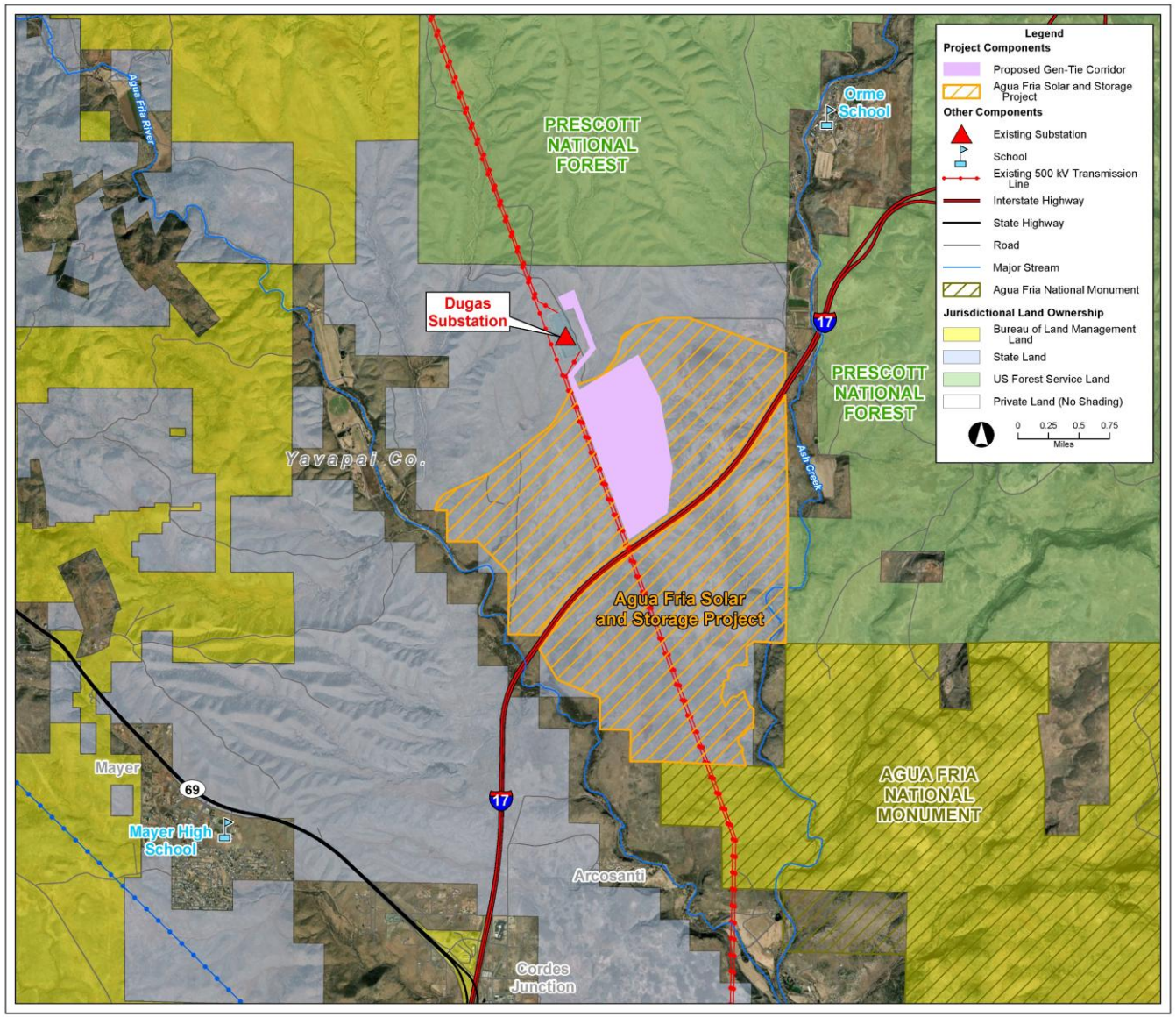
- Wetlands and ephemeral washes
- Threatened and Endangered Species studies
- Big game migration assessment
- Cultural (archaeological) resources investigation
- Noise analysis
- Visual and viewshed analysis

Wildlife Conservation Strategy

- Includes assessment of all wildlife and wildlife habitat in project area
  - T&E Species
  - Big game
  - Vegetation
  - Wetlands and ephemeral washes
- Best management practices
  - Identifies area for avoidance (wetlands, washes)
  - Includes big game corridors through project arrays
  - Vegetation management during construction and operations
  - Wildlife-friendly species and management techniques

Project Permitting Next Steps

- Certificate of Environmental Compatibility with Arizona Corporation Commission for the Gen-Tie
  - Additional open house to be scheduled in early 2025
- Yavapai County Permitting Process and Site Plan Approval
  - Separate process from the gen-tie CEC permit
  - The Public will be noticed according to County requirements in early 2025
  - Open house to be scheduled in early 2025

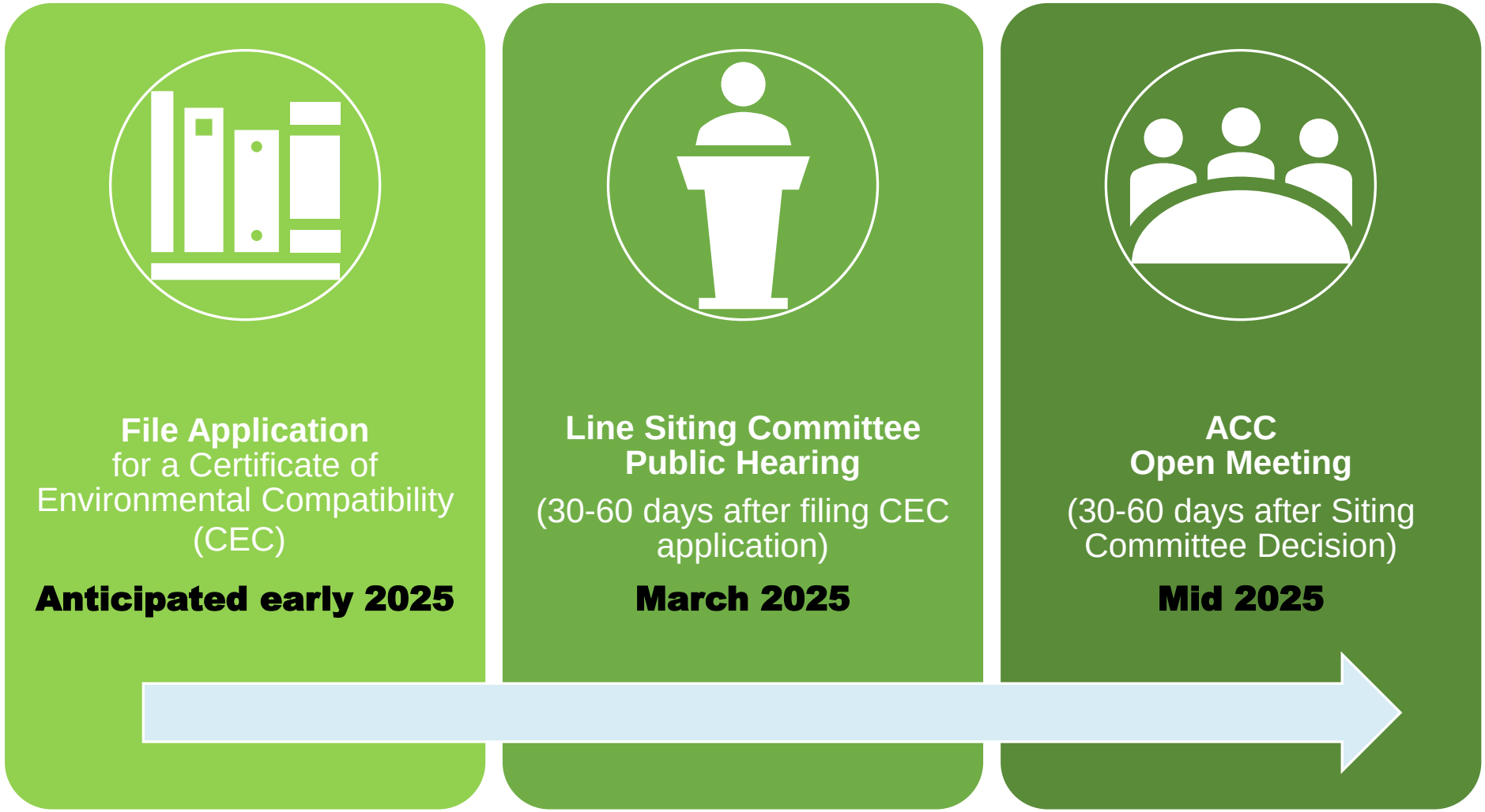


CEC Environmental Analysis

- Biological Resources
- Cultural and Historical Resources
- Land Use
- Noise
- Recreation
- Visual and Aesthetics



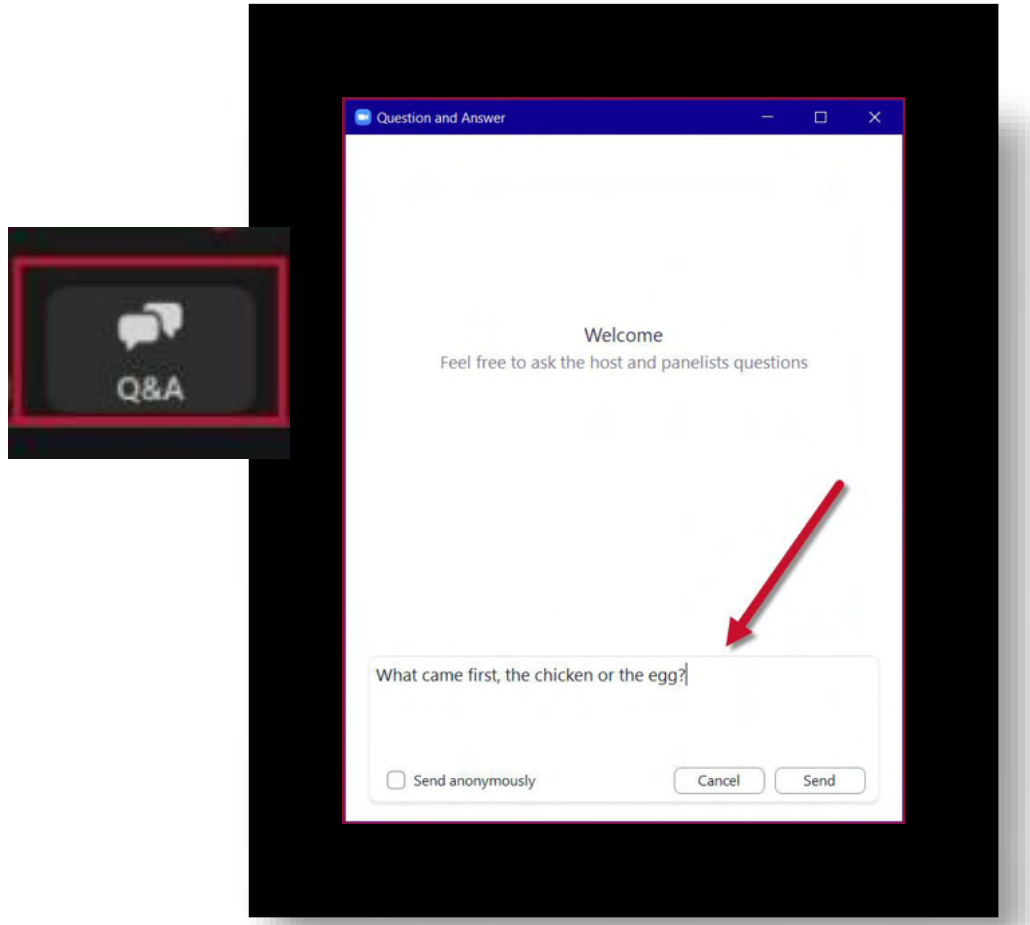
Arizona Corporation Commission (ACC) Siting Process



Questions

- Use the Q&A Feature to type in questions
- Can ask questions throughout the presentation
- We will respond to as many questions as we can

Click "Q&A" at bottom of screen



Project Information Line:
1 (833) 367-7889

Project Website:
longroadenergy.com/agua-fria

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Longroad Agua Fria Solar and Gen-Tie Project
Virtual Open Houses Summary

December 12, 2024

Time: 12:00 pm
Registered: 42
Attended: 21

Time: 5:30 pm
Registered: 31
Attended: 14

Panelists:
Alyssa Menzel, Longroad Energy
Deron Lawrence, Longroad Energy
Steve Morgan, KP Environmental

Open House Summary:

- KPE facilitated the meeting
- Longroad Energy presented information about the program and a short PowerPoint presentation
- KPE solicited questions through the Zoom Q&A feature and panelists answered them verbally
- 35 people attended; 21 in session 1 and 14 in session 2.
- 48 questions/comments were submitted through the Q&A feature; 31 in session 1 and 17 in session 2.

The questions/comments submitted are listed verbatim below:

Session 1

- Will, and if so when, will Longroad be in contact with neighboring land owners?
- Are these 4,215 acres flat and if not what kind of terrain is it and what kind of grades are you running into?
- How will this affect the various antelope herds that roam that area? Fenced vs open for roaming and grazing within the panel areas?
- Do you have a firm understanding with APS as to what I believe are called Open Access Transmission Tariffs? I've heard rumors of APS wanting $100 million from Candela in this regard for this project.
- Will the solar panels be visible from the 17?
- Why is the Project BESS site so large?
- Candella promoted a minimally invasive installation process. Will Longroad be adopting these methods?

- How far along in the solar facility design is Longroad? Has Longroad made any changes to the design since the project was bought?
- Will a copy of this slide deck be available to share to others unable to attend today?
- You didn't share any detail about the Wildlife Conservation Plan - when will you share that?
- What is the reasoning for including portions of Ash creek within the proejct footprint? This reach does have portions of perenial water and is an important movement corridor for wildlife too easily access the AFNM.
- Will your report include existing water, water movement, etc. and how the solar field will interact with those elements.
- I've heard lots of anti-solar Fear mongering at meetings related to Yavapai County Ordinance. Two Questions here: 1) are you considering finding alternatives to lithium batteries. Might you work with Boston based Form Energy in using their promising iron-air technology? 2) Can you do your vegetation management with herbicides?
- Do you plan on doing a pronhorn antelope presence survey?
- Who are the environmental consultations that you have hired?
- Will the panels be stationary?
- vs. tracking..
- I have seen Candela make note of Antelope migration on this project, but as someone that unfortunately lives within sight of this project, there are no Antelope.
- Is any offsite mitigation being considered for lost wildlife habitat?
- Candela discussed minimal site disturbance; vegetation management with sheep; little or no herbicide use.
- Given the story in the AZ Mirror earlier in week, might the Trump Administration trying to kill the IRA subsidies for renewable energy seriously impact financing this project of yours in Yavapai County and its moving ahead?
- We will want large wildlife to have access to the water resources within the project area.
- How will Long Road engage with the local community throughout the project. Will there be any in person community engagement with the community.
- Where can we get a copy of the new county grading ordinance
- Will your PV arrays be able to sense the approach of dangerous thunderstorms with damaging hail and move them safely out of the way?
- This is a very large area, will small wildlife be able to transverse the entire panel area?
- Are sensitive archeological sites being identified and protected?
- Send ordinance to Karl@om.com
- Please provide the county ordinance: showard@azcec.us
- Is there any media available that might show what a facility like this looks like in the afternoon since since these will be tracking panels? My property is directly in line with the setting sun and the facility.
- Thank you.

Session 2

- Some of my thoughts:
  - Agua Fria National Monument contains rich Yavapai history, and this adjacent area is part of their homelands as well. I would like to hear about your work with the Yavapai-Apache Nation, Ft. McDowell Yavapai Nation, Yavapai-Prescott tribe, or others.
  - I am curious if this can be a multi-use landscape-- maybe land conservation under or adjacent the panels.
  - I am interested in impacts to viewsheds at Arcosanti and the mesa tops at AFNM.
  - I would love to hear the general thoughts/feelings of others you've gathered so far, especially the Audubon.
- How will the size of the AF project compare with other Longroad projects in AZ, in the US?
- How long will it take to build the project? Will it be constructed in phases?
- The landscape on the mesas is susceptible to promulation of exotic and invasive plant species such as mustard, brome, oats, and stinknet. These in turn promote wildfire. What is the plan to control that risk?
- Could the GenTie be constructed in such a way to facilitate a wildlife corridor(s) and to reduce the risk of a massive fire across the landscape?
- How does this benefit the people of Yavapai county? APS gets a break, y'all get paid, and the people of Yavapai county lose more of their public land and still pay high premiums.
- What you see today's drought impacted landscape is very different than the amount of vegetation that occurs during a normal wet year.
- Just schools within Yavapai benefit or all of arizona?
- Still no benefits directly to the community then
- The washes are highly dynamic in terms of the water and sediment carried. They also serve as important wildlife corridors. How wide will the corridors be?
- Will there be opportunities for members of the general public to visit the grounds? on tours etc.
- Will grassland wildlife and bird surveys be conducted in the various seasons to gain an appreciation for the variety of species?
- Has aps released on how they're going to use this power or any relief efforts for the communities for their already high premiums?
- I appreciate your time and thought in all of this. It's hard to see change coming to a landscape I care for very much, but I am trying to think about it as an opportunity as well. I am interested to see how things develop, especially as you and your partners experiment with different management strategies.
- The AFNM is a dark sky monument. WIll there be light pollution issues associated with the project?
- The new Ordinance caps individual projects at 3,000 acres. Will Longroad use just 3,000 acres of the 4200 for panels, BESS and maintenance buildings?
- Thx for holding this open house!

AGUA FRIA SOLAR, STORAGE & GEN-TIE PROJECT

WELCOME

Please Sign In

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AGUA FRIA SOLAR, STORAGE AND GEN-TIE PROJECT

OPEN HOUSE

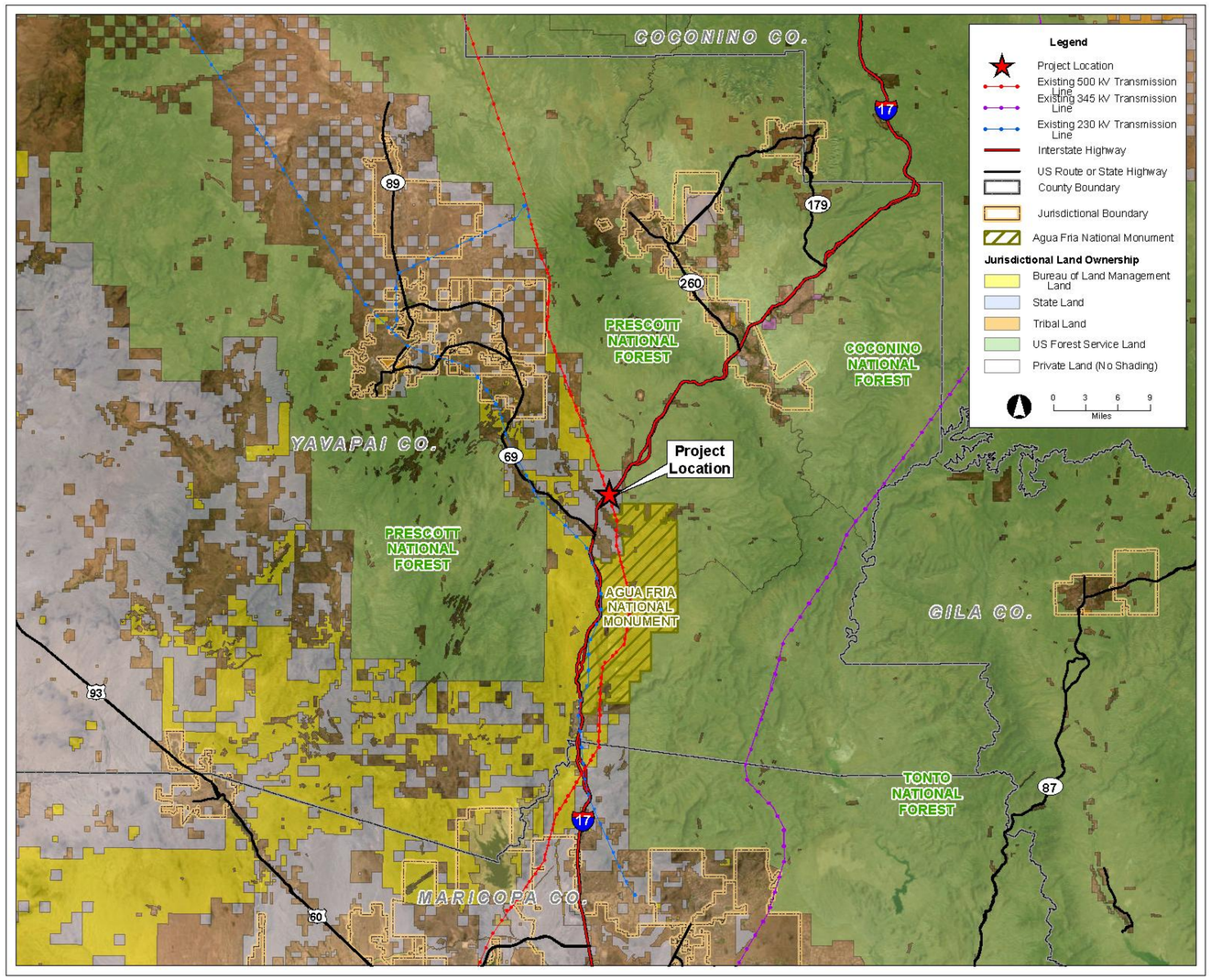
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AGUA FRIA SOLAR, STORAGE & GEN-TIE PROJECT

Project Overview

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PROJECT OVERVIEW



- The Project will transmit renewable energy to the regional grid & support grid reliability.
- Sited on +4,200 acres of State Trust Land in Unincorporated Yavapai County.
- Approximately $36 million in revenue will be paid to Arizona public schools over the life of the project.
- Project will produce up to 450MW of clean solar power and battery energy storage:
  - Permitting Phase: 2025
  - Construction Start: 2026-2028

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LONGROAD ENERGY IN ARIZONA

- US-based developer, owner and operator of large utility scale solar and battery energy projects in Arizona.
- Successful Construction:
  - Completed construction of 285 MW solar in Maricopa County (2024).
  - Three additional projects under construction in Maricopa, Pinal and Pima Counties.
- More than 5,000 acres of Arizona State Trust Land under lease, directly benefiting Arizona public schools.



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PROJECT HISTORY TIMELINE

2020

Project development initiated

2023

Solar lease signed with Arizona State Land Department

2024

Longroad Energy acquired the Project from Candela

2025

Project permitting

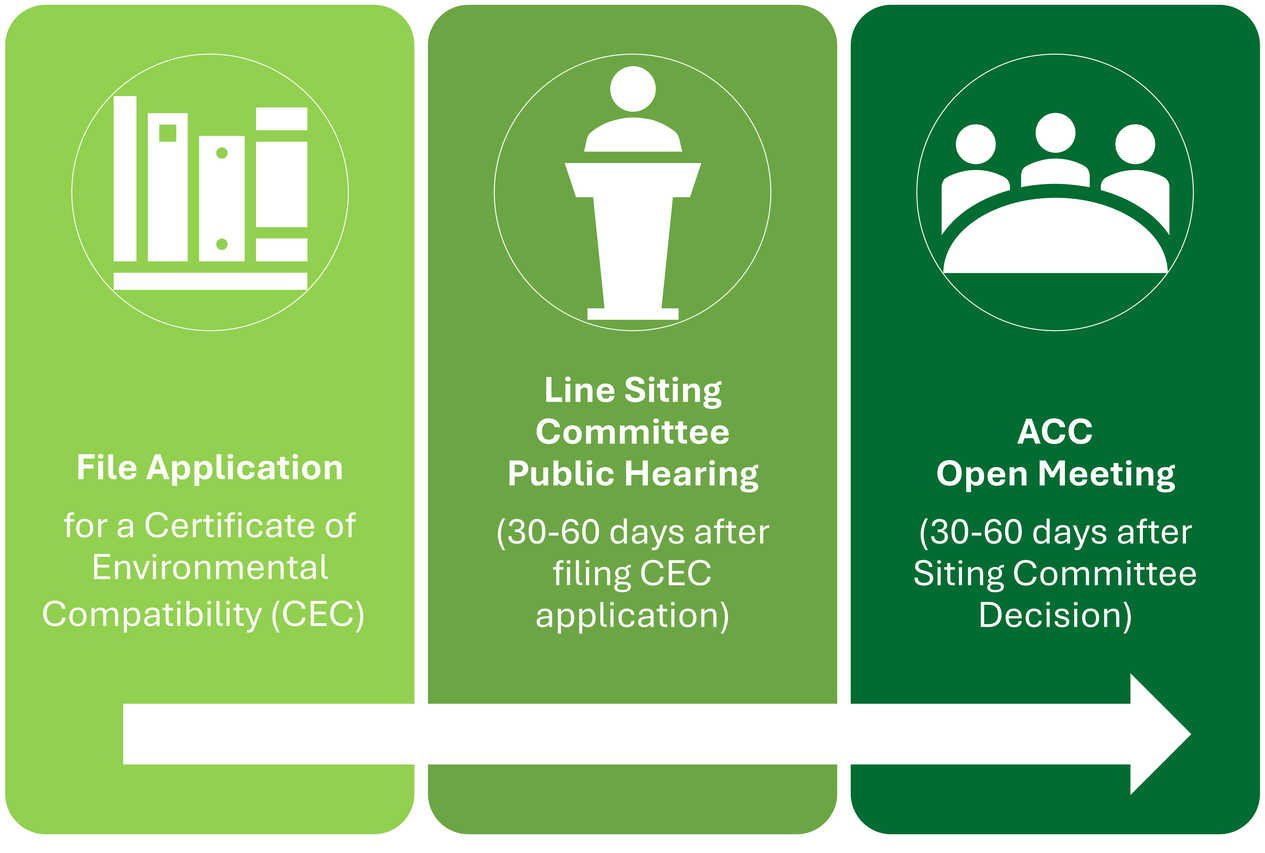
2026 - 2028

Anticipated start of construction

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ACC GEN-TIE SITING PROCESS

This process applies only to the approximately 1.8-mile gen-tie line.



ARIZONA CORPORATION COMMISSION PROCESS INFORMATION

APPLICATION FILING: First Week of February 2025

LINE SITING COMMITTEE OPEN HEARING SESSIONS:
Location: Mayer Recreation Center
10001 S Wicks Ave, Mayer, AZ
Date and Time: Beginning on March 17th at 1:00 PM and each subsequent day at 9:00 AM (tentative)

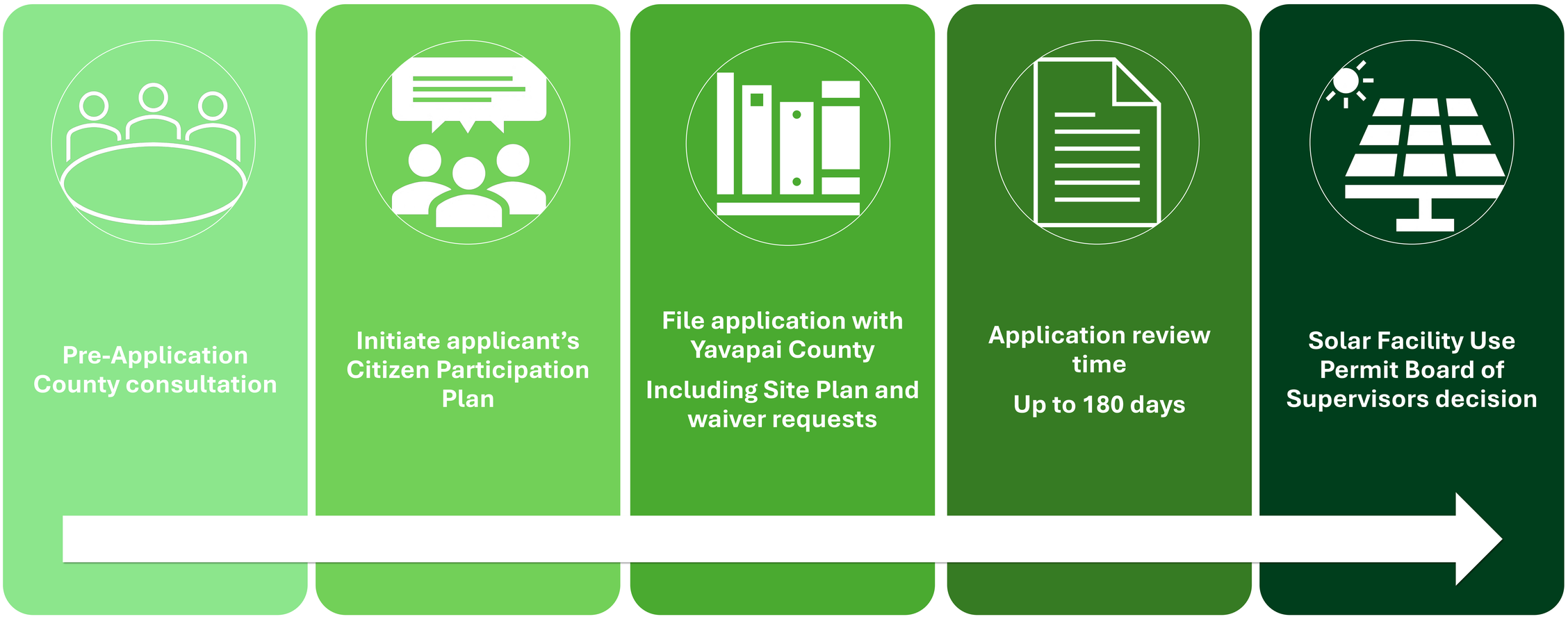
SPECIAL PUBLIC COMMENT SESSION:
Date: March 17, 2025
Time: 5:30 PM (tentative)

ACC OPEN MEETING:
30-60 days after Siting Committee Decision

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YAVAPAI COUNTY PROCESS SOLAR FACILITY USE PERMIT

This process applies only to the solar and battery energy storage facilities.



This process follows the Yavapai County Solar Ordinance guidelines effective December 2024.

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AGUA FRIA SOLAR, STORAGE & GEN-TIE PROJECT

Engineering & Construction

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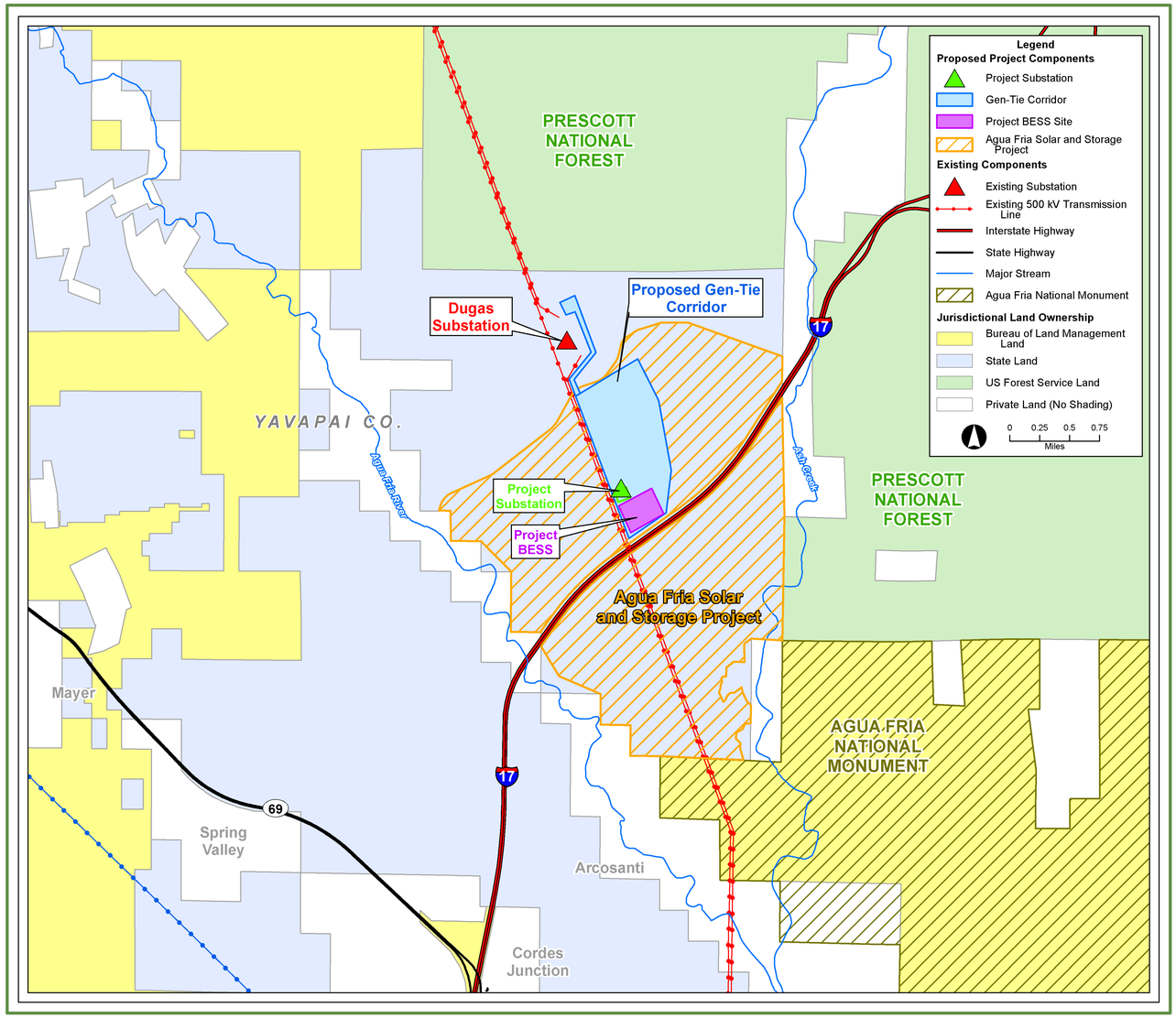
PROJECT COMPONENTS

Solar

- Field of photovoltaic (PV) modules will produce up to 450 MW of clean solar power.
- Solar PV area is within Yavapai County on State Trust Land with solar lease.

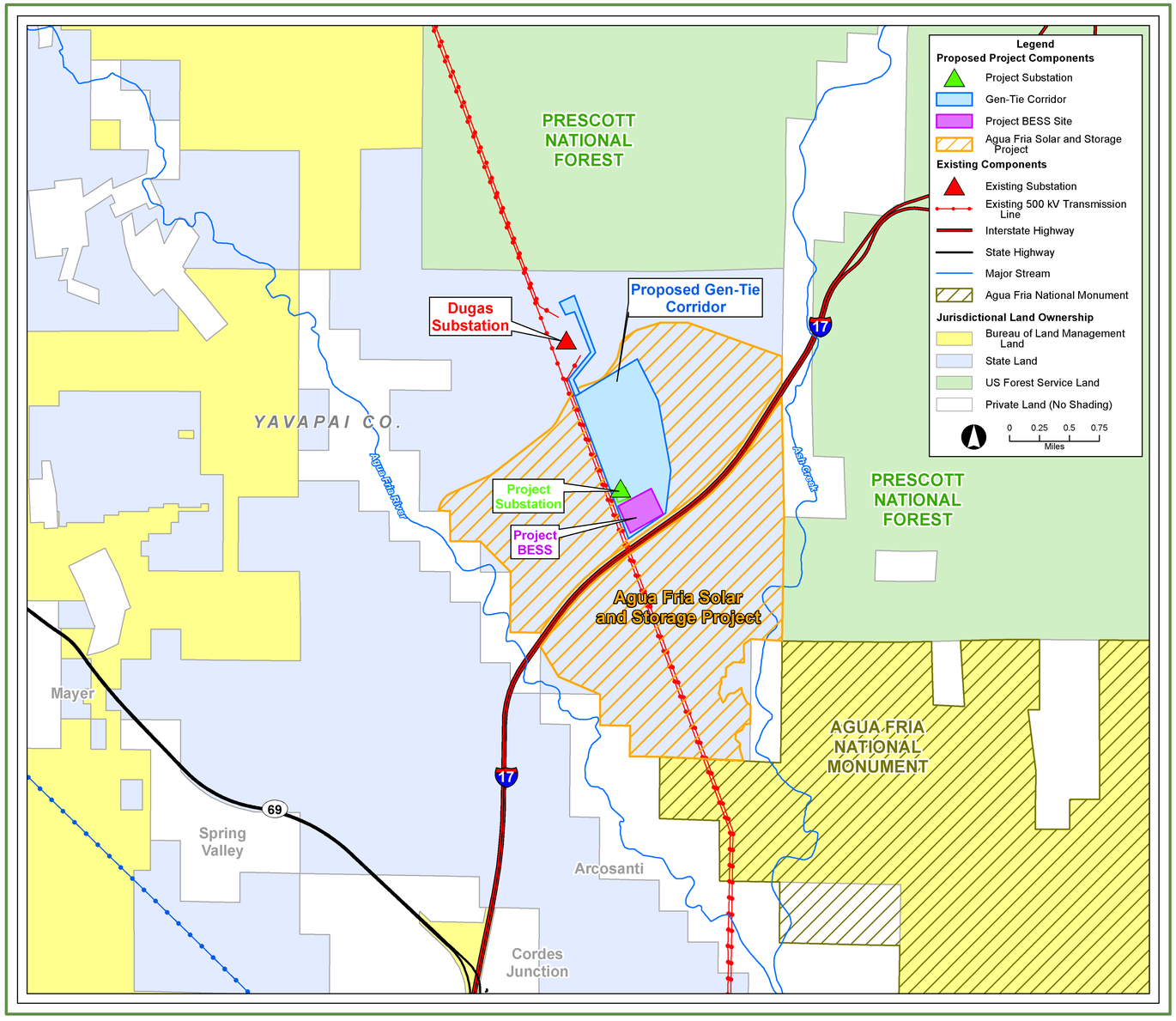
Energy Collection & Battery Storage

- On-site Project Substation.
- Battery Energy Storage System (BESS).
- Will provide 450 MW of energy storage capacity.
- Improve energy grid reliability.



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PROJECT COMPONENTS



Gen-Tie Line

- 500 kV overhead gen-tie line.
- Co-located with existing transmission lines.
- Will connect the Project to the existing regional energy grid at APS Dugas Substation.
- APS is the service provider for all of Yavapai County.

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SOLAR FIELD EXAMPLE



Photo: Longroad's Sun Streams 4 Project in Maricopa County

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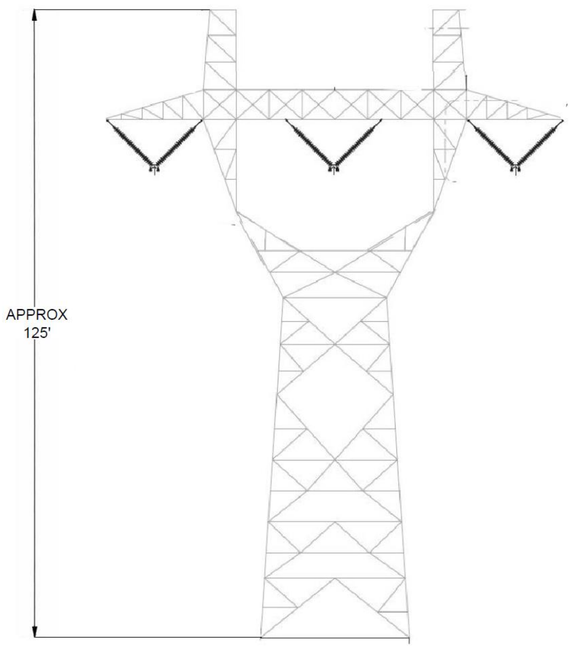
BATTERY ENERGY STORAGE SYSTEM EXAMPLE

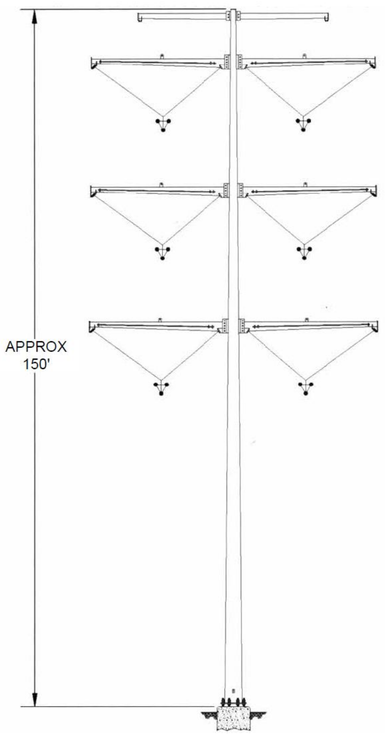


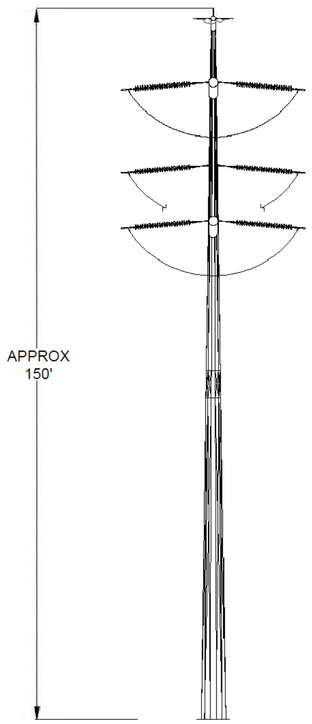
Photo: Longroad's Sun Streams 3 Project in Maricopa County

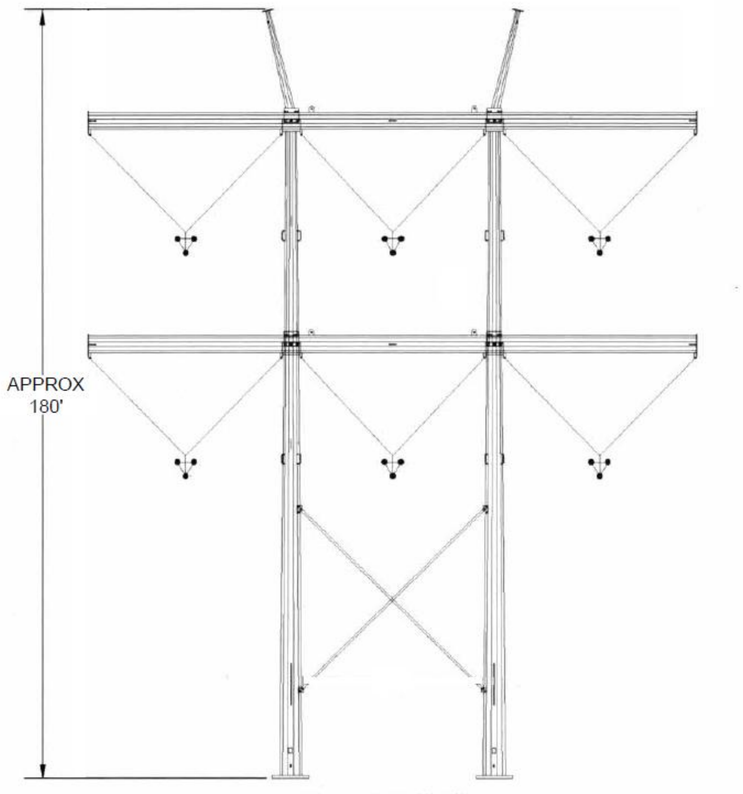
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STRUCTURE TYPES









Typical right-of-way width 250 feet

Represents typical structures. Actual structure types for this project have not yet been determined and may vary depending on location.

AGUA FRIA SOLAR, STORAGE & GEN-TIE PROJECT

Environmental

COMMITMENT TO THE ENVIRONMENT

- Projects are sited to protect and preserve essential ecosystems
- “Early and Often” coordination with AZGFD & USFWS
- Thorough environmental assessment process
- Actively engage with environmental research to stay informed about & help advance techniques to support environmental practices
- Uphold & comply with environmental laws and regulatory guidelines
- Minimize conflict with wildlife during construction & operation
- Environmental commitments are included in construction contracts
- Wildlife Conservation Strategy & Vegetation Management Plan

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DETAILED ENVIRONMENTAL STUDIES

Wetlands and Aquatic Resources

Cultural (Archaeological) Resources Investigation

Visual and Viewshed Analysis

Threatened and Endangered Species Studies: Recon & Protocol Level Surveys

Noise Analysis

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WILDLIFE CONSERVATION STRATEGY





INCLUDES ASSESSMENT OF WILDLIFE AND WILDLIFE HABITAT IN PROJECT AREA

- Threatened & Endangered species habitat assessment
- Reconnaissance and protocol level surveys
- Soil profile investigation to inform Vegetation Management Plan
- BMPs designed for avoidance and minimization





BEST MANAGEMENT PRACTICES

- Identifies areas for avoidance (wetlands and critical habitat)
- Includes big game corridors through Project arrays
- Vegetation management during construction and operations
- Wildlife-friendly species and management techniques

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AGUA FRIA SOLAR, STORAGE & GEN-TIE PROJECT

WE WANT TO HEAR FROM YOU!

Please Fill Out A Comment Form

Other Ways To Comment

Project Information Line
1 (833) 367-7889

Project Email
aguafria@longroadenergy.com

Project Website Comment Portal
longroadenergy.com/agua-fria

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PRESCOTT NATIONAL FOREST

Proposed Gen-Tie Corridor

Dugas Substation

YAVAPAI CO.

Project Substation

Project BESS

Agua Fria Solar and Storage Project

PRESCOTT NATIONAL FOREST

Ash Creek

AGUA FRIA NATIONAL MONUMENT

Arcosanti

Spring Valley

Cordes Junction

Agua Fria River

17

69

Legend

Proposed Project Components

- Project Substation
- Gen-Tie Corridor
- Project BESS Site
- Agua Fria Solar and Storage Project Boundary

Existing Components

- Existing Substation
- Existing 500 kV Transmission Line
- Existing 230 kV Transmission Line
- Interstate Highway
- State Highway
- Major Stream
- Parcel
- Agua Fria National Monument

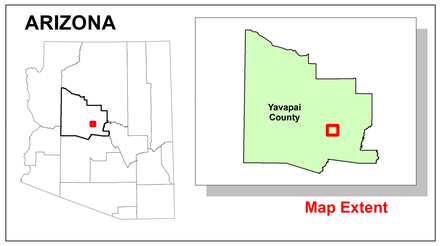
Jurisdiction

- Bureau of Land Management Land
- State Land
- US Forest Service Land
- Private Land (No Shading)

0 0.25 0.5 0.75 1
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: BLM, ESRI, Yavapai Co., USGS.

ARIZONA



Map Extent

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AGUA FRIA GEN-TIE PROJECT

Agua Fria Solar, Storage, and Gen-Tie Map

Map Extent: Yavapai County, AZ

Date: 01.13.25		Author: ckvw

Dugas Substation

Proposed Gen-Tie Corridor

YAVAPAI CO.

Agua Fria River

Ash Creek

17

O&M Building

Substation

BESS

WILDLIFE CORRIDOR

WILDLIFE CORRIDOR

WILDLIFE CORRIDOR

WILDLIFE CORRIDOR

WILDLIFE CORRIDOR

Legend

Proposed Project Components

- Gen-Tie Corridor
- Agua Fria Solar and Storage Project Boundary
- Development Area ~ 1,830 ac.
- Non-Development Area ~ 2,390 ac.
- Primary Wildlife Corridor

Existing Components

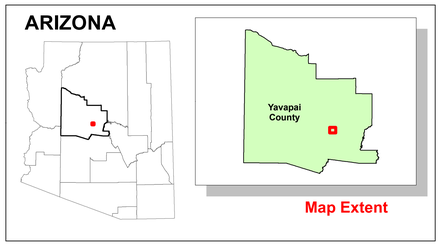
- Existing Substation
- Existing 500 kV Transmission Line
- Interstate Highway
- Major Stream

0 0.25 0.5 0.75

Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: BLM, ESRI, Yavapai Co., USGS.

ARIZONA



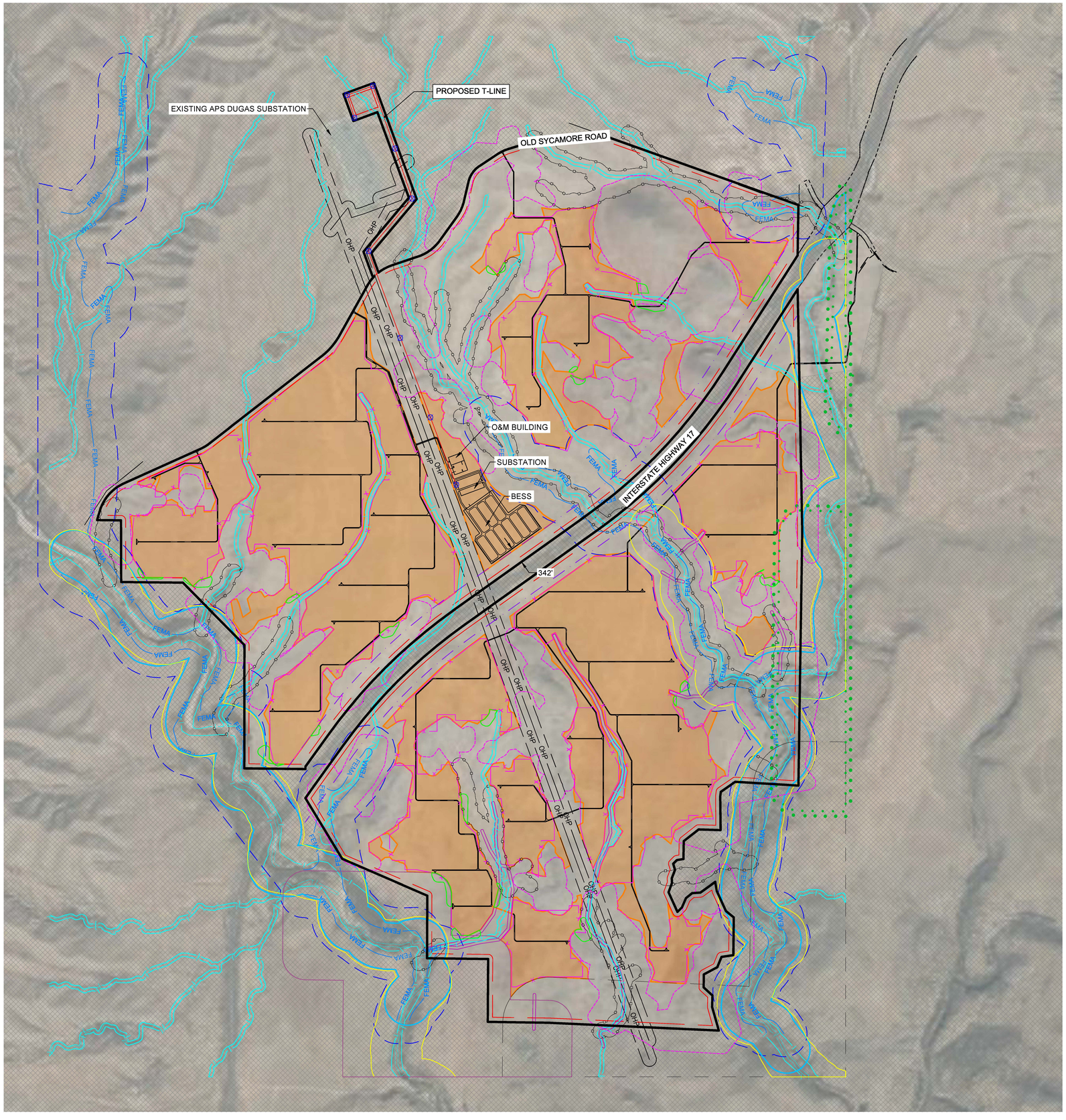
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AGUA FRIA GEN-TIE PROJECT

Primary Wildlife Corridors

Map Extent: Yavapai County, AZ

Date: 01.13.25		Author: ckvw



LEGEND

EXISTING FEATURES

- PROPERTY LINE
- EASEMENT LINE
- ROAD RIGHT-OF-WAY
- NON-PARTICIPATING BOUNDARIES
- DIRT ROAD
- ASPHALT ROAD
- VEGETATION
- FENCE
- OVERHEAD POWER
- OVERHEAD POWER POLE/TOWER
- WATERBODY
- WETLAND
- FEMA 100-YEAR (ZONE A)
- MAJOR CONTOUR
- MINOR CONTOUR

YAVAPAI COUNTY SOLAR ORDINANCE SETBACKS

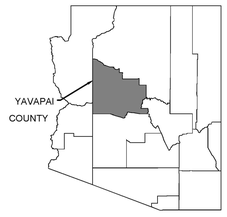
- 1000' NATIONAL MONUMENT SETBACK
- 500' INTERMITTENT STREAM SETBACK
- 500' FEMA ZONE SETBACK
- 500' NATIONAL FOREST SETBACK
- 500' CANYON/RAVINE SETBACK
- 500' ADJ. PROPERTY ZONING SETBACK
- 300' INTERSTATE ROW SETBACK
- 150' EPHEMERAL WASH SETBACK
- 150' SETBACK FROM 10% SLOPES
- 100' GENERAL PROPERTY SETBACK
- 40' STREAM SETBACK
- 5280' (1 MILE) DWELLING SETBACK

PROPOSED FEATURES

- SECURITY CHAIN LINK FENCE
- UNPAVED ROAD
- ADDITIONAL DEVELOPMENT AREA FOR BASIN GRADING
- DEVELOPMENT AREA

DEVELOPMENT AREA NOTES

1. DEVELOPMENT AREA MAP CONSTRUCTED USING THE FOLLOWING INFORMATION:
   - 1.1. SETBACK AND DEVELOPMENT AREA LINEWORK FROM CAD FILE "AGUAFRIA_FS7_540W_SG4400_101724 BIND" PROVIDED BY MCCARTHY
   - 1.2. EVS HAS NOT BEEN PROVIDED REPORTS OR CAD FILES REFLECTING THE SOURCE ENTITY OF THE SHOWN SETBACKS, ONLY THE CONSTRAINTS LINEWORK
2. SETBACKS PER YAVAPAI COUNTY ZONING ORDINANCE "SECTION 608 SOLAR FACILITIES" APPROVED NOVEMBER 6, 2024.



PROJECT

AGUA FRIA SOLAR

LOCATION

34.384909, -112.091644
MAYER, AZ

SUBMITTAL

COUNTY SUBMITTAL

SCALE

NORTH

0 1200 2400 FT

1 2 IN

DRAWING SCALES APPLY TO 22" x 34" SHEETS

SHEET NAME

DEVELOPMENT AREA MAP

SHEET NUMBER

EXHIBIT



AGUA FRIA SOLAR, STORAGE AND GEN-TIE PROJECT

OPEN HOUSE

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Agenda

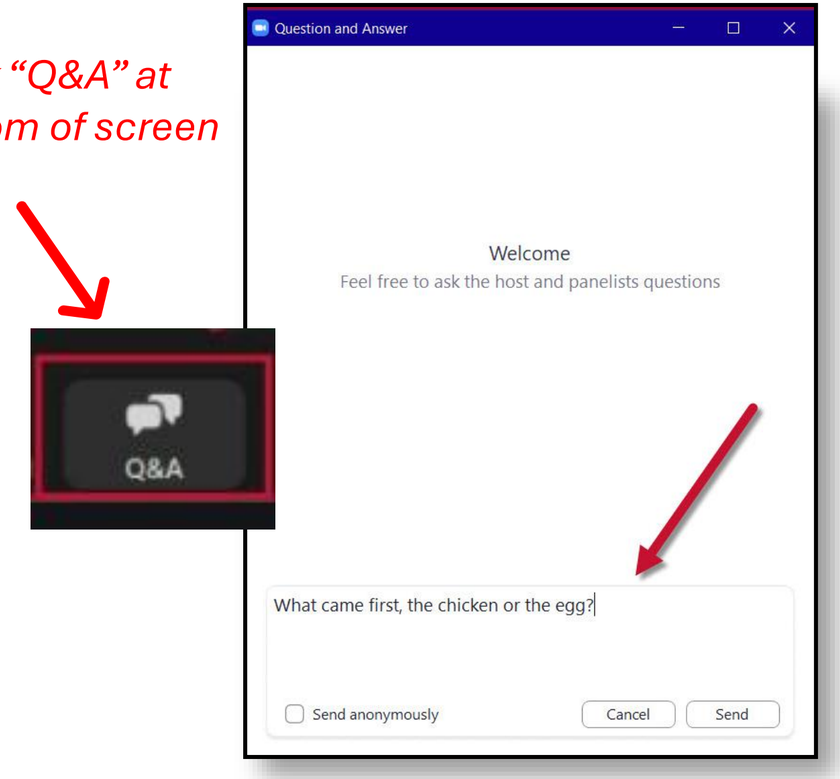
- Introduction to Longroad Energy
- Project Description
- Environmental and Permitting Process
- Q&A

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Questions

- Use the Q&A Feature to type in questions
- Can ask questions throughout the presentation
- We will respond to as many questions as we can

Click "Q&A" at bottom of screen



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Who are we?

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LONGROAD ENERGY IN ARIZONA

- US-based developer, owner and operator of large utility scale solar and battery energy projects in Arizona
- Successful Construction:
  - Completed construction of 285 MW solar in Maricopa County (2024)
  - Three additional projects under construction in Maricopa, Pinal and Pima counties
- More than 5,000 acres of AZ State Trust Land under lease, directly benefiting AZ public schools



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PROJECT HISTORY TIMELINE

2020

Project development initiated

2023

Solar Lease signed with Arizona State Land Department

2024

Longroad Energy acquired the Project from Candela

2025

Project Permitting

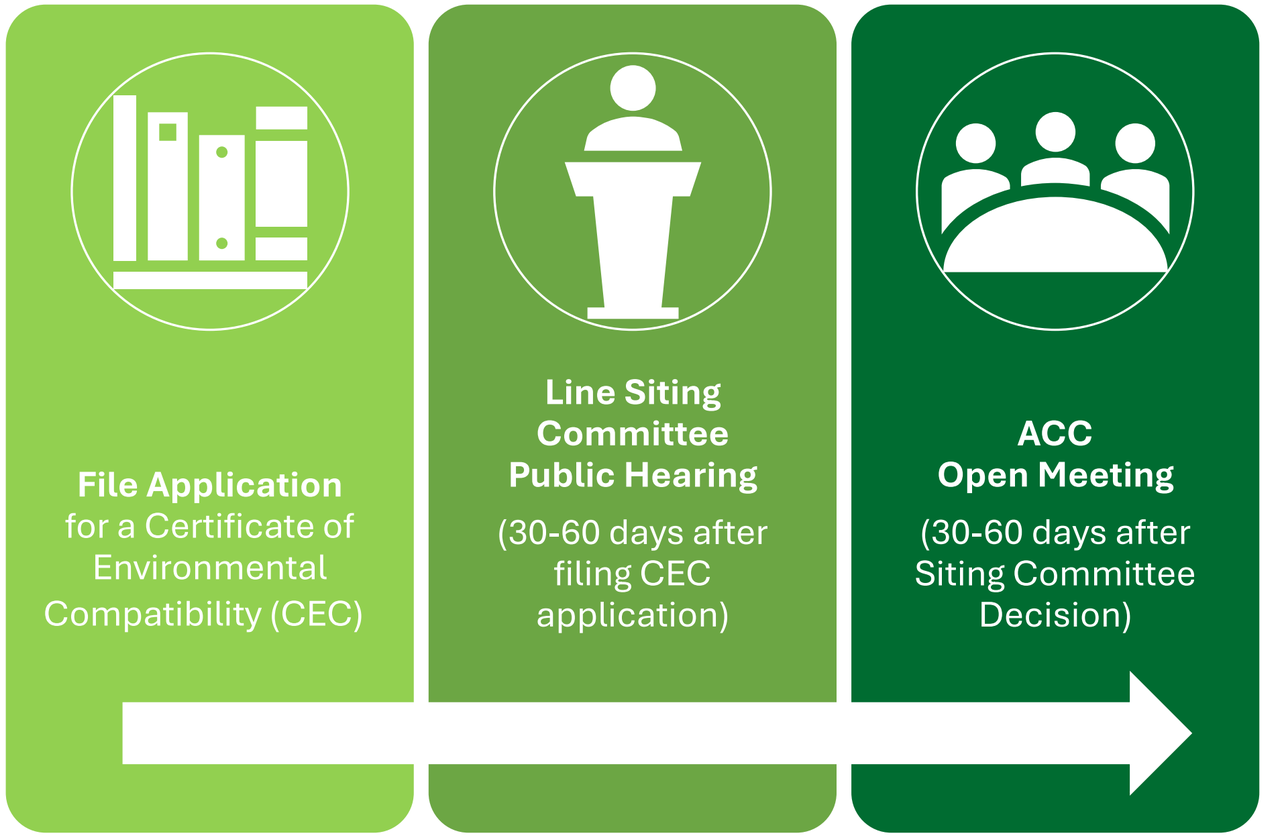
2026 - 2028

Anticipated start of construction

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ACC GEN-TIE SITING PROCESS

This process applies only to the approximately 1.8-mile gen-tie line.



ARIZONA CORPORATION COMMISSION PROCESS INFORMATION

APPLICATION FILING: First Week of February 2025

LINE SITING COMMITTEE OPEN HEARING SESSIONS:
Date: March 17, 2025 – March 19 or until complete
Location: Mayer Recreation Center
10001 S Wicks Ave, Mayer, AZ
Time: Beginning on March 17th at 1:00 PM and each subsequent day at 9:00 AM (tentative)

PUBLIC COMMENT SESSION DURING HEARING:
Date: March 17, 2025
Time: 5:30 PM (tentative)

ACC OPEN MEETING:
30-60 days after Siting Committee Decision

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YAVAPAI COUNTY PROCESS SOLAR FACILITY USE PERMIT

This process applies only to solar and battery energy storage facilities.



Pre-Application County Consultation



Initiate Applicant's Citizen Participation Plan



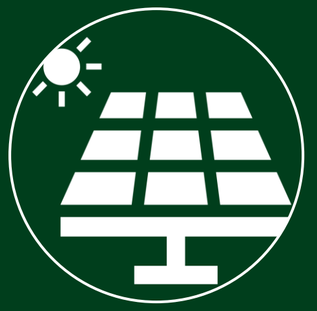
File Application with Yavapai County

Including Site Plan and Waiver Requests



Application Review Time

Up to 180 days



Solar Facility Use Permit Board of Supervisors decision

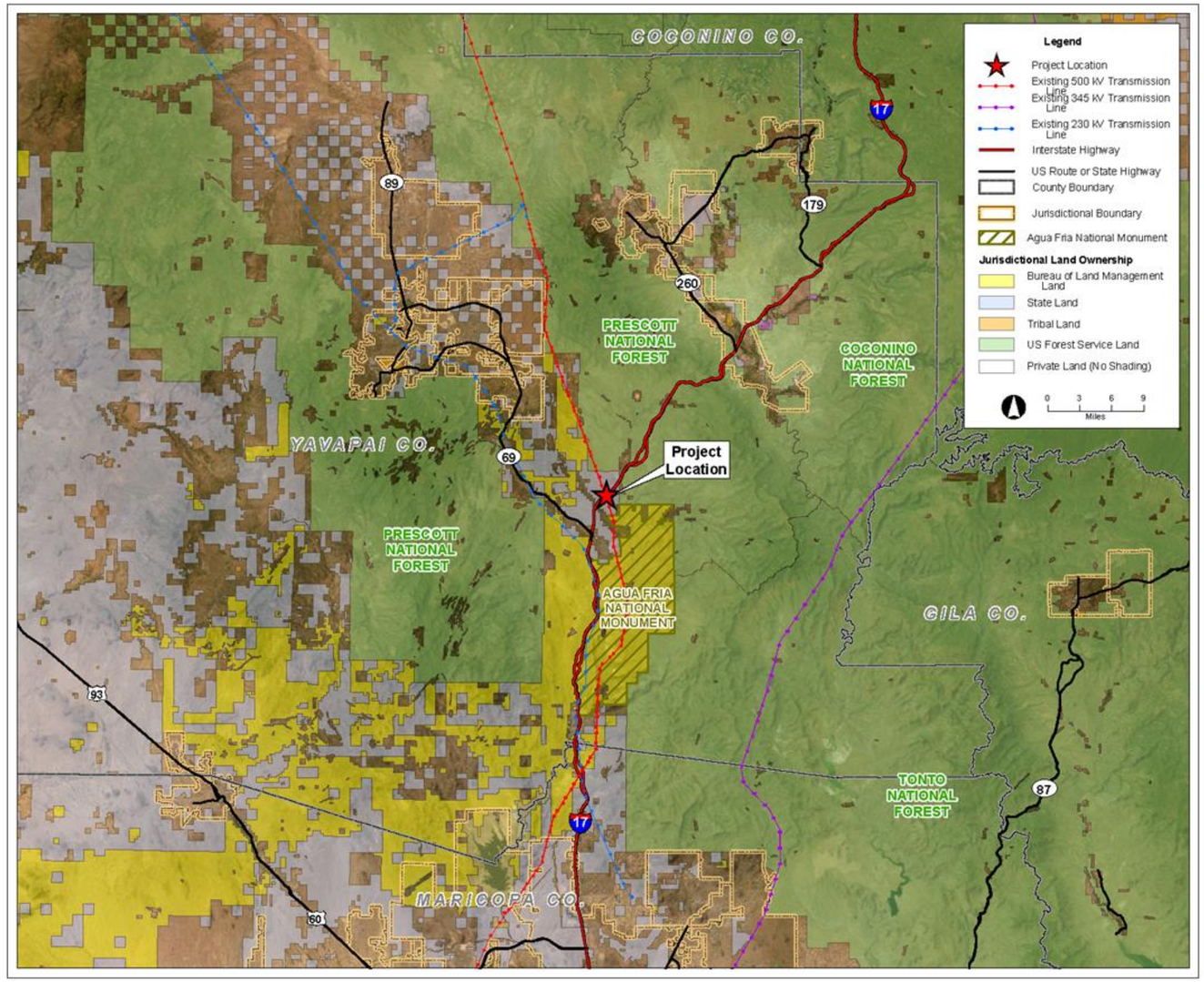
This process follows the Yavapai County Solar Ordinance guidelines effective December 2024.

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Project Overview

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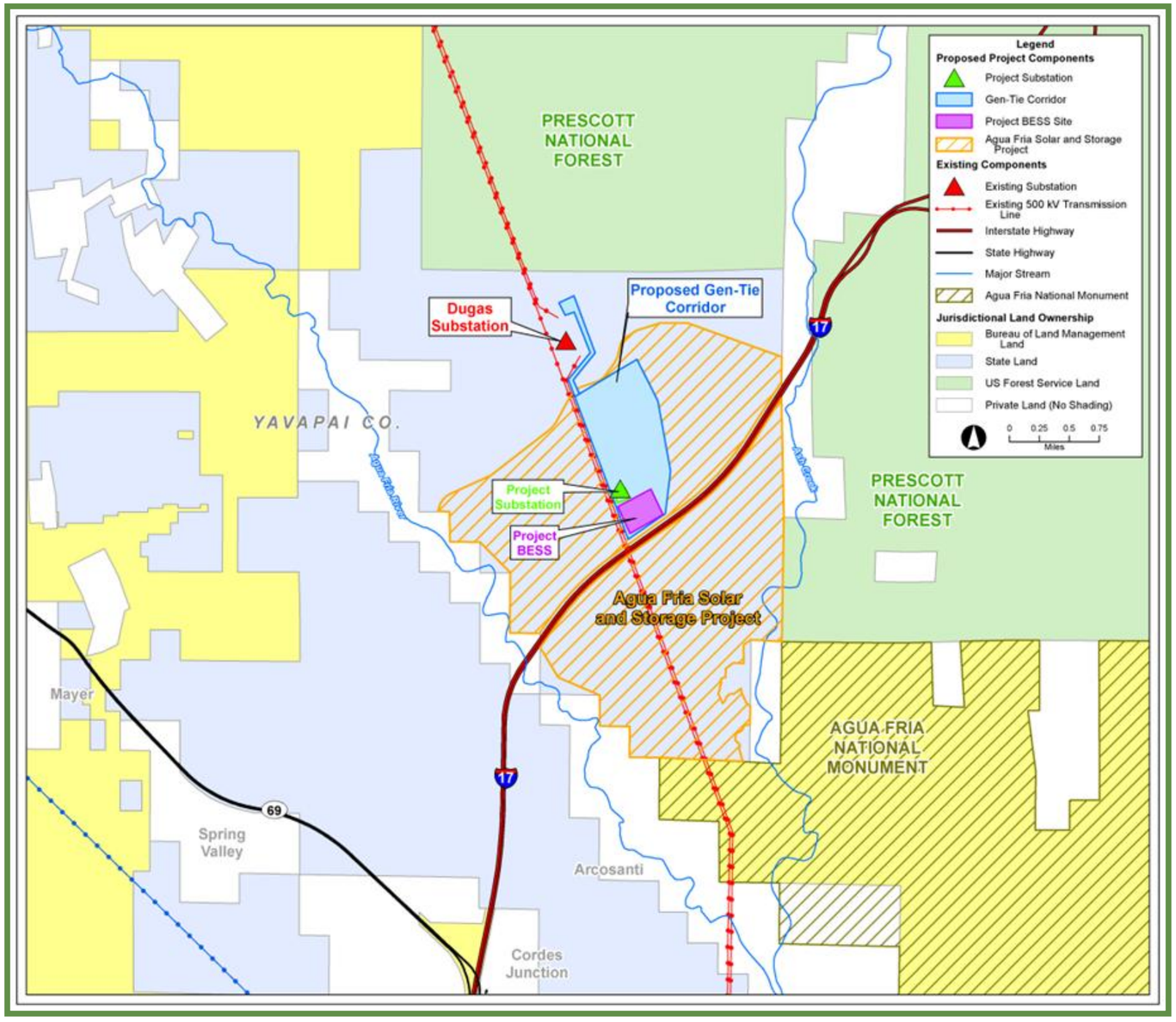
PROJECT OVERVIEW



- The Project will transmit renewable energy to the regional grid & support grid reliability
- Sited on +4,200 acres of State Trust Land in Unincorporated Yavapai County
- Approximately $36 million in revenue will be paid to Arizona public schools over the life of the project.
- Project will produce up to 450MW of clean solar power and battery energy storage
  - Permitting Phase: 2025
  - Construction Start: 2026-2028

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PROJECT COMPONENETS



CEC Jurisdictional Component:

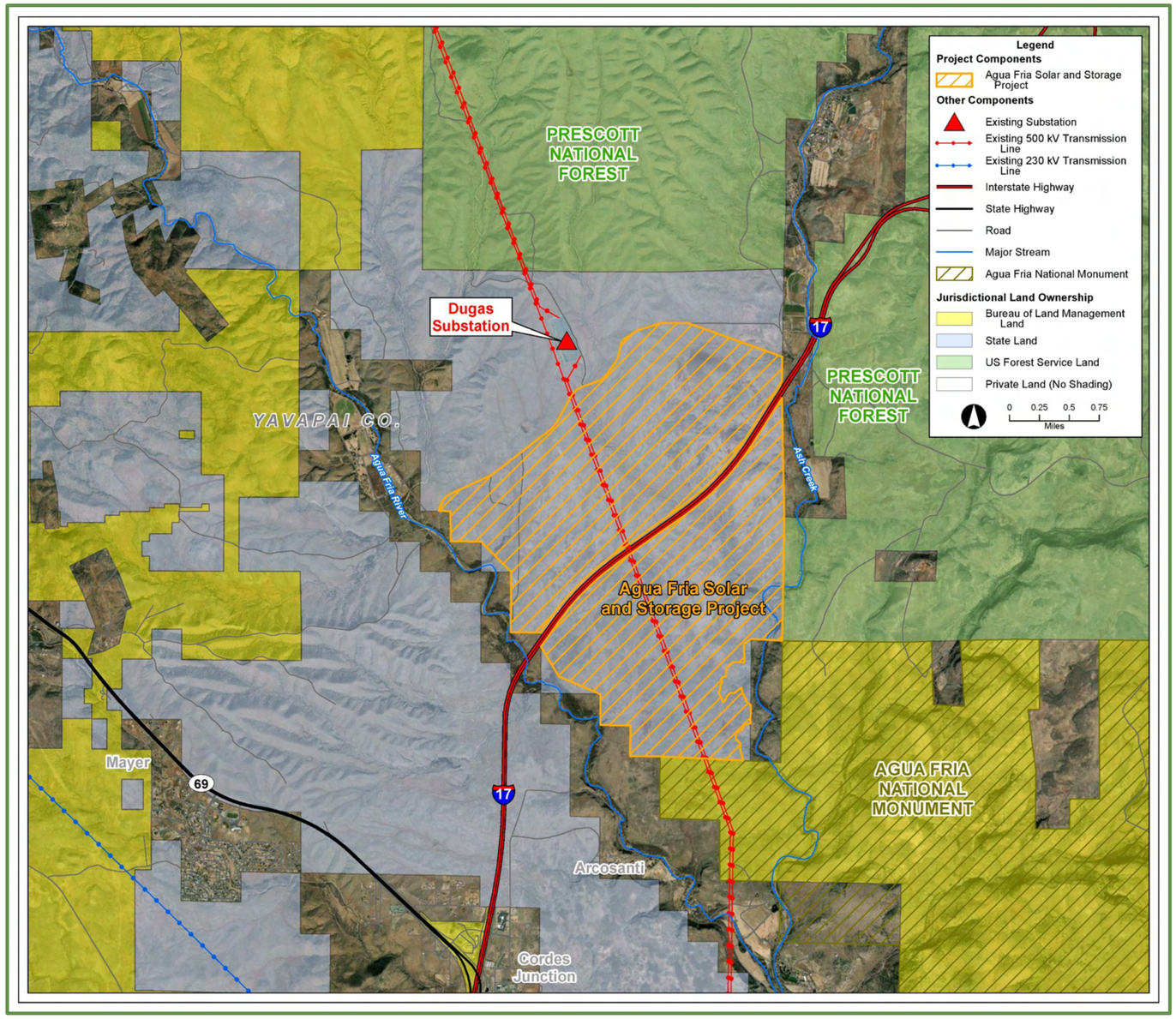
- **Gen-tie to connect the Project substation to the existing transmission network**

Additional Components:

- Solar field of photovoltaic modules
- Inverters and medium voltage collection lines
- On-site Project substation
- Battery energy storage system (BESS)
- Operation and maintenance building

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PROJECT COMPONENETS

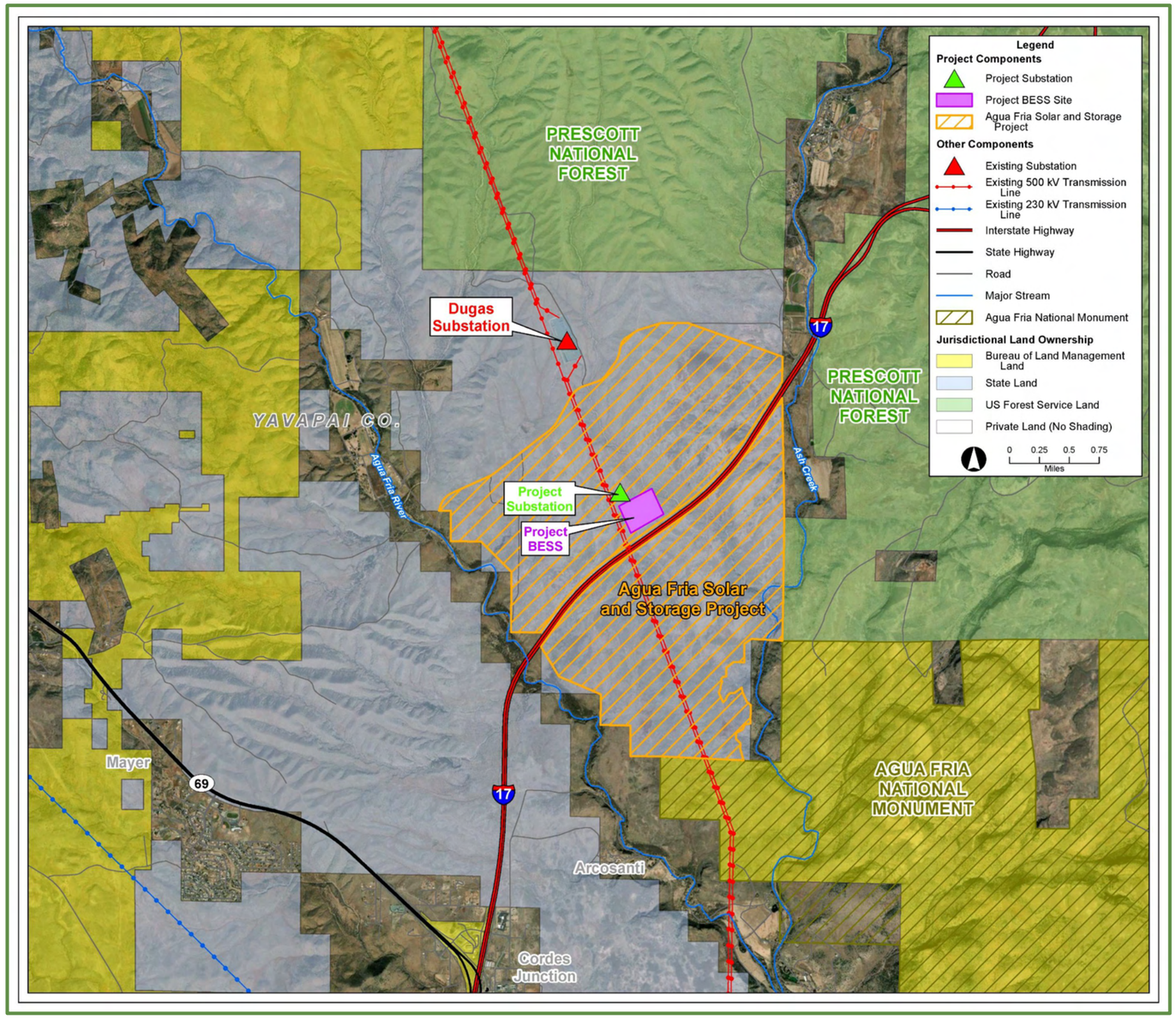


Solar Area

- Field of photovoltaic (PV) modules will produce up to 450 MW of clean solar power
- Solar PV area is within Yavapai County on State Trust Land with solar lease

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PROJECT COMPONENETS



Energy Collection & Battery Storage

- On-site Project Substation
- Battery Energy Storage System (BESS)
  - Will provide 450 MW of energy storage capacity
  - Improve energy grid reliability

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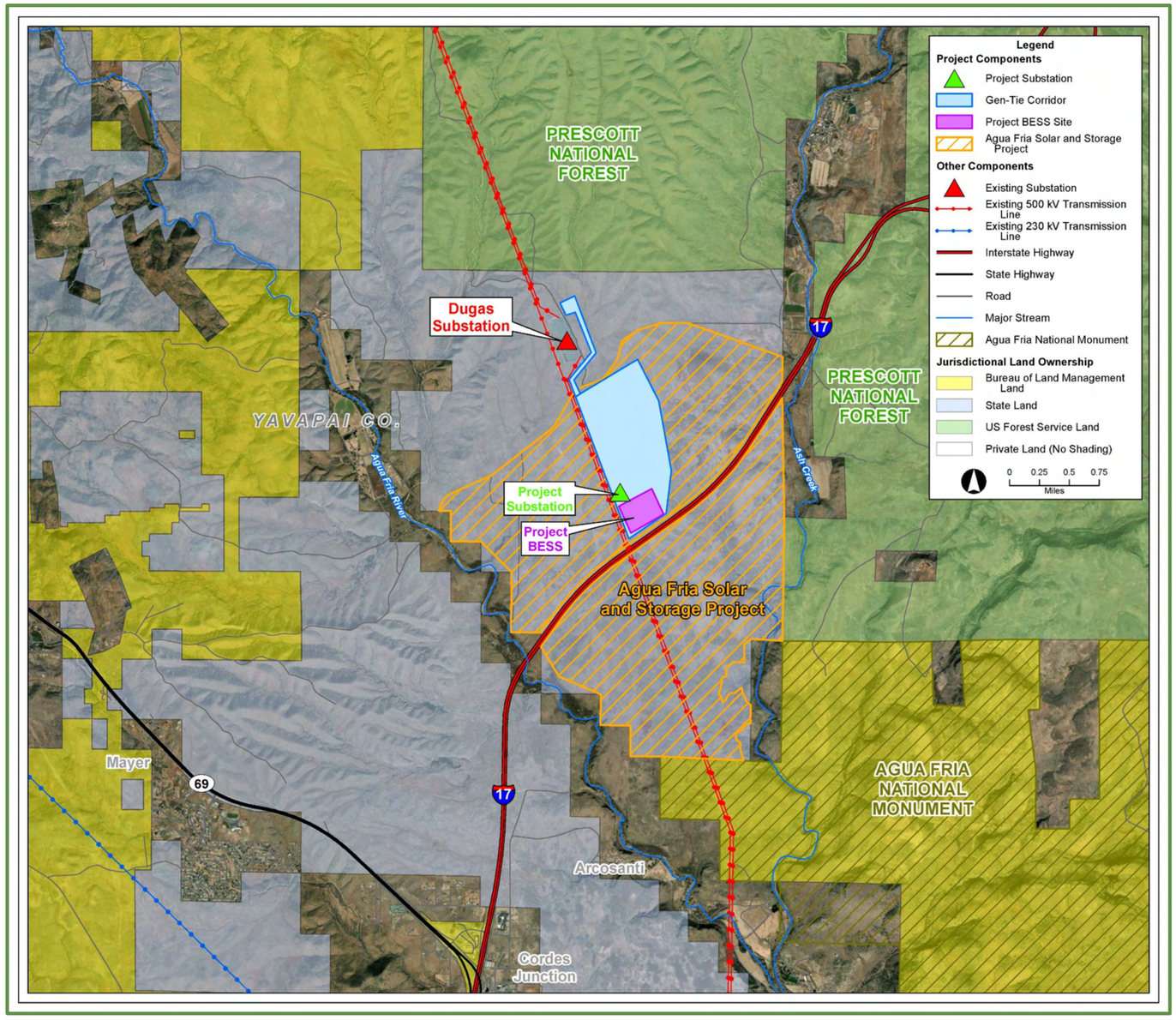
BESS EXAMPLE



Photo: Longroad Energy's Sun Streams 3 Project in Maricopa County

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PROJECT COMPONENETS

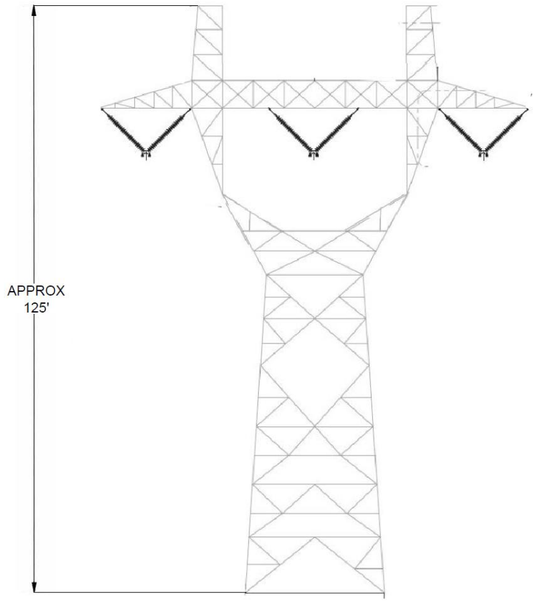


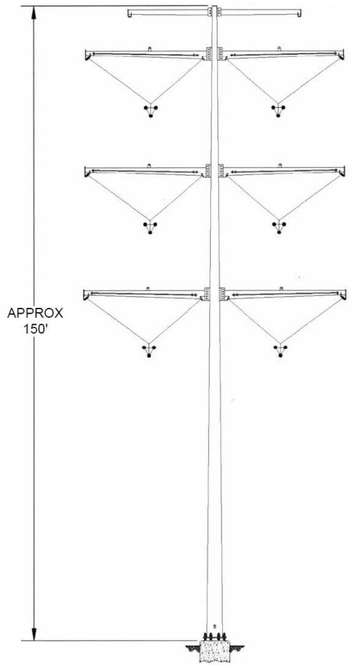
Gen-Tie

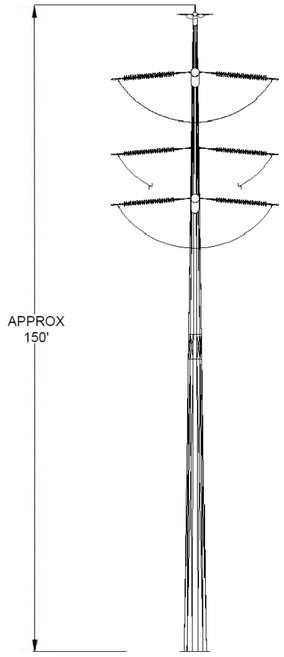
- 500 kV overhead gen-tie line
- Co-located with existing transmission lines
- Will connect the Project to the existing regional energy grid at APS Dugas Substation
- APS is the service provider for all of Yavapai County

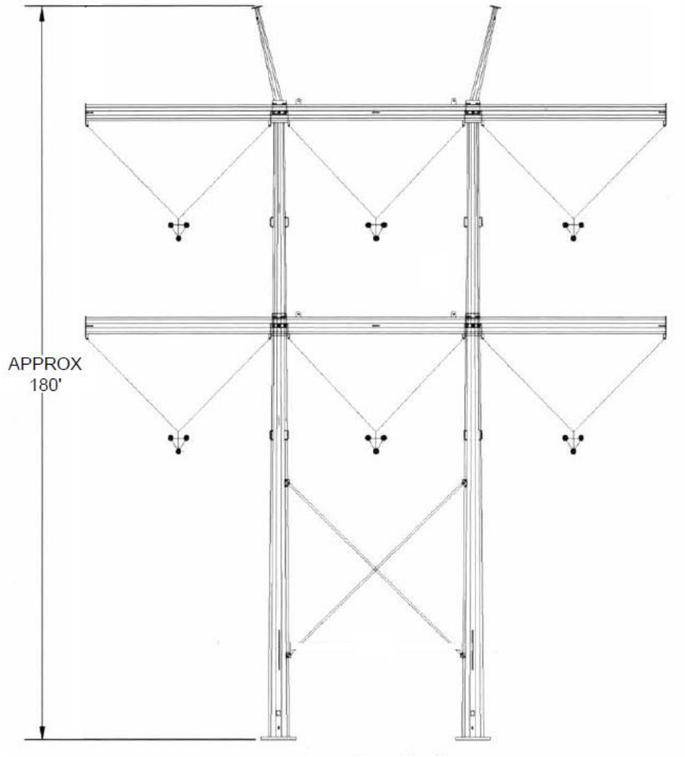
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STRUCTURE TYPES





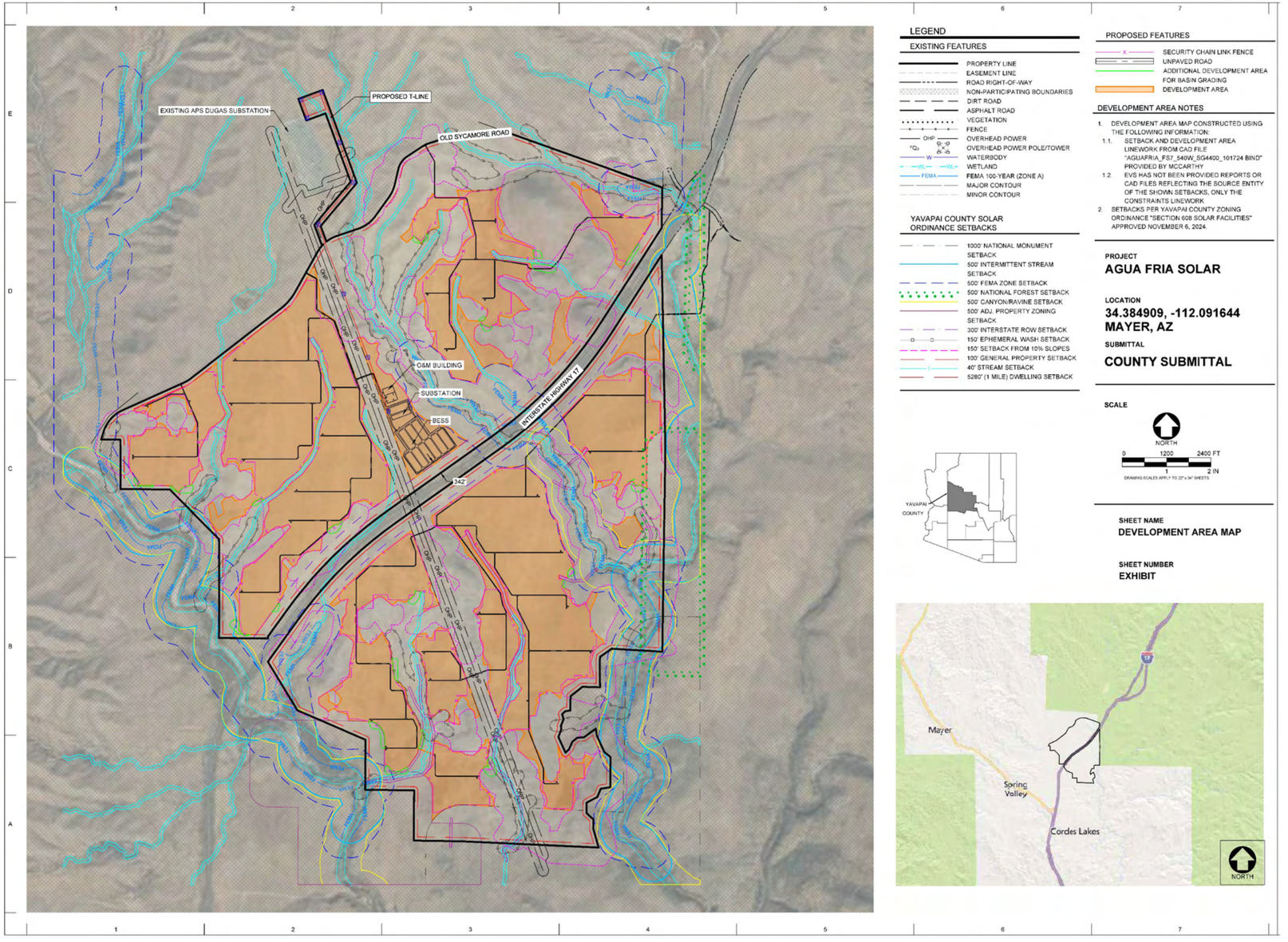




Typical right-of-way width 250 feet

Represents typical structures. Actual structure types for this project have not yet been determined and may vary depending on location.

SITE MAP WITH SETBACKS



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Environmental

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COMMITMENT TO THE ENVIRONMENT

- Projects are sited to protect and preserve essential ecosystems
- “Early and Often” coordination with AZGFD & USFWS
- Thorough environmental assessment process
- Actively engage with environmental research to stay informed about & help advance techniques to support environmental practices
- Uphold & comply with environmental laws and regulatory guidelines
- Minimize conflict with wildlife during construction & operation
- Environmental commitments are included in construction contracts
- Wildlife Conservation Strategy & Vegetation Management Plan

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DETAILED ENVIRONMENTAL STUDIES

Wetlands and Aquatic Resources

Cultural (Archaeological) Resources Investigation

Visual and Viewshed Analysis

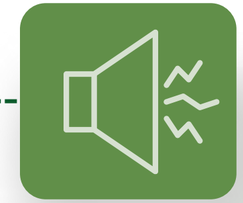








Threatened and Endangered Species Studies: Recon & Protocol Level Surveys



Noise Analysis

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WILDLIFE CONSERVATION STRATEGY



INCLUDES ASSESSMENT OF WILDLIFE AND WILDLIFE HABITAT IN PROJECT AREA

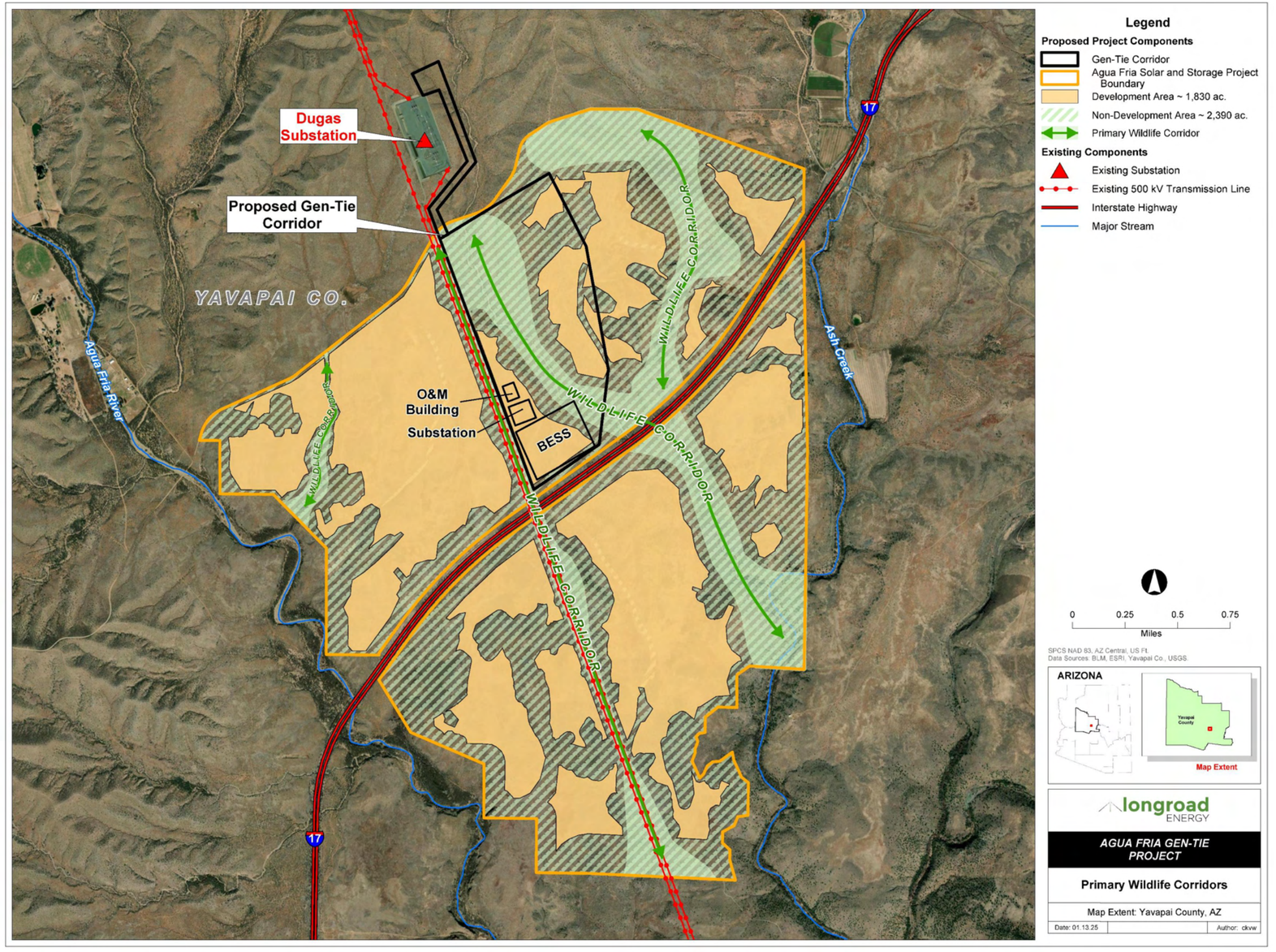
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BEST MANAGEMENT PRACTICES

- Identifies area for avoidance (wetlands and critical habitat)
- Includes big game corridors through Project arrays
- Vegetation management during construction and operations
- Wildlife-friendly species and management techniques

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WILDLIFE CORRIDOR MAP



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SOLAR FIELD EXAMPLE



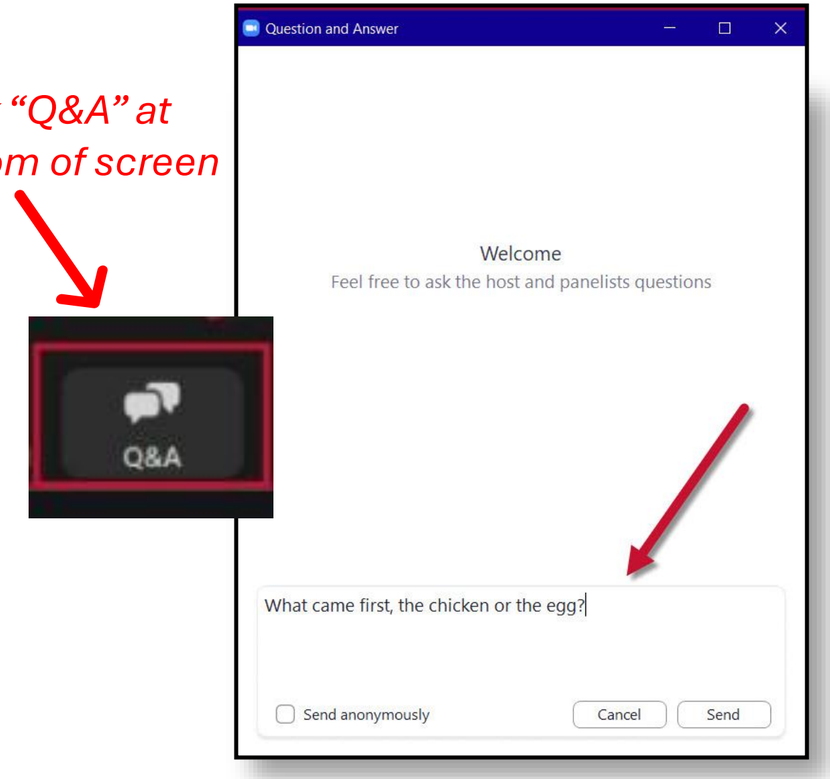
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Photo: Longroad Energy's Sun Streams 4 Project in Maricopa County

Questions

- Use the Q&A Feature to type in questions
- We will respond to as many questions as we can

Click "Q&A" at bottom of screen



Other Ways To Comment

Project Information Line
1 (833) 367-7889

Project Email
aguafria@longroadenergy.com

Project Website Comment Portal
longroadenergy.com/agua-fria

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THANK YOU

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Longroad Agua Fria Solar, Battery Storage and Gen-Tie Project
Virtual & In-Person Open House Summary

In-person Open House
January 28, 2025
Time: 4:30 pm – 6:30 pm
Cordes Lakes Community Center

This event was open to the public and had an Open House format. There were representatives from Longroad Energy, KP Environmental and ICF in attendance to speak with the public and respond to questions about the Project.

Stations included: Welcome, Project Overview/Permitting, Engineering/Construction, Environmental, Project Maps, and Comments.There were 29 people in attendance. Attendees included firemen from the Mayer Fire Department, Paul Orme and his wife, who own the Orme Ranch and Orme School and representatives of Arcosanti as well as area land owners. Many were supportive of the Project and attendees discussed the Project individually or in small groups with Project representatives. All were encouraged to provide written comments either at the meeting or afterward via a comment form.

Six Comment Forms were received during the open house. Comments received are listed verbatim below:

- Very well presented with everyone informed on sending people to the expert of each subject – good visual presentation
- Excellent & informative!
- Very well-conceived project which we support
- We have the property that is in the right lower corner of the map for the proposed solar field. 1 What temperature changes can we expect from the heat from panels (thermodynamics) 2 What effect will the project have on our properties water level? Never run dry in recorded history. 3 What effects will the questions above have on the animals and endangered species that are on the property
- Glare from house
- Due to riparian habitat, please consider disturbance to wildlife and timing of construction to mating times of birds, or migration of wildlife such as pronghorn





Virtual Open Houses
January 30, 2025

Time: 12:00 pm
Registered: 7
Attended: 7

Time: 5:30 pm
Registered: 3
Attended: 3

Panelists:
Alyssa Menzel, Longroad Energy
Ashley Groeneveld, Longroad Energy
Steve Morgan, KP Environmental

Virtual open houses were held on January 30th with an afternoon and an evening session. Registration was open to the public and meetings were conducted via Zoom platform. For each session, the meeting was facilitiated by KP Environmental with panelists from Longroad Energy. For the afternoon session, Longroad Energy staff gave a presentation with slides presenting information about the Project and the company. Questions were then solicited through the Zoom Q&A feature with the public's questions posed by the moderator and responded to verbally by the Longroad Energy panelists. In the evening session, all participants had also attended the afternoon session, therefore the presentation was abbreviated and the meeting moved quickly to the Q&A portion of the meeting. In total, 10 people attended the sessions; seven in the afternoon session and three in the evening session. As noted, some individuals participated in both.

In total, 38 questions/comments were submitted through the Q&A feature; 26 in the afternoon session and 12 in the evening session. The questions/comments submitted are listed verbatim below:

Session 1

- How many solar panels are anticipated?
- Will wildlife corridors, buffers areas be accessible to the public for hunting, hiking, grazing
- Are you able to share the tentative project maps with us at this time?
- Will panel areas be graded or left as naturally vegetated?
- tjflood@att.net *(email provided for requested follow up)*
- What is your prognosis for the likelihood of pronghorn survival in the area?
- Will panels follow contours or will the panel areas be terraced to provide flat panel installation?
- will the ground be scraped clean to place the panels?
- Candela explored sheep for vegetation control under the panels. Is this strategy being considered?
- Waht about hunting or hiking in the none panel areas?

- Is there potential improvement of the Agua Fria as a wildlife corridor by vegetation management on buffer areas on either side of I-17?
- "My suggestion for the solar development is that a multi-use pathway open to the public is developed outside of the project fence line, around the perimeter of the project and where it follows along the I-17 North and South.
  Pathways can help improve access for emergency responders, serve as a firebreak, and protect public access to public lands. If a vehicle fire started on the I-17, or in the other natural areas surrounding the site, the paths could also help protect the solar company's investment. This is also very important due to the high-quality cultural resources in Agua Fria National Monument.
  I highly recommend the movie ""Fire in Paradise"" on Netflix. Paradise, CA is building pathways that can withstand the weight of emergency vehicles for improved access and to serve as a firebreak after the devastating Camp Fire caused over 85 deaths."
- "Late last year a teenage boy passed away from being hit by a car in Prescott Valley, it was along a stretch of Arizona State Trust Land: https://www.12news.com/video/news/local/arizona/prescott-valley-teens-death-renews-calls-for-safer-pathways-for-pedestrians-bicyclists/75-c9dee85f-9730-4fa7-a5c5-34e8c7103f9d . Pathways are one of the top items of support from members of the public according to a statistically significant public survey done recently by Arizona State Parks for the Statewide Comprehensive Outdoor Recreation Plan. Has a pathway around the perimeter of the site and along the I-17 N and I-17 S outside of the project fence line been considered?"
- A biologist I know says sheep often introduce exotic plant species.
- Are you aware of any other contemplated solar projects on state trust land in the area?
- repeat with corrections: What about hunting or hiking on non panel areas?
- Currently there is public road access under the 500 kv lines. Will these be closed of?
- How much additional capacity does the 500KV transmission line have once this project is on line?
- Can you answer if panels will follow contours or be placed on flat terraces?
- Will you be considering impacts caused by placing the GenTie line into the Dugas substation? (It is outside the Project Site Plan).
- Will i-17 underpasses be improved in the wildlife corridors?
- As this area is being taken out from public use for hiking, etc. and people usually can have access to with an ASLD lands with their recreational permit, I think an approximate 10-ft wide DG pathway, outside the project fenceline along the perimeter and both sides of the I-17, seems reasonable to protect future connectivity, serve as a firebreak, and improve emergency access.
- Where will Longroad access east side of project?
- Is there any federal funding? Is a National Environmental Policy Act document being required?
- Can you share the comments that are not questions?
- "earthhous@aol.com Thank you". *(email provided for requested follow up)*

Session 2

- That's funny don't waste time on me have a good night
- Seems like good news to me
- Doed Longroad need a permit for preliminary site work?
- Will there be fencing around the entire project boundary?

- If a Class III Cutural Resources Survey identifies sites eligible for designation under the National Historic Preservation Program, Criterion D, will Longroad leave them undisturbed?
- Isn't fencing around panelws only porous to small animals?
- Is Longroad placing cameras on the completed fenced arrays to research impacts on wildlife?
- Regarding Stormwater Protectin, willl there be holding basins for high runoff?
- Is there concern that seeding of graded areas might not be successful due to low annual rainfall?
- How will invasive species be handled? On disturbed land?
- Will there be a wildfire management plan?
- Will the panels be recycled at the end of their service?

The following action items were noted during the virtual open houses:

- Send Tim Flood the preliminary layout in an email as requested. (completed by KPE staff)
- Send Mary Hoadley requested Q&A posts that were comments, not questions. (completed by KPE staff)

Agua Fria Solar, Storage and Gen-tie Project

Open House | January 28, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: MICHAEL BITTMAN Phone: _____

Address ANDOSANTI

Organization: SAME

Email: [redacted]

Comments: VERY WELL PRESENTED WITH EVERYONE INFORMED ON SENDING PEOPLE TO THE EXPERT OF EACH SUBJECT - GOOD VISUAL PRESENTATION

Thank you for your time and interest!

Please visit longroadenergy.com/agua-fria
or call 1 (833) 367-7889 for more information.

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Agua Fria Solar, Storage and Gen-tie Project

Open House | January 28, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: SHAWN ORME Phone: [redacted]

Address [redacted]

Organization: ORME RANCH INC

Email: _____

Comments: Excellent & informative!

Thank you for your time and interest!

Please visit longroadenergy.com/agua-fria
or call 1 (833) 367-7889 for more information.

longroad ENERGY

Agua Fria Solar, Storage and Gen-tie Project

Open House | January 28, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: PAUL OSME Phone: [redacted]

Address OSME RANCH, MAYER, AZ. 86333

Organization: OSME RANCH

Email: [redacted]

Comments: Very well received project which we support

Thank you for your time and interest!

Please visit longroadenergy.com/agua-fria
or call 1 (833) 367-7889 for more information.

longroad ENERGY

Agua Fria Solar, Storage and Gen-tie Project

Open House | January 28, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Jorge Sommerer Phone: [redacted]

Address [redacted]

Organization: Gloria Sommerer Trust

Email: [redacted]

Comments: We have the property that is in the RT lower corner of the map for the proposed Solar field, I what Temperture changes can we expect from the heat from Panels (Thermodynamics)

2 What effect will the project have on our properties water level, (never running in recorded History.

3 what effects will the questions above have on the Animals and Endangered species that are on the property

Thank you for your time and interest!

1-28-25

Please visit longroadenergy.com/agua-fria or call 1 (833) 367-7889 for more information.

longroad ENERGY

Agua Fria Solar, Storage and Gen-tie Project

Open House | January 28, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Brad _____ Phone: _____

Address _____

Organization: _____

Email: _____

2 Comments: glare from house

_____

_____

_____

_____

_____

_____

Thank you for your time and interest!

Please visit longroadenergy.com/agua-fria
or call 1 (833) 367-7889 for more information.

longroad ENERGY

Agua Fria Solar, Storage and Gen-tie Project

Open House | January 28, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: Linn Williams Phone: [redacted]

Address Arcosanti

Organization: Cosanti foundation

Email: [redacted]

Comments: Due to proximity to riparian habitat, please consider disturbance to wildlife and timing of construction to mating times of birds, or migration of wildlife such as pronghorn.

Thank you for your time and interest!

Please visit longroadenergy.com/agua-fria
or call 1 (833) 367-7889 for more information.

longroad ENERGY

800-05-003G
800-20-042G
800-01-017Y
REAR
3,108'
800-20-043U
800-20-056W
DUGAS SUBSTATION
AZ STATE LEASE NO.
14-111099
FRONT
Distance to road centerline? (Front setback from planned 33' half street)
500-25-014B
500-25-015
800-20-043S
Front setback to ROW?
300'
Ouma Rd
17
500-25-014D
YAVAPAI CO.
800-20-044F
500-25-014C
FRONT
33' (road centerline to Development Area)
[Note per applicant]
177.6' PL/EP
400' R/W
39.1' PAVED ROAD
72.9' EP/EP
39.8' PAVED ROAD
Dugas Rd
500-25-014F
Distance to road centerline? (Front setback from planned 33' half street)
Exterior side setbacks to APS ROW?
Exterior side setbacks to APS ROW? (Assumed 0' or within ROW)
Front setback to ROW?
Ash Creek
501-31-009B
800-20-056X
Agua Fria River
200'
FRONT
300'
Front setback to ROW?
SIDE
800-01-018K
Old Sycamore Rd
Side setback to PL?
800-20-044H
800-20-044M
500-25-014G
FR 686
501-31-005
SIDE
FRONT
800-20-044P
800-20-044S
300'
400' R/W
200'
377'
500-04-002
Exterior side setbacks to APS ROW?
Exterior side setbacks to APS ROW?
501-27-006
17
800-20-044U
330' TRANSMISSION R/W
800-09-001E
800-20-044T
200'
Side setback to PL?
800-20-044V
460'
501-27-006B
501-27-006C
501-27-004
200'
554'
1,000'
800-20-044Z
500-04-001
REAR

Applicant
Staff

Legend

Proposed Project

- Project Parcel
- Development Area
- Agua Fria Solar and Storage Lease Boundary

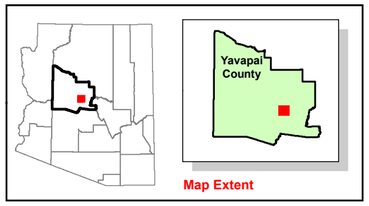
Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Old Sycamore Road Alignment
- ALTA I-17 Edge of Pavement
- Road
- Watercourse
- Transmission Right-of-Way
- Parcel

Development Area Perimeter Setbacks

0 0.25 0.5 Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



Map Extent

longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Additional Exhibit A - Conceptual

Map Extent: Yavapai County, AZ

Date: 9.16.26 | Author: ckv

Dugas Substation

Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features

- Watercourse
- FEMA - 100-year Floodplain (Zone A)
- ALTA - mapped Floodplain
- ASLD Property

Yavapai County Solar Ordinance Setbacks

- 500' Buffer Zone - Lease Area
- 500' Buffer Zone - ASLD Property
- 200' Buffer Zone - ASLD Property

Waiver Area

- Waiver #1 Areas

Development Area Edits

- Removed Development Area

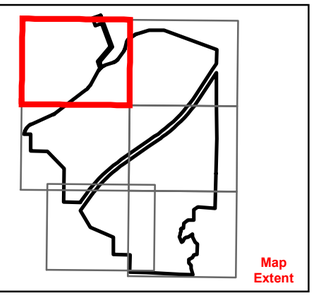
Waiver Area Distance

- # Minimum Distance from ASLD Parcel Boundary

Page 1

0 0.1 0.2
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



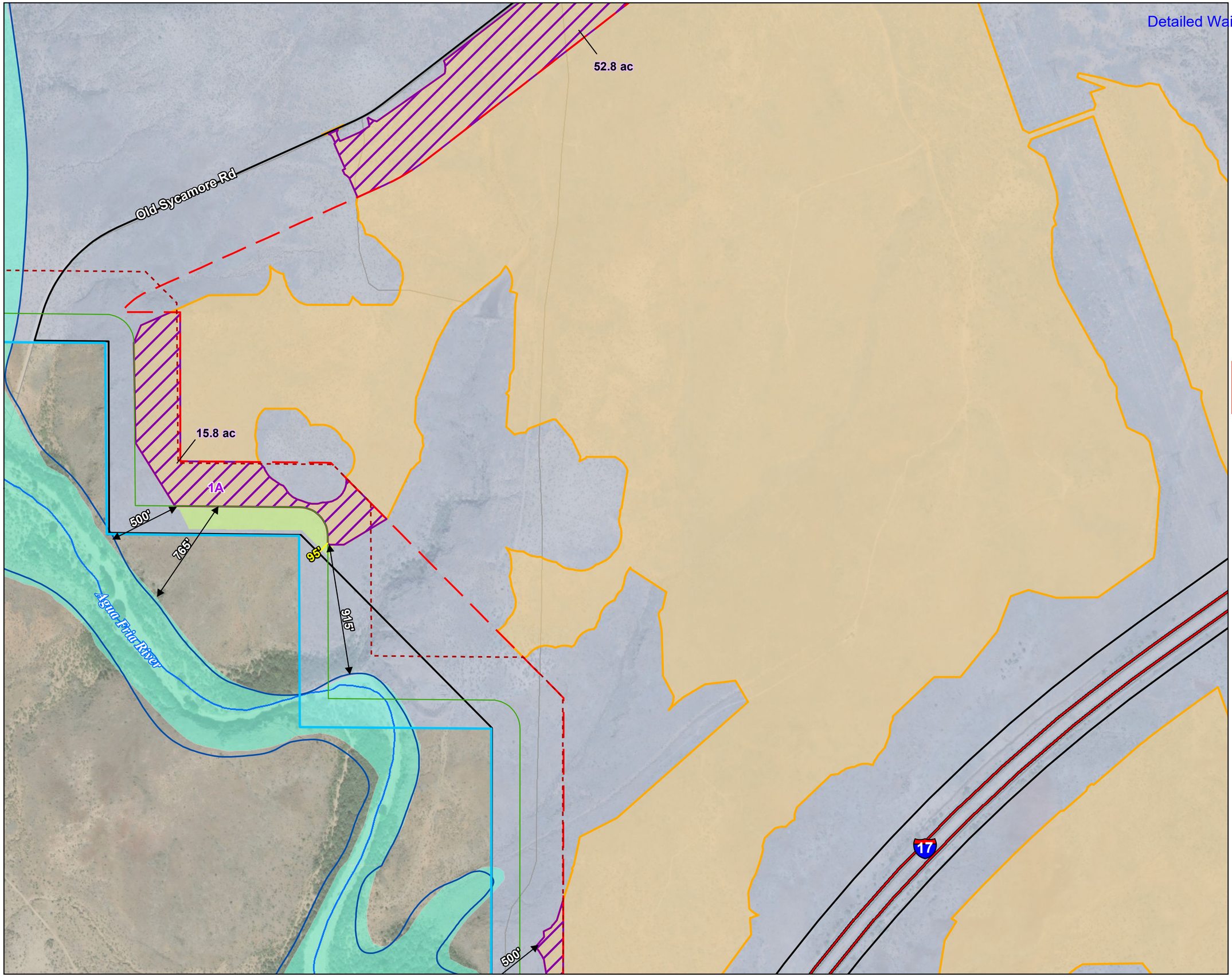
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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #1 Details

Map Extent: Yavapai County, AZ

Date: 6.17.26		Author: ckv



Legend

Proposed Project
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Watercourse
- FEMA - 100-year Floodplain (Zone A)
- ALTA - mapped Floodplain
- ASLD Property

Yavapai County Solar Ordinance Setbacks
- 500' Buffer Zone - Lease Area
- 500' Buffer Zone - ASLD Property
- 200' Buffer Zone - ASLD Property

Waiver Area
- Waiver #1 Areas

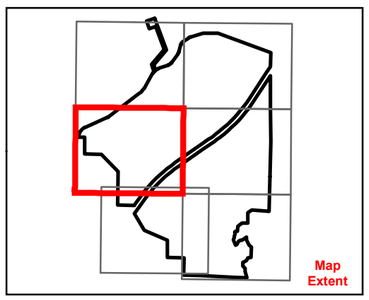
Development Area Edits
- Removed Development Area

Waiver Area Distance
- # Minimum Distance from ASLD Parcel Boundary

Page 2

0 0.1 0.2
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #1 Details

Map Extent: Yavapai County, AZ

Date: 6.17.26		Author: ckv

500'
6.8 ac
1B
500'
715'
200'
800'
Agua Fria River
34'
15.2 ac
1C
935'
500'
500'
1D
12 ac
200'
17

Legend

Proposed Project
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Watercourse
- FEMA - 100-year Floodplain (Zone A)
- ALTA - mapped Floodplain
- ASLD Property

Yavapai County Solar Ordinance Setbacks
- 500' Buffer Zone - Lease Area
- 500' Buffer Zone - ASLD Property
- 200' Buffer Zone - ASLD Property

Waiver Area
- Waiver #1 Areas

Development Area Edits
- Removed Development Area

Waiver Area Distance
- # Minimum Distance from ASLD Parcel Boundary

Page 3

0 0.1 0.2
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.

Map Extent

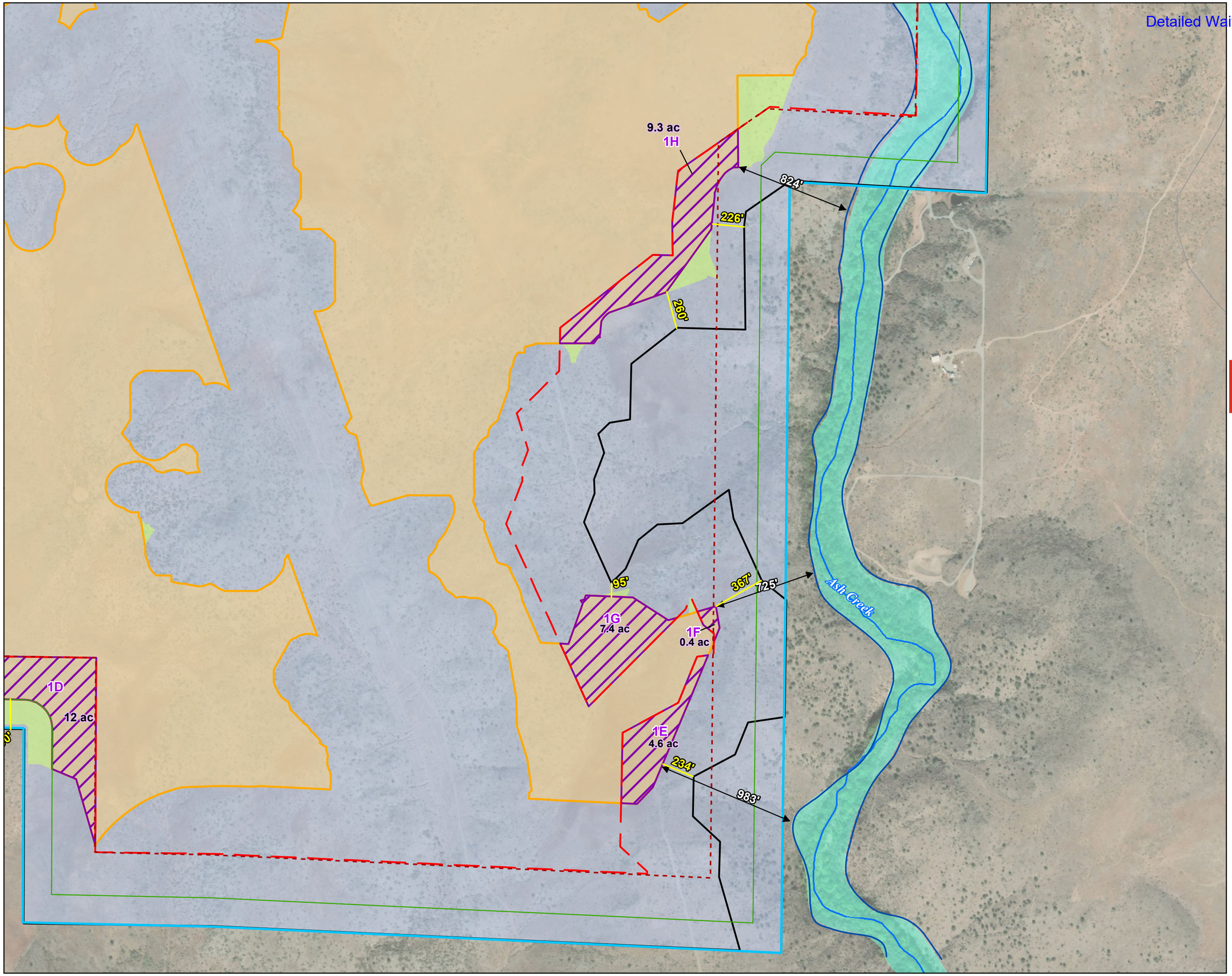
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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #1 Details

Map Extent: Yavapai County, AZ

Date: 6.17.26		Author: ckv



Legend

Proposed Project
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Watercourse
- FEMA - 100-year Floodplain (Zone A)
- ALTA - mapped Floodplain
- ASLD Property

Yavapai County Solar Ordinance Setbacks
- 500' Buffer Zone - Lease Area
- 500' Buffer Zone - ASLD Property
- 200' Buffer Zone - ASLD Property

Waiver Area
- Waiver #1 Areas

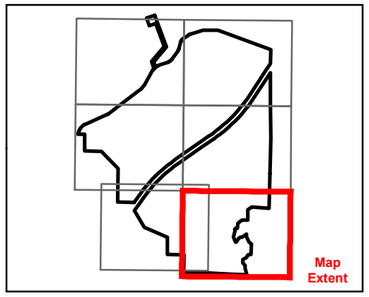
Development Area Edits
- Removed Development Area

Waiver Area Distance
- # Minimum Distance from ASLD Parcel Boundary

Page 4

0 0.1 0.2
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #1 Details

Map Extent: Yavapai County, AZ

Date: 6.17.26		Author: ckv

Detailed Waiver Request Maps Page 5 of 15

1I
10.7 ac

905'

200'

735'

17

Ash Creek

Legend

Proposed Project
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Watercourse
- FEMA - 100-year Floodplain (Zone A)
- ALTA - mapped Floodplain
- ASLD Property

Yavapai County Solar Ordinance Setbacks
- 500' Buffer Zone - Lease Area
- 500' Buffer Zone - ASLD Property
- 200' Buffer Zone - ASLD Property

Waiver Area
- Waiver #1 Areas

Development Area Edits
- Removed Development Area

Waiver Area Distance
- Minimum Distance from ASLD Parcel Boundary

Page 5

0 0.1 0.2
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.

Map Extent

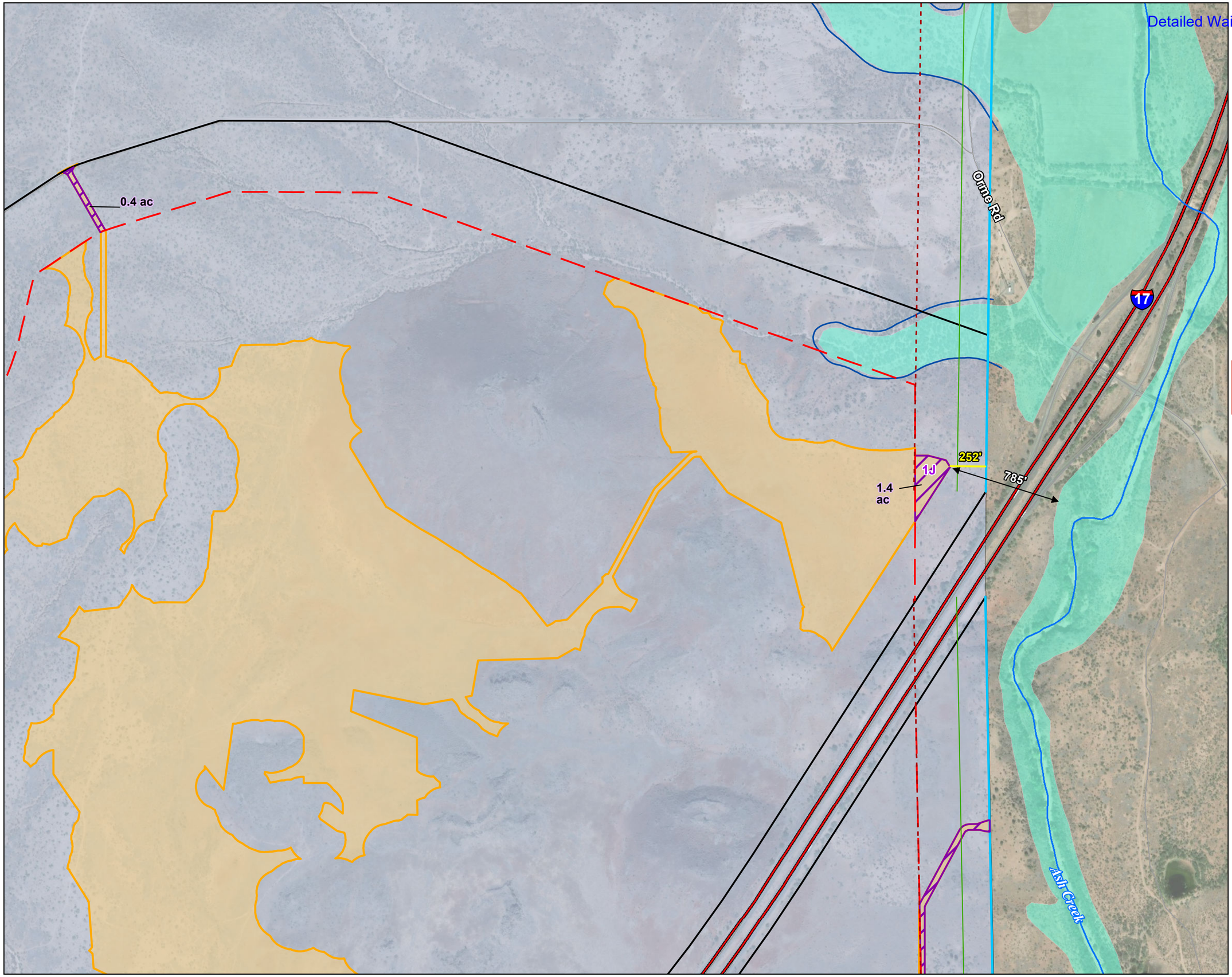
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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #1 Details

Map Extent: Yavapai County, AZ

Date: 6.17.26		Author: ckv



Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features

- Watercourse
- FEMA - 100-year Floodplain (Zone A)
- ALTA - mapped Floodplain
- ASLD Property

Yavapai County Solar Ordinance Setbacks

- 500' Buffer Zone - Lease Area
- 500' Buffer Zone - ASLD Property
- 200' Buffer Zone - ASLD Property

Waiver Area

- Waiver #1 Areas

Development Area Edits

- Removed Development Area

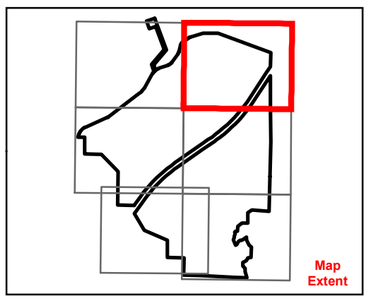
Waiver Area Distance

- # Minimum Distance from ASLD Parcel Boundary

Page 6

0 0.1 0.2
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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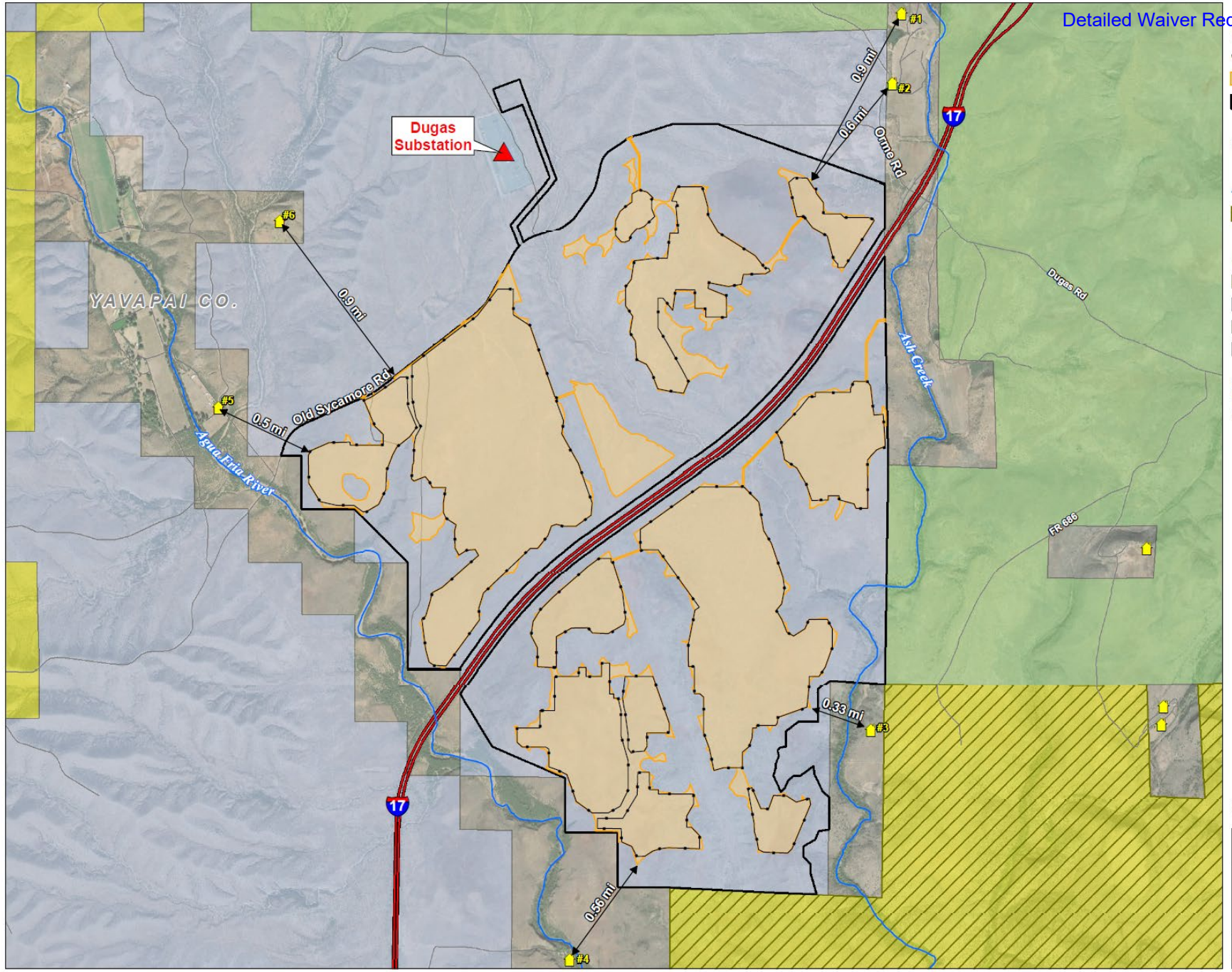
AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #1 Details

Map Extent: Yavapai County, AZ

Date: 6.17.26		Author: ckv

Waiver #2



Legend

Proposed Project
- Security Game Fence
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Dwelling
- Watercourse
- Agua Fria National Monument

Jurisdictional Land Ownership
- Bureau of Land Management Land
- State Land
- US Forest Service Land
- Private Land (No Shading)

Yavapai County Solar Ordinance Setbacks

5,280 feet / 1 mile from any dwellings

Page 7

0 0.25 0.5 0.75
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.

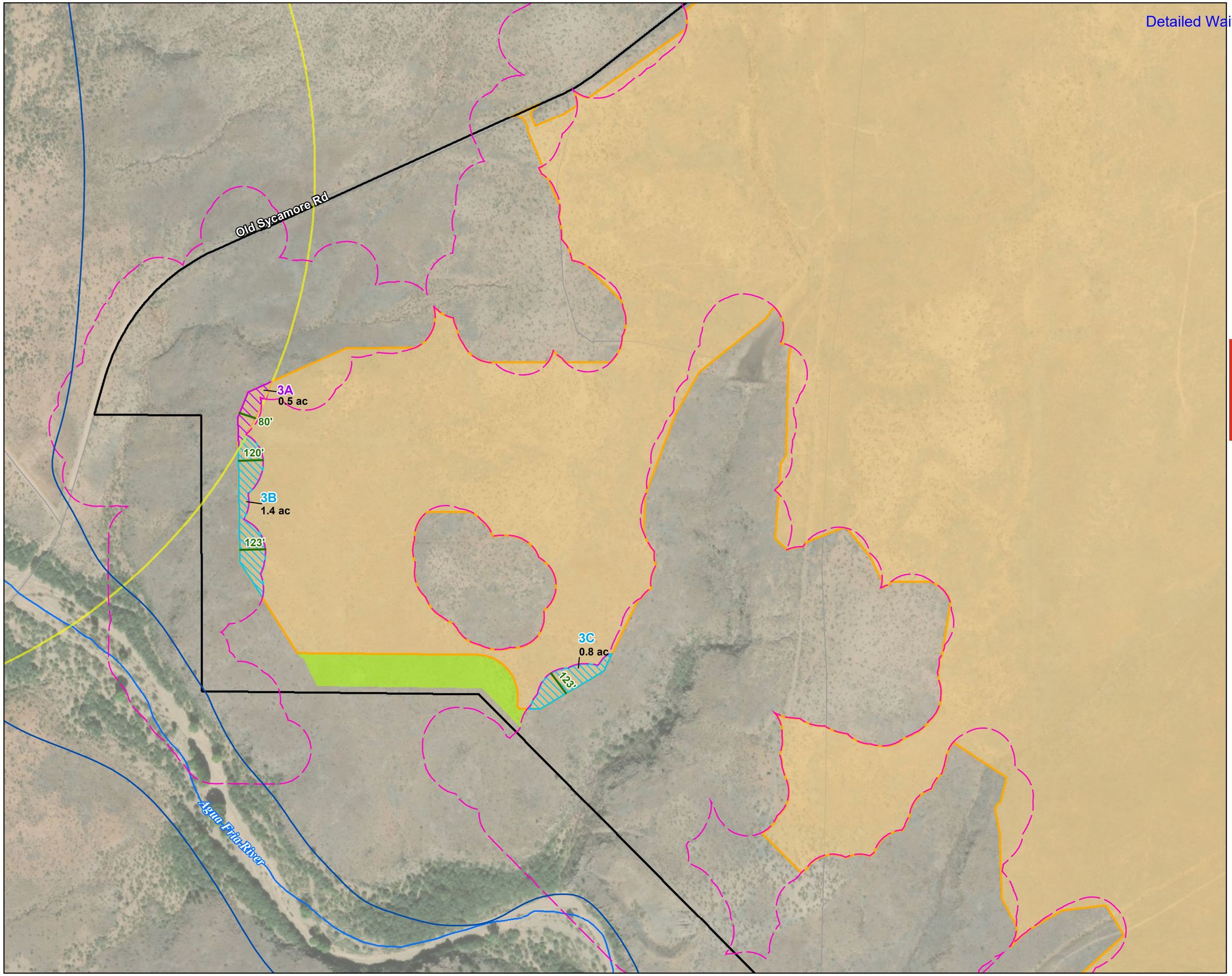
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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #2 Distances

Map Extent: Yavapai County, AZ

Date: 5.13.26 | Author: ckv



Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features

- Dwelling
- Watercourse
- ALTA - mapped Floodplain

Yavapai County Solar Ordinance/ Waiver Request Setbacks

- 150' 10% Slope Setback
- 300/500' Interstate ROW Setback
- 0.5 mi Residence Buffer

Waiver Area

- Waiver #3 Areas adj to AFR & AC
- Waiver #3 Areas w/in 500ft of I-17
- Waiver #3 Areas w/in .5 mi of Dwelling

Development Area Edits

- Removed Development Area

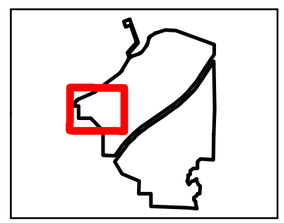
Waiver Area Distance

- #' Distance from Dev Area to maximum Slope Setback

Page 8

0 200 400 600
Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26		Author: ckv

3J
0.6 ac
121'
28'
3I
0.12 ac
3K
1 ac
117'
3L
0.1 ac
38'
3D
0.6 ac
87'
70'
3E
0.4 ac
3H
0.05 ac
27'
134'
3G
1.1 ac
3M
0.8 ac
156'
3F
0.3 ac
86'
17
Agua Fria River

Legend

Proposed Project
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Dwelling
- Watercourse
- ALTA - mapped Floodplain

Yavapai County Solar Ordinance/ Waiver Request Setbacks
- 150' 10% Slope Setback
- 300/500' Interstate ROW Setback
- 0.5 mi Residence Buffer

Waiver Area
- Waiver #3 Areas adj to AFR & AC
- Waiver #3 Areas w/in 500ft of I-17
- Waiver #3 Areas w/in .5 mi of Dwelling

Development Area Edits
- Removed Development Area

Waiver Area Distance
- #' Distance from Dev Area to maximum Slope Setback

0 200 400 600
Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.

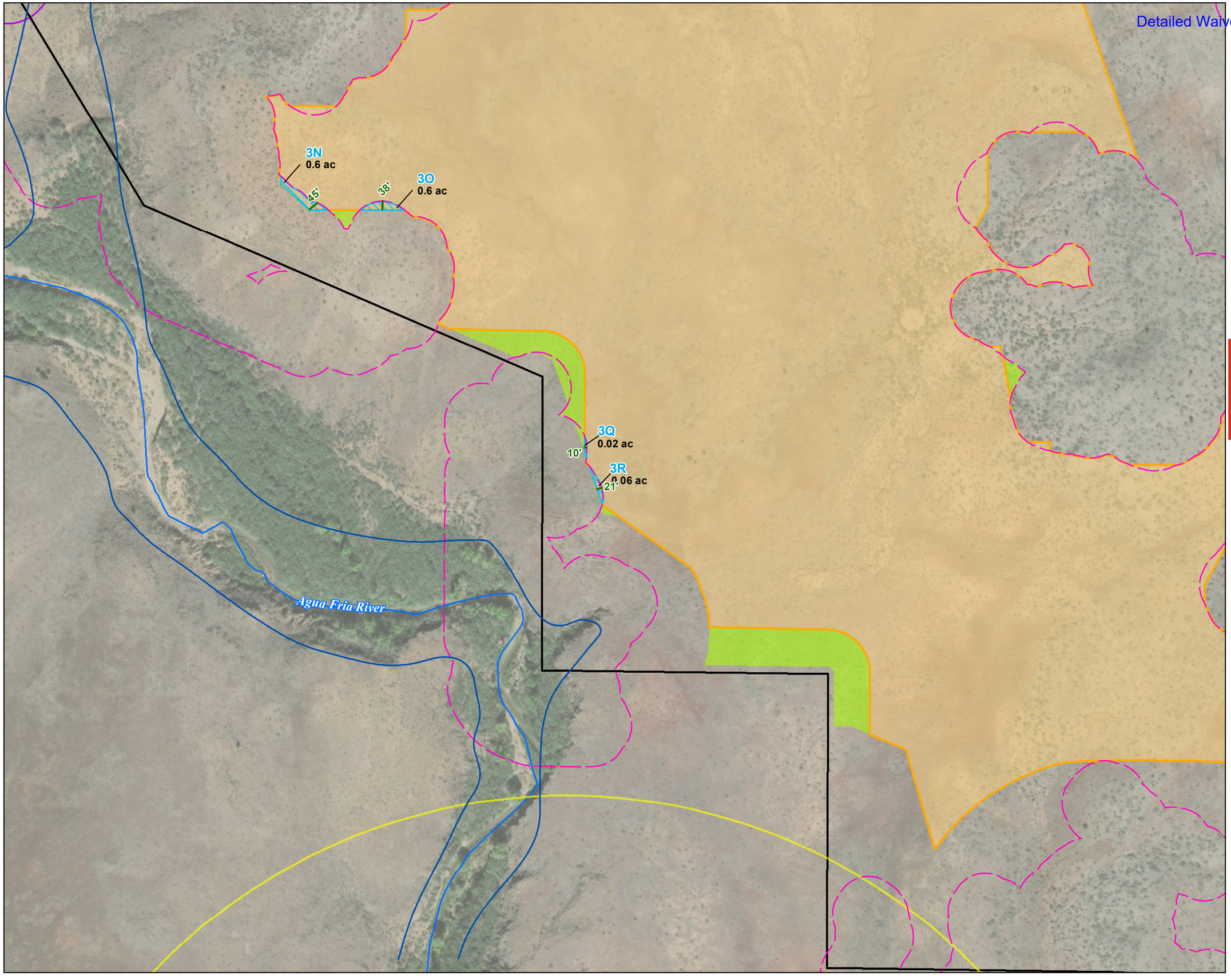
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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26 | Author: ckv



Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features

- Dwelling
- Watercourse
- ALTA - mapped Floodplain

Yavapai County Solar Ordinance/ Waiver Request Setbacks

- 150' 10% Slope Setback
- 300/500' Interstate ROW Setback
- 0.5 mi Residence Buffer

Waiver Area

- Waiver #3 Areas adj to AFR & AC
- Waiver #3 Areas w/in 500ft of I-17
- Waiver #3 Areas w/in .5 mi of Dwelling

Development Area Edits

- Removed Development Area

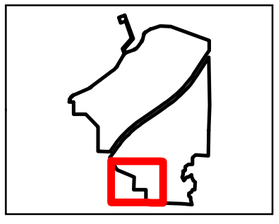
Waiver Area Distance

- #' Distance from Dev Area to maximum Slope Setback

Page 10

0 200 400 600
Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



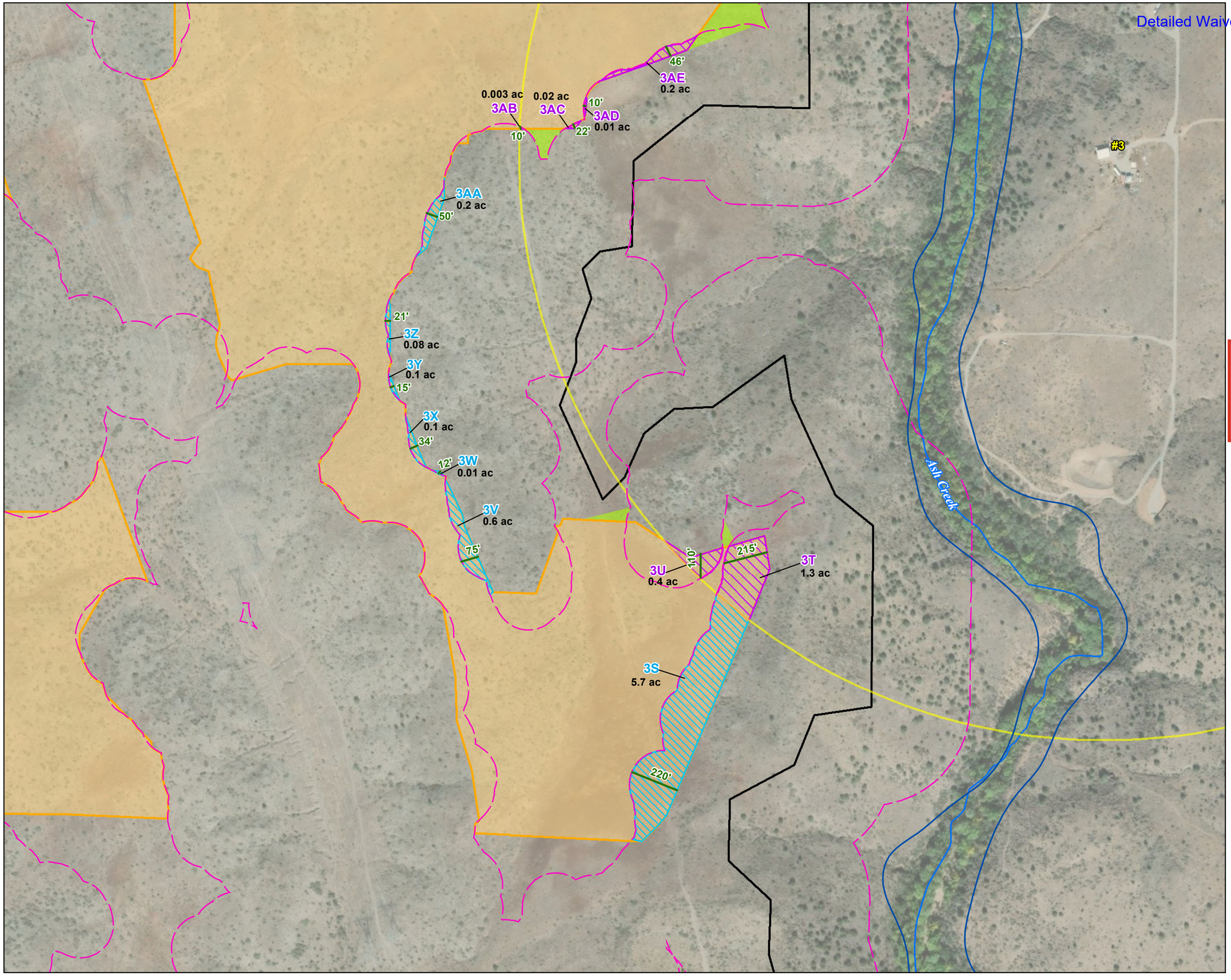
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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26		Author: ckv



Legend

Proposed Project
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Dwelling
- Watercourse
- ALTA - mapped Floodplain

Yavapai County Solar Ordinance/ Waiver Request Setbacks
- 150' 10% Slope Setback
- 300/500' Interstate ROW Setback
- 0.5 mi Residence Buffer

Waiver Area
- Waiver #3 Areas adj to AFR & AC
- Waiver #3 Areas w/in 500ft of I-17
- Waiver #3 Areas w/in .5 mi of Dwelling

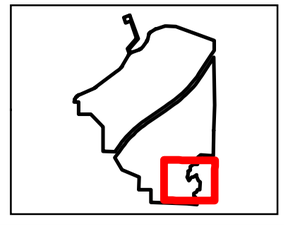
Development Area Edits
- Removed Development Area

Waiver Area Distance
- #' Distance from Dev Area to maximum Slope Setback

Page 11

0 200 400 600
Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



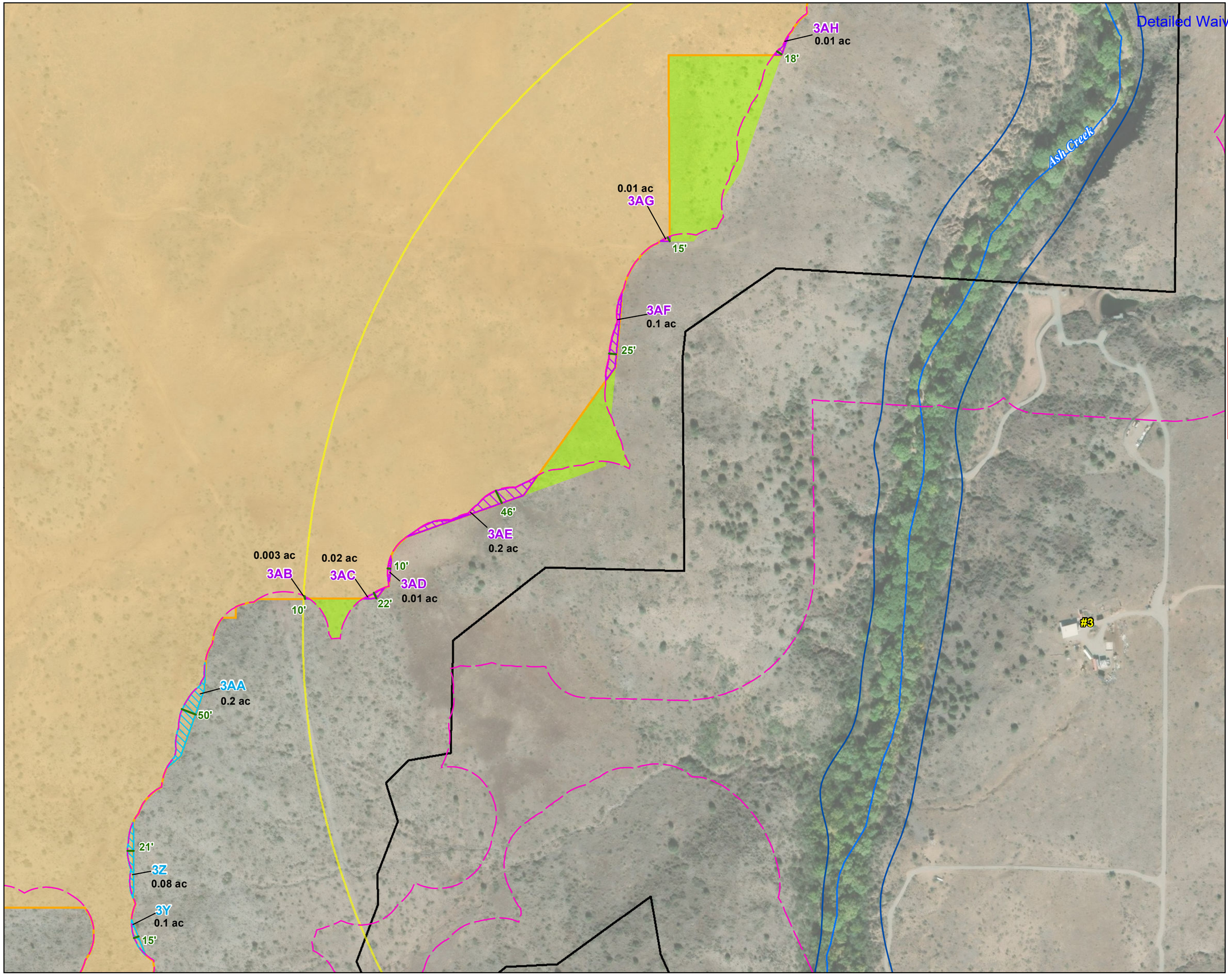
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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26 | Author: ckv



Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features

- Dwelling
- Watercourse
- ALTA - mapped Floodplain

Yavapai County Solar Ordinance/ Waiver Request Setbacks

- 150' 10% Slope Setback
- 300/500' Interstate ROW Setback
- 0.5 mi Residence Buffer

Waiver Area

- Waiver #3 Areas adj to AFR & AC
- Waiver #3 Areas w/in 500ft of I-17
- Waiver #3 Areas w/in .5 mi of Dwelling

Development Area Edits

- Removed Development Area

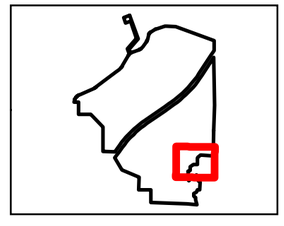
Waiver Area Distance

- #' Distance from Dev Area to maximum Slope Setback

Page 12

0 200 400 600
Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



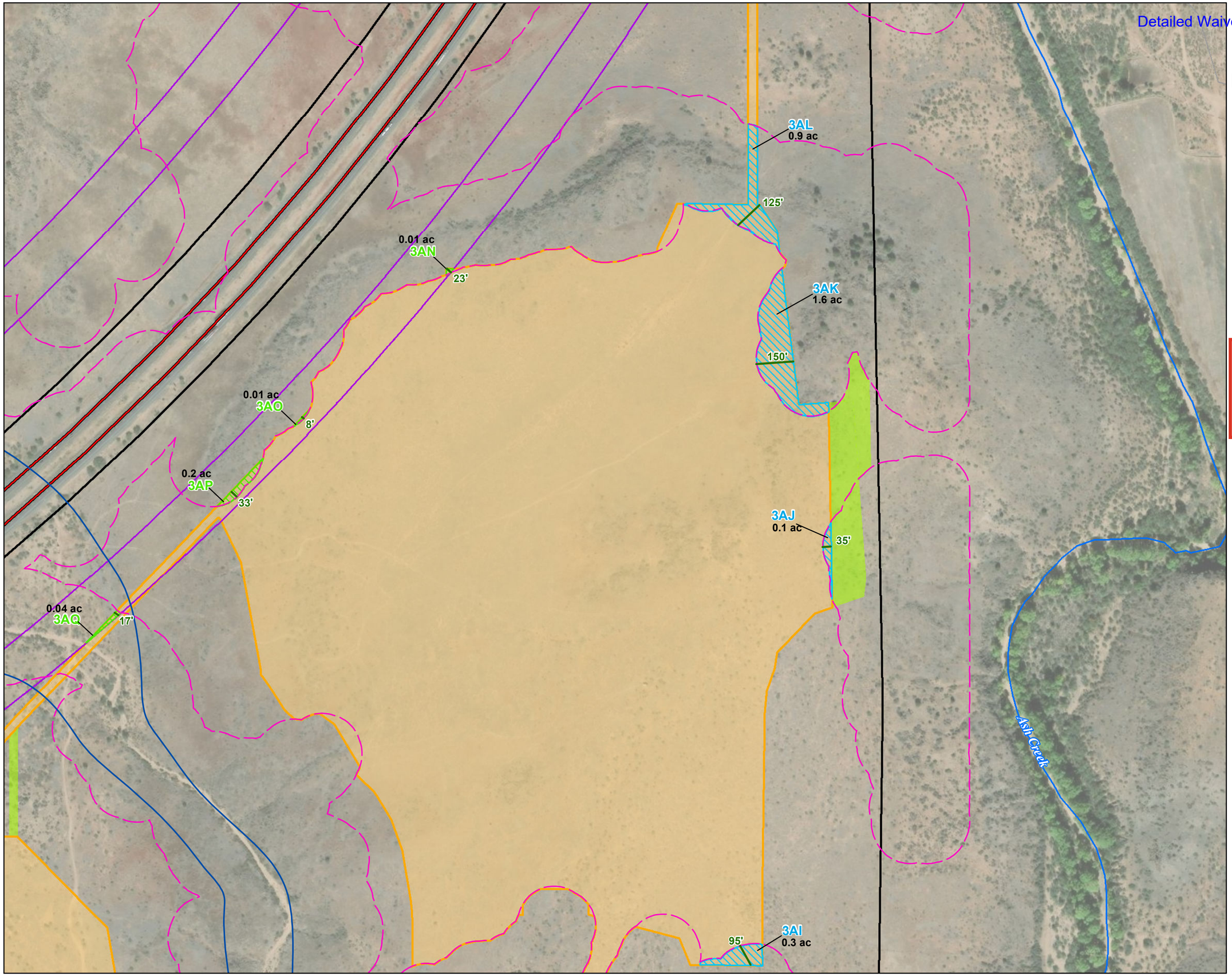
longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26		Author: ckv



Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features

- Dwelling
- Watercourse
- ALTA - mapped Floodplain

Yavapai County Solar Ordinance/ Waiver Request Setbacks

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- 300/500' Interstate ROW Setback
- 0.5 mi Residence Buffer

Waiver Area

- Waiver #3 Areas adj to AFR & AC
- Waiver #3 Areas w/in 500ft of I-17
- Waiver #3 Areas w/in .5 mi of Dwelling

Development Area Edits

- Removed Development Area

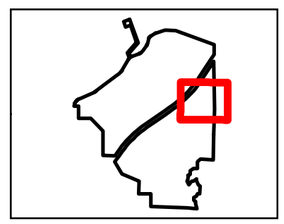
Waiver Area Distance

- #' Distance from Dev Area to maximum Slope Setback

Page 13

0 200 400 600
Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



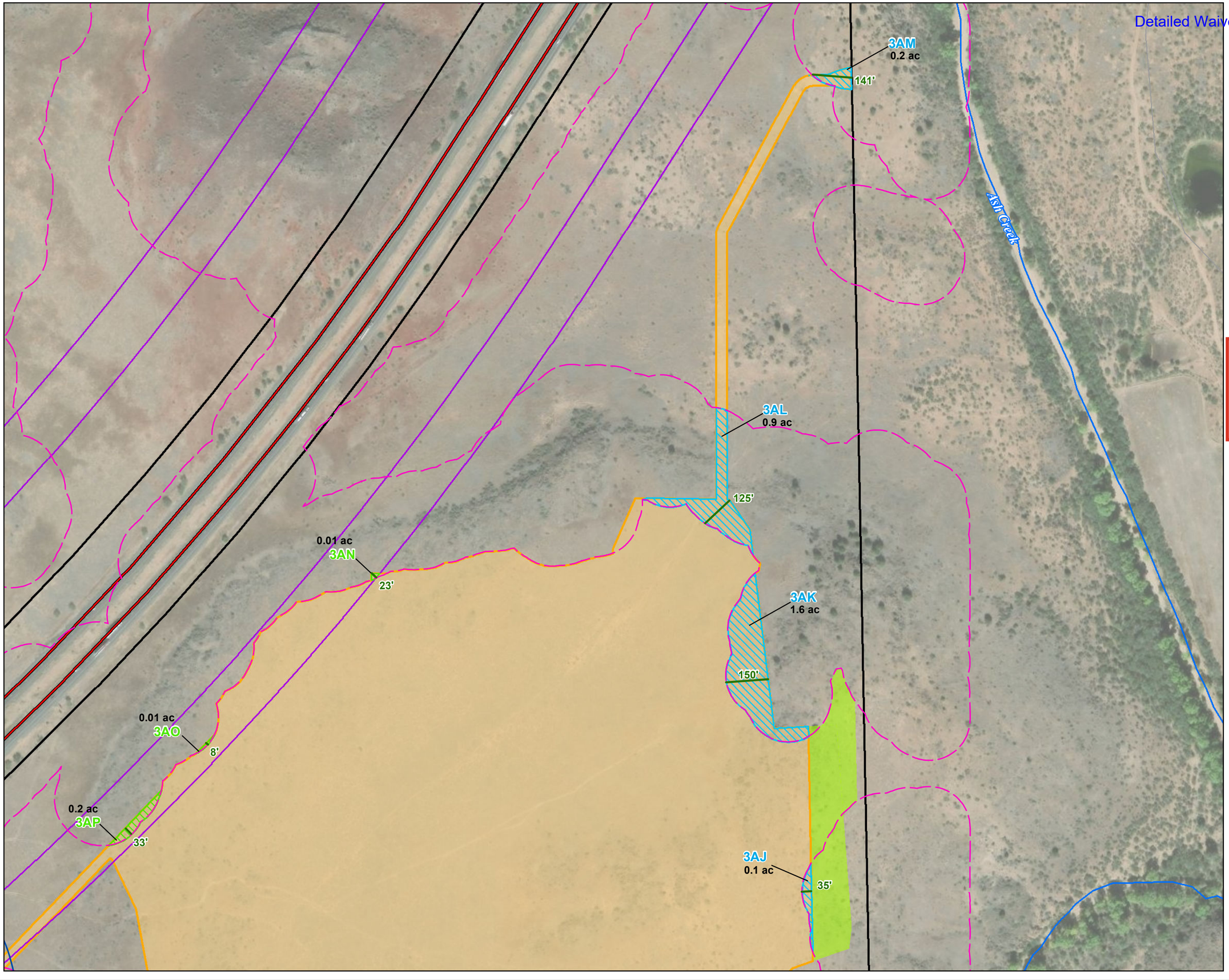
longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26		Author: ckv



Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features

- Dwelling
- Watercourse
- ALTA - mapped Floodplain

Yavapai County Solar Ordinance/ Waiver Request Setbacks

- 150' 10% Slope Setback
- 300/500' Interstate ROW Setback
- 0.5 mi Residence Buffer

Waiver Area

- Waiver #3 Areas adj to AFR & AC
- Waiver #3 Areas w/in 500ft of I-17
- Waiver #3 Areas w/in .5 mi of Dwelling

Development Area Edits

- Removed Development Area

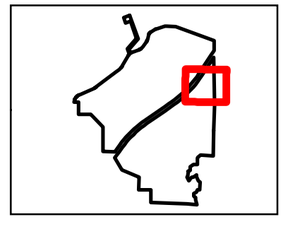
Waiver Area Distance

- #' Distance from Dev Area to maximum Slope Setback

Page 14

0 200 400 600
Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26		Author: ckv

Development Area: Waiver Locations

Dugas Substation

YAVAPAI CO.

Old Sycamore Rd

Agua Fria River

Orme Rd

Ash Creek

Dugas Rd

FR 686

17

17

Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Interstate Highway
- Road
- Watercourse
- 200' Buffer Zone - ASLD Property
- ALTA - FEMA Floodplain
- Agua Fria National Monument

Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

Yavapai County Solar Ordinance Setbacks

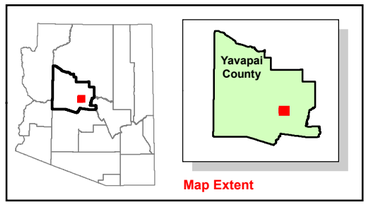
- 500' Buffer Zone - Lease Area
- 500' FEMA Floodplain Setback
- 300' Interstate ROW Setback
- 150' 10% Slope Setback
- 500' Federally Managed Land National Forest Setback
- 1,000' National Monument Setback

Waiver Area

- Waiver #1 Areas
- Waiver #3 Areas

0 0.25 0.5 Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



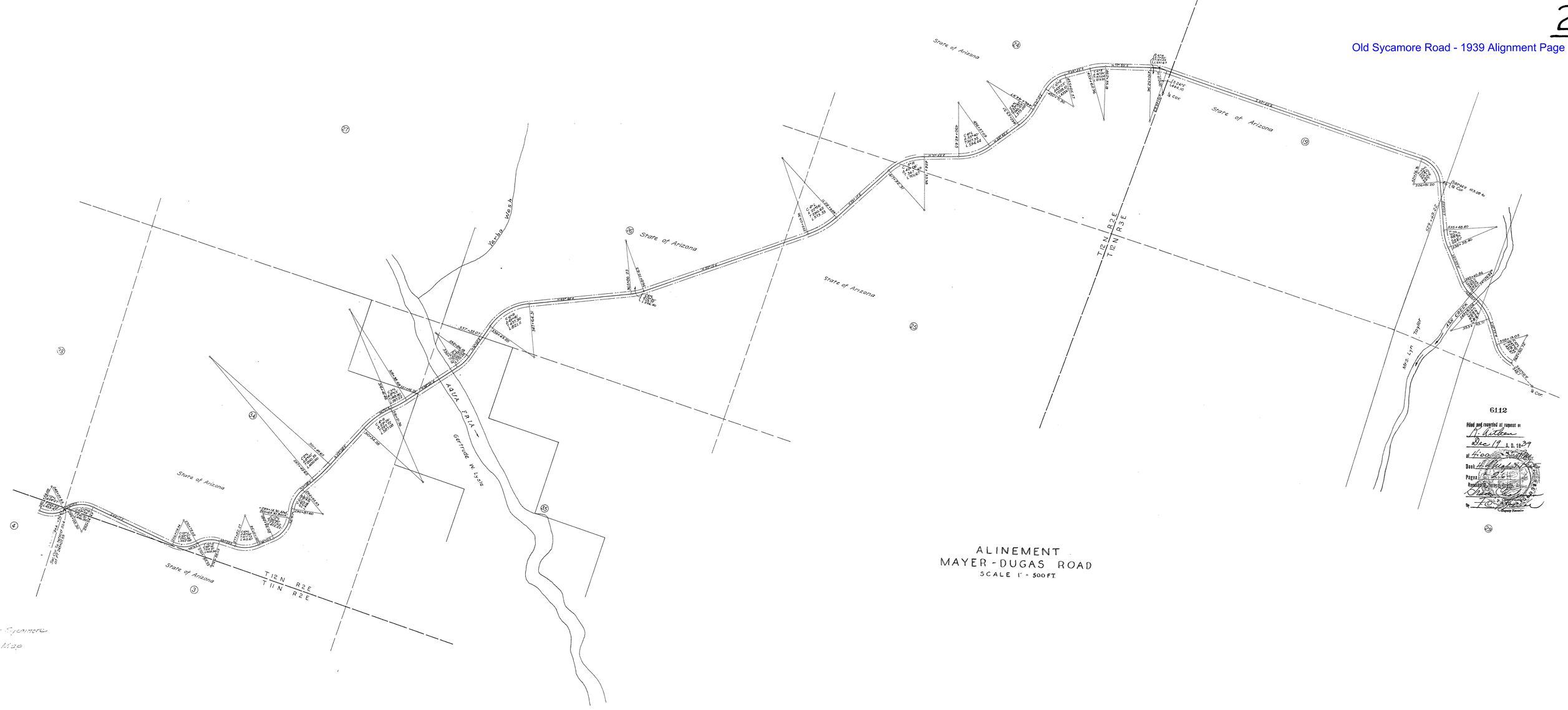
longroad ENERGY

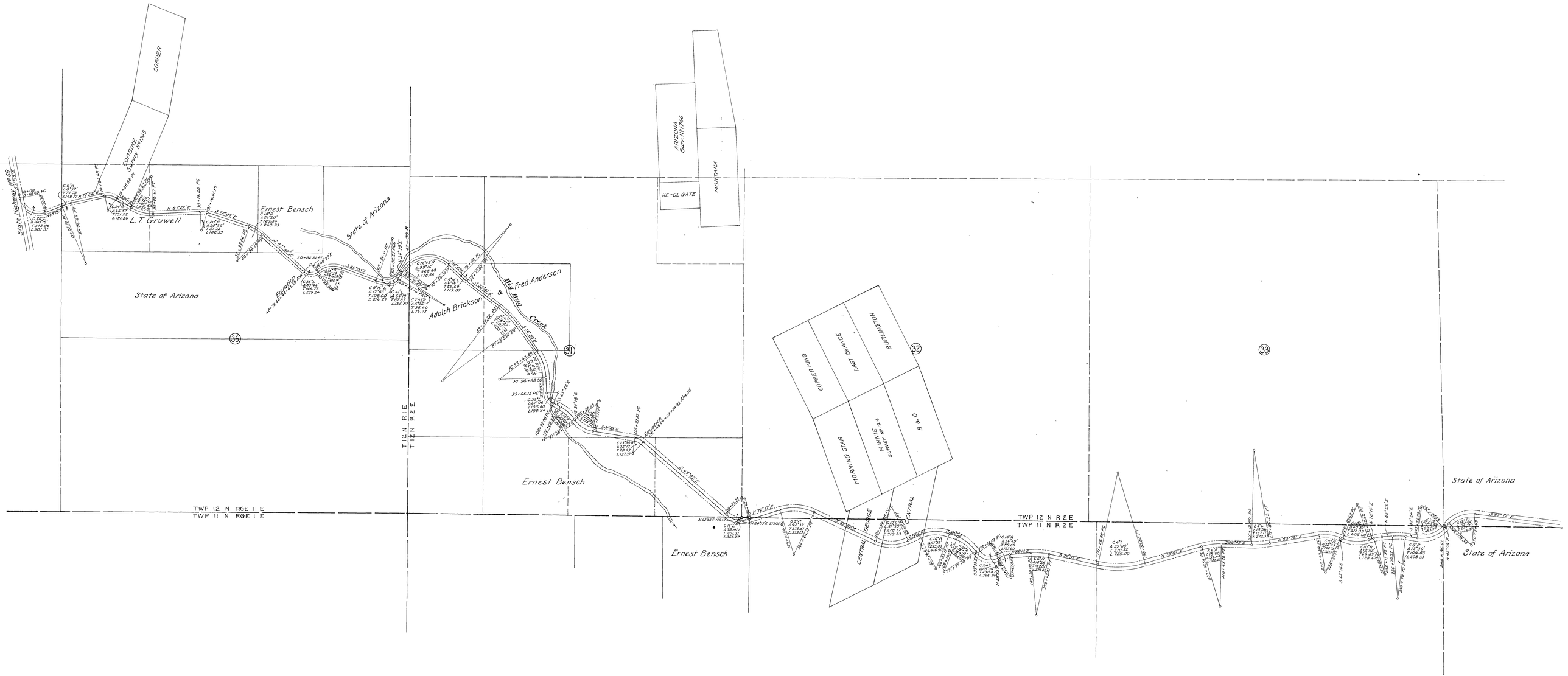
AGUA FRIA SOLAR AND STORAGE PROJECT

Development Area Map - Waiver Area

Map Extent: Yavapai County, AZ

Date: 6.30.26 | Author: ckv


State of Arizona
T 12 N R 2 E
T 12 N R 3 E
T 11 N R 2 E
Yavapai Co. 6.5 M.
AGUA FRIA
Gertrude W. Lyon
Mrs. Lyn Taylor
OLD SYCAMORE ROAD
6112
Filed and recorded at request of
R. Britton
Dec 19 A. D. 1939
at 4:00 P.M.
Book 4 Highways
Pages 26
Recorded by
Deputy Recorder
No. 10
ALINEMENT
MAYER - DUGAS ROAD
SCALE 1" = 500 FT.


COPPER
SOMBINE SURVEYING
L. T. Gruwell
Ernest Bensch
State of Arizona
Adolph Brickson
Big Fred Anderson & Big Hog Creek
ARIZONA
MONTANA
HE-OL GATE
COPPER KING
LAST CHANCE
BURLINGTON
MORNING STAR
SUNRISE NO. 1 & 2
B & O
CENTRAL
T12N R1E
T12N R2E
TWP 12 N RGE 1 E
TWP 11 N RGE 1 E
TWP 12 N R2E
TWP 11 N R2E
36
31
32
33

800-05-003G
800-20-042G
800-01-017Y
REAR
3,108'
800-20-043U
800-20-056W
DUGAS SUBSTATION
AZ STATE LEASE NO.
14-111099
FRONT
Distance to road centerline? (Front setback from planned 33' half street)
500-25-014B
500-25-015
800-20-043S
Front setback to ROW?
300'
Ouma Rd
17
500-25-014D
YAVAPAI CO.
800-20-044F
500-25-014C
FRONT
33' (road centerline to Development Area)
[Note per applicant]
177.6' PL/EP
400' R/W
39.1' PAVED ROAD
72.9' EP/EP
39.8' PAVED ROAD
Dugas Rd
500-25-014F
Distance to road centerline? (Front setback from planned 33' half street)
Exterior side setbacks to APS ROW?
Exterior side setbacks to APS ROW? (Assumed 0' or within ROW)
Front setback to ROW?
Ash Creek
501-31-009B
800-20-056X
Agua Fria River
200'
FRONT
300'
Front setback to ROW?
SIDE
800-01-018K
Old Sycamore Rd
Side setback to PL?
800-20-044H
800-20-044M
500-25-014G
FR 686
501-31-005
SIDE
FRONT
800-20-044P
800-20-044S
300'
400' R/W
200'
377'
500-04-002
Exterior side setbacks to APS ROW?
Exterior side setbacks to APS ROW?
501-27-006
17
800-20-044U
330' TRANSMISSION R/W
800-09-001E
800-20-044T
200'
Side setback to PL?
800-20-044V
460'
501-27-006B
501-27-006C
501-27-004
200'
554'
1,000'
800-20-044Z
500-04-001
REAR

Applicant
Staff

Legend

Proposed Project

- Project Parcel
- Development Area
- Agua Fria Solar and Storage Lease Boundary

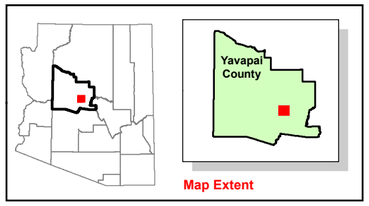
Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Old Sycamore Road Alignment
- ALTA I-17 Edge of Pavement
- Road
- Watercourse
- Transmission Right-of-Way
- Parcel

Development Area Perimeter Setbacks

0 0.25 0.5 Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



Map Extent

longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Additional Exhibit A - Conceptual

Map Extent: Yavapai County, AZ

Date: 9.16.26 | Author: ckv

Dugas Substation

Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features

- Watercourse
- FEMA - 100-year Floodplain (Zone A)
- ALTA - mapped Floodplain
- ASLD Property

Yavapai County Solar Ordinance Setbacks

- 500' Buffer Zone - Lease Area
- 500' Buffer Zone - ASLD Property
- 200' Buffer Zone - ASLD Property

Waiver Area

- Waiver #1 Areas

Development Area Edits

- Removed Development Area

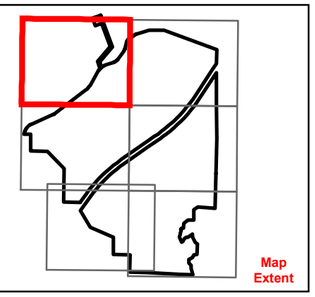
Waiver Area Distance

- # Minimum Distance from ASLD Parcel Boundary

Page 1

0 0.1 0.2
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



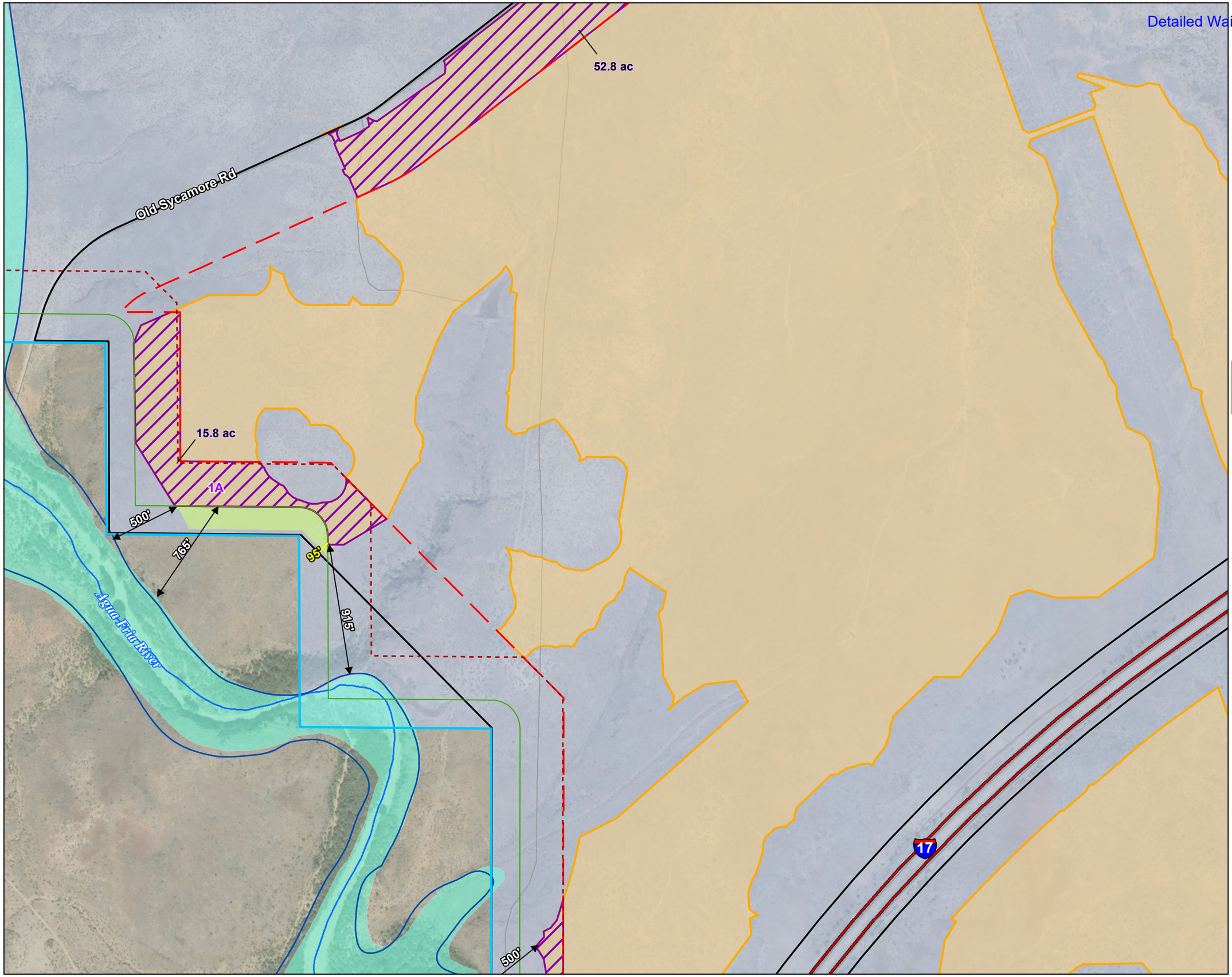
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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #1 Details

Map Extent: Yavapai County, AZ

Date: 6.17.26		Author: ckv



Legend

Proposed Project
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Watercourse
- FEMA - 100-year Floodplain (Zone A)
- ALTA - mapped Floodplain
- ASLD Property

Yavapai County Solar Ordinance Setbacks
- 500' Buffer Zone - Lease Area
- 500' Buffer Zone - ASLD Property
- 200' Buffer Zone - ASLD Property

Waiver Area
- Waiver #1 Areas

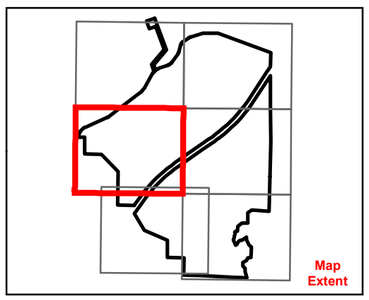
Development Area Edits
- Removed Development Area

Waiver Area Distance
- # Minimum Distance from ASLD Parcel Boundary

Page 2

0 0.1 0.2
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #1 Details

Map Extent: Yavapai County, AZ

Date: 6.17.26		Author: ckv

500'
6.8 ac
1B
500'
715'
200'
800'
Agua Fria River
34'
15.2 ac
1C
935'
500'
500'
1D
12 ac
200'
17

Legend

Proposed Project
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Watercourse
- FEMA - 100-year Floodplain (Zone A)
- ALTA - mapped Floodplain
- ASLD Property

Yavapai County Solar Ordinance Setbacks
- 500' Buffer Zone - Lease Area
- 500' Buffer Zone - ASLD Property
- 200' Buffer Zone - ASLD Property

Waiver Area
- Waiver #1 Areas

Development Area Edits
- Removed Development Area

Waiver Area Distance
- # Minimum Distance from ASLD Parcel Boundary

Page 3

0 0.1 0.2
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.

Map Extent

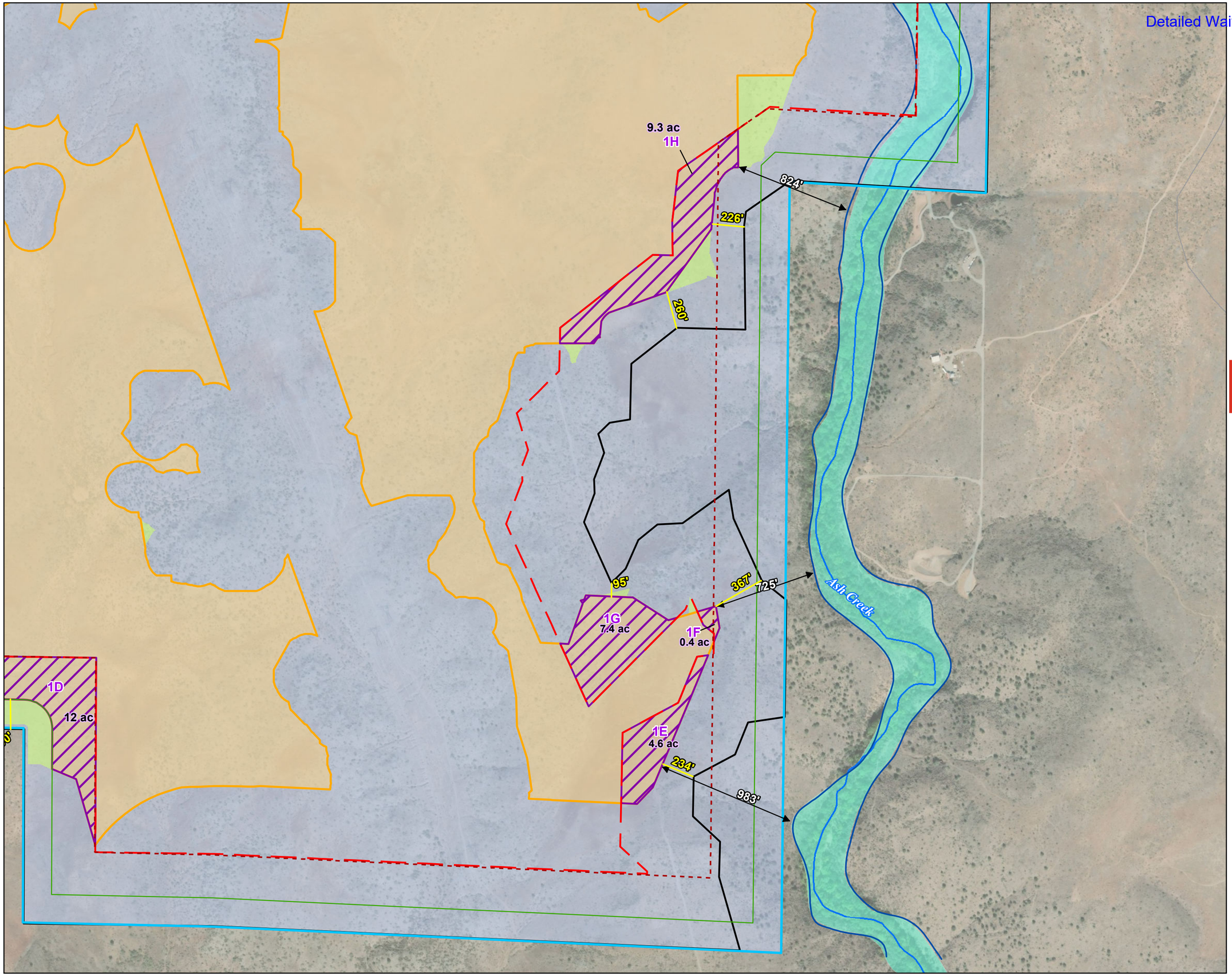
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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #1 Details

Map Extent: Yavapai County, AZ

Date: 6.17.26		Author: ckv



Legend

Proposed Project
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Watercourse
- FEMA - 100-year Floodplain (Zone A)
- ALTA - mapped Floodplain
- ASLD Property

Yavapai County Solar Ordinance Setbacks
- 500' Buffer Zone - Lease Area
- 500' Buffer Zone - ASLD Property
- 200' Buffer Zone - ASLD Property

Waiver Area
- Waiver #1 Areas

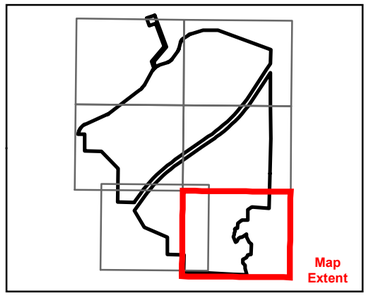
Development Area Edits
- Removed Development Area

Waiver Area Distance
- # Minimum Distance from ASLD Parcel Boundary

Page 4

0 0.1 0.2
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #1 Details

Map Extent: Yavapai County, AZ

Date: 6.17.26		Author: ckv

Detailed Waiver Request Maps Page 5 of 15

1I
10.7 ac

905'

200'

735'

17

Ash Creek

Legend

Proposed Project
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Watercourse
- FEMA - 100-year Floodplain (Zone A)
- ALTA - mapped Floodplain
- ASLD Property

Yavapai County Solar Ordinance Setbacks
- 500' Buffer Zone - Lease Area
- 500' Buffer Zone - ASLD Property
- 200' Buffer Zone - ASLD Property

Waiver Area
- Waiver #1 Areas

Development Area Edits
- Removed Development Area

Waiver Area Distance
- Minimum Distance from ASLD Parcel Boundary

Page 5

0 0.1 0.2
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.

Map Extent

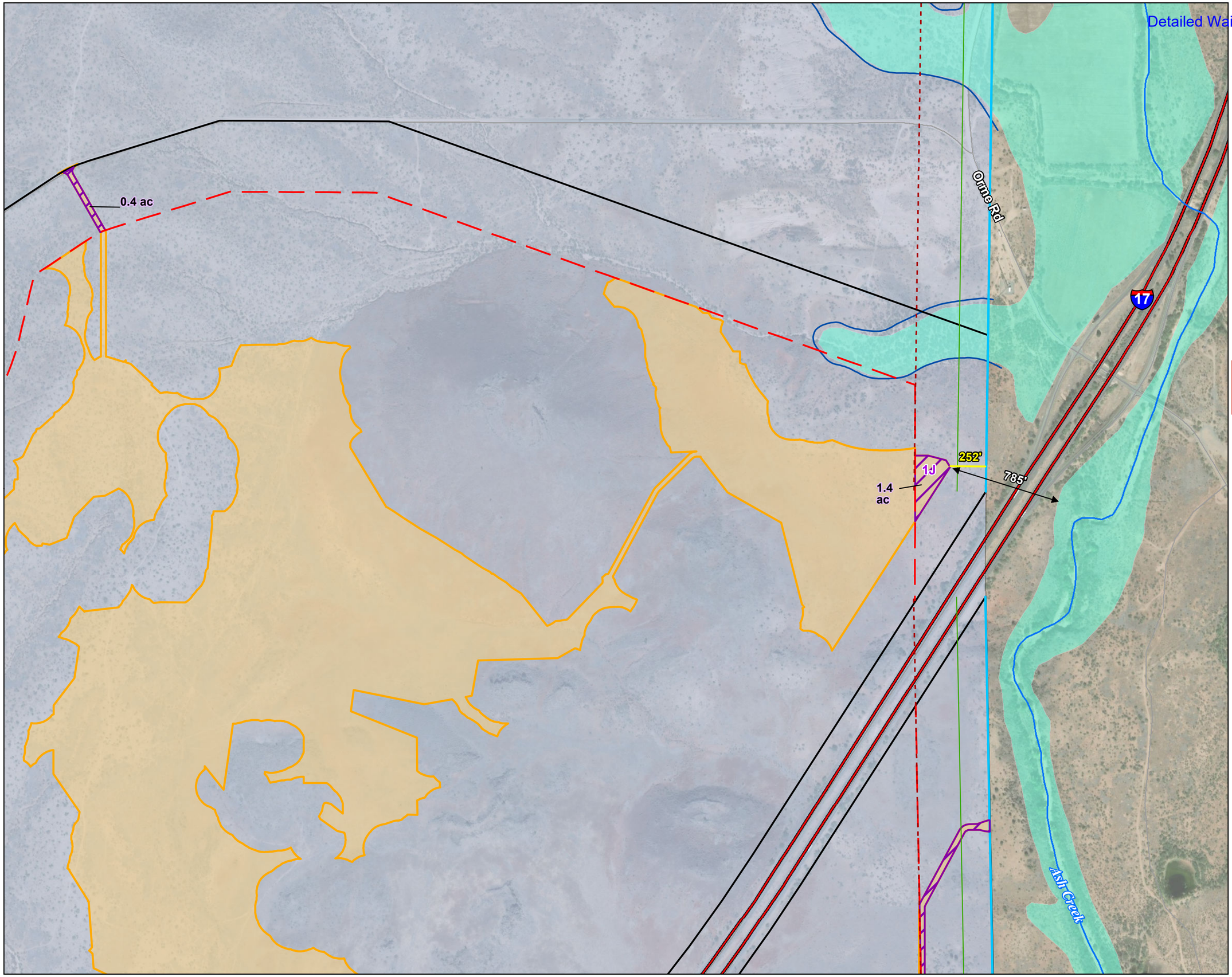
longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #1 Details

Map Extent: Yavapai County, AZ

Date: 6.17.26		Author: ckv



Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features

- Watercourse
- FEMA - 100-year Floodplain (Zone A)
- ALTA - mapped Floodplain
- ASLD Property

Yavapai County Solar Ordinance Setbacks

- 500' Buffer Zone - Lease Area
- 500' Buffer Zone - ASLD Property
- 200' Buffer Zone - ASLD Property

Waiver Area

- Waiver #1 Areas

Development Area Edits

- Removed Development Area

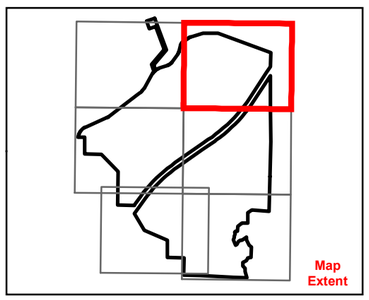
Waiver Area Distance

- # Minimum Distance from ASLD Parcel Boundary

Page 6

0 0.1 0.2
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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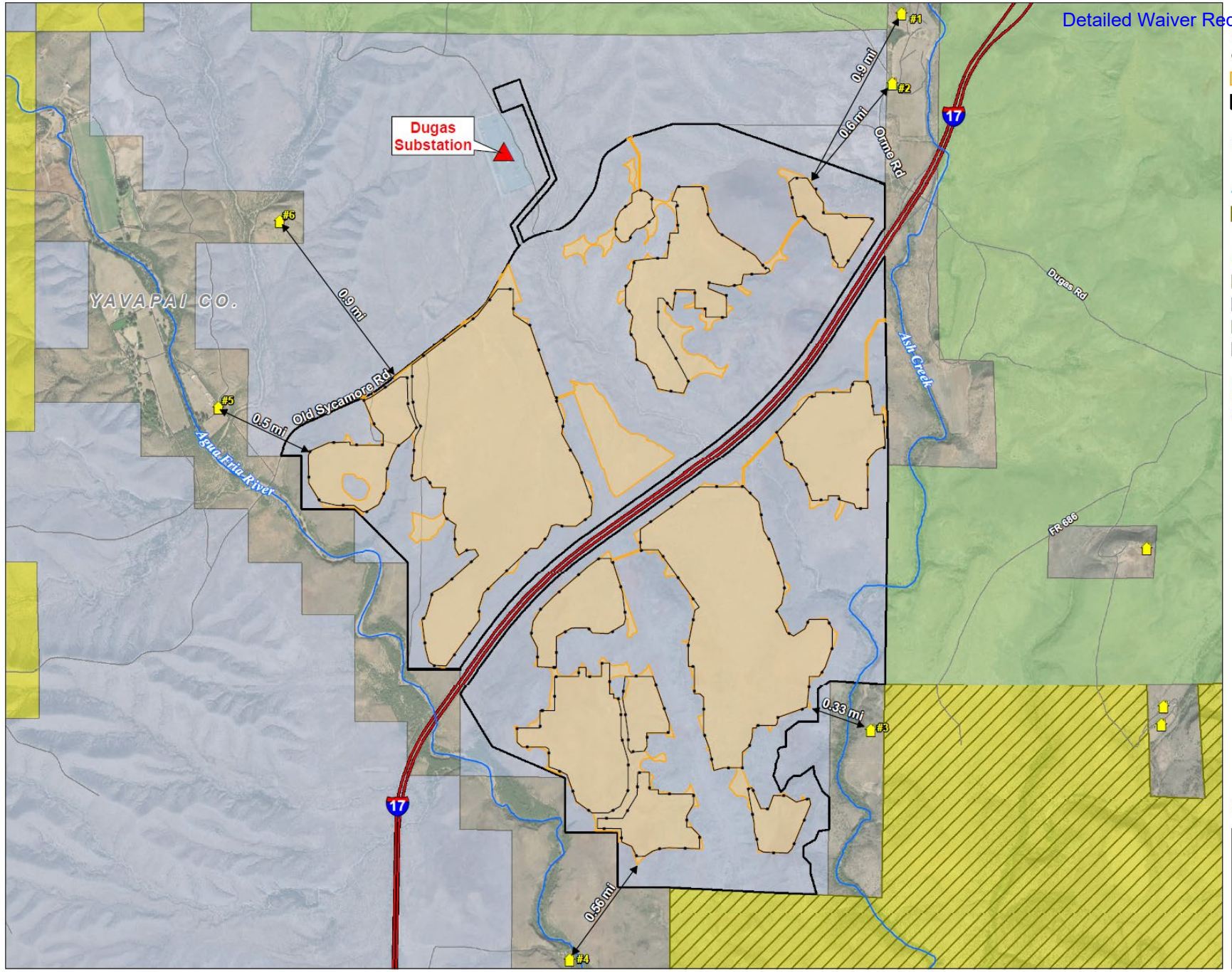
AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #1 Details

Map Extent: Yavapai County, AZ

Date: 6.17.26		Author: ckv

Waiver #2



Legend

Proposed Project
- Security Game Fence
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Dwelling
- Watercourse
- Agua Fria National Monument

Jurisdictional Land Ownership
- Bureau of Land Management Land
- State Land
- US Forest Service Land
- Private Land (No Shading)

Yavapai County Solar Ordinance Setbacks

5,280 feet / 1 mile from any dwellings

Page 7

0 0.25 0.5 0.75
Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.

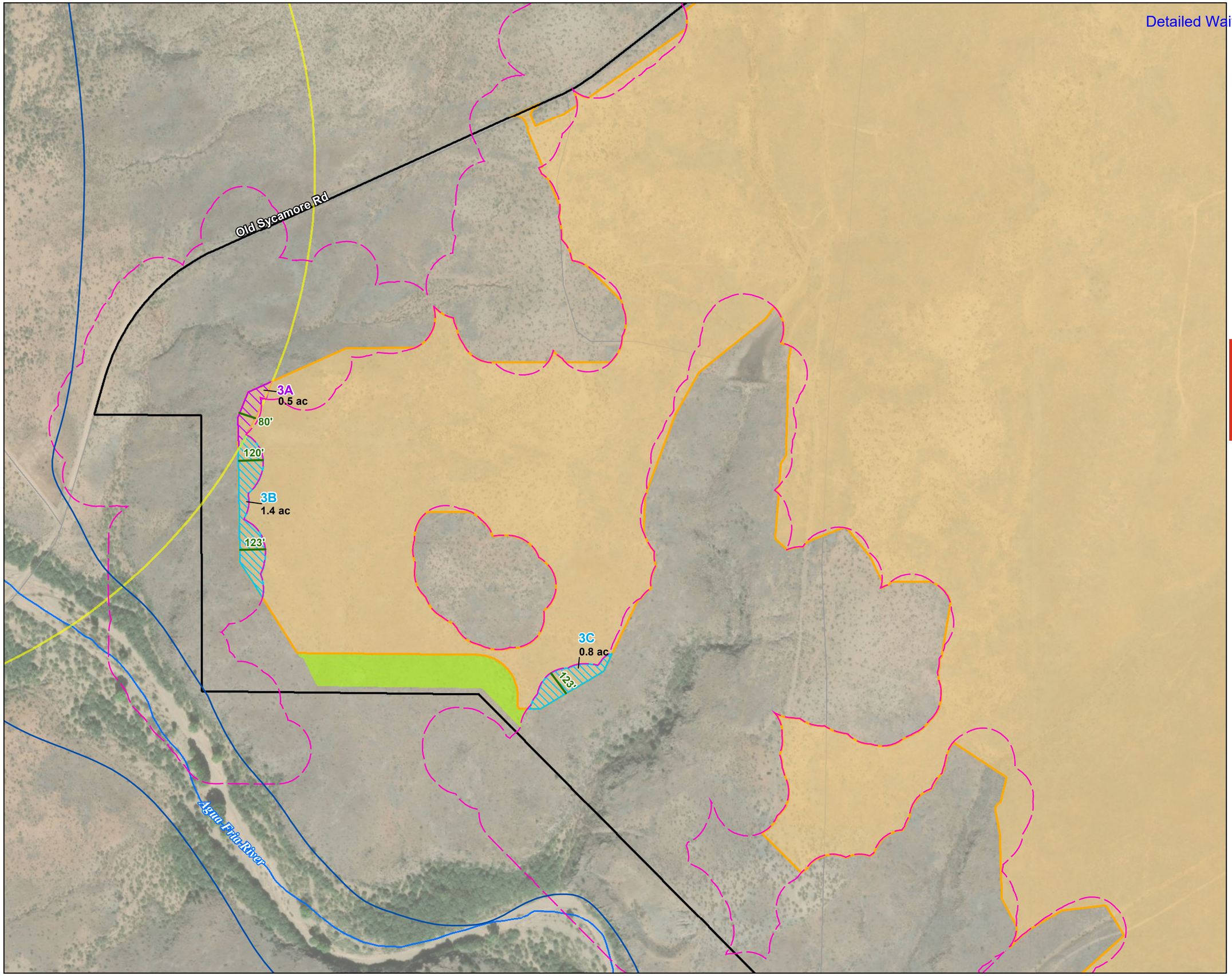
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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #2 Distances

Map Extent: Yavapai County, AZ

Date: 5.13.26 | Author: ckv



Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features

- Dwelling
- Watercourse
- ALTA - mapped Floodplain

Yavapai County Solar Ordinance/ Waiver Request Setbacks

- 150' 10% Slope Setback
- 300/500' Interstate ROW Setback
- 0.5 mi Residence Buffer

Waiver Area

- Waiver #3 Areas adj to AFR & AC
- Waiver #3 Areas w/in 500ft of I-17
- Waiver #3 Areas w/in .5 mi of Dwelling

Development Area Edits

- Removed Development Area

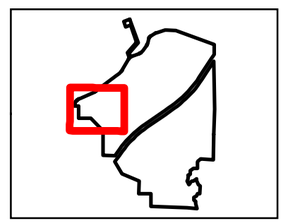
Waiver Area Distance

- #' Distance from Dev Area to maximum Slope Setback

Page 8

0 200 400 600
Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26		Author: ckv

3J
0.6 ac
121'
28'
3I
0.12 ac
3K
1 ac
117'
3L
0.1 ac
38'
3D
0.6 ac
87'
70'
3E
0.4 ac
3H
0.05 ac
27'
134'
3G
1.1 ac
3M
0.8 ac
156'
3F
0.3 ac
86'
17
Agua Fria River

Legend

Proposed Project
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Dwelling
- Watercourse
- ALTA - mapped Floodplain

Yavapai County Solar Ordinance/ Waiver Request Setbacks
- 150' 10% Slope Setback
- 300/500' Interstate ROW Setback
- 0.5 mi Residence Buffer

Waiver Area
- Waiver #3 Areas adj to AFR & AC
- Waiver #3 Areas w/in 500ft of I-17
- Waiver #3 Areas w/in .5 mi of Dwelling

Development Area Edits
- Removed Development Area

Waiver Area Distance
- #' Distance from Dev Area to maximum Slope Setback

0 200 400 600
Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.

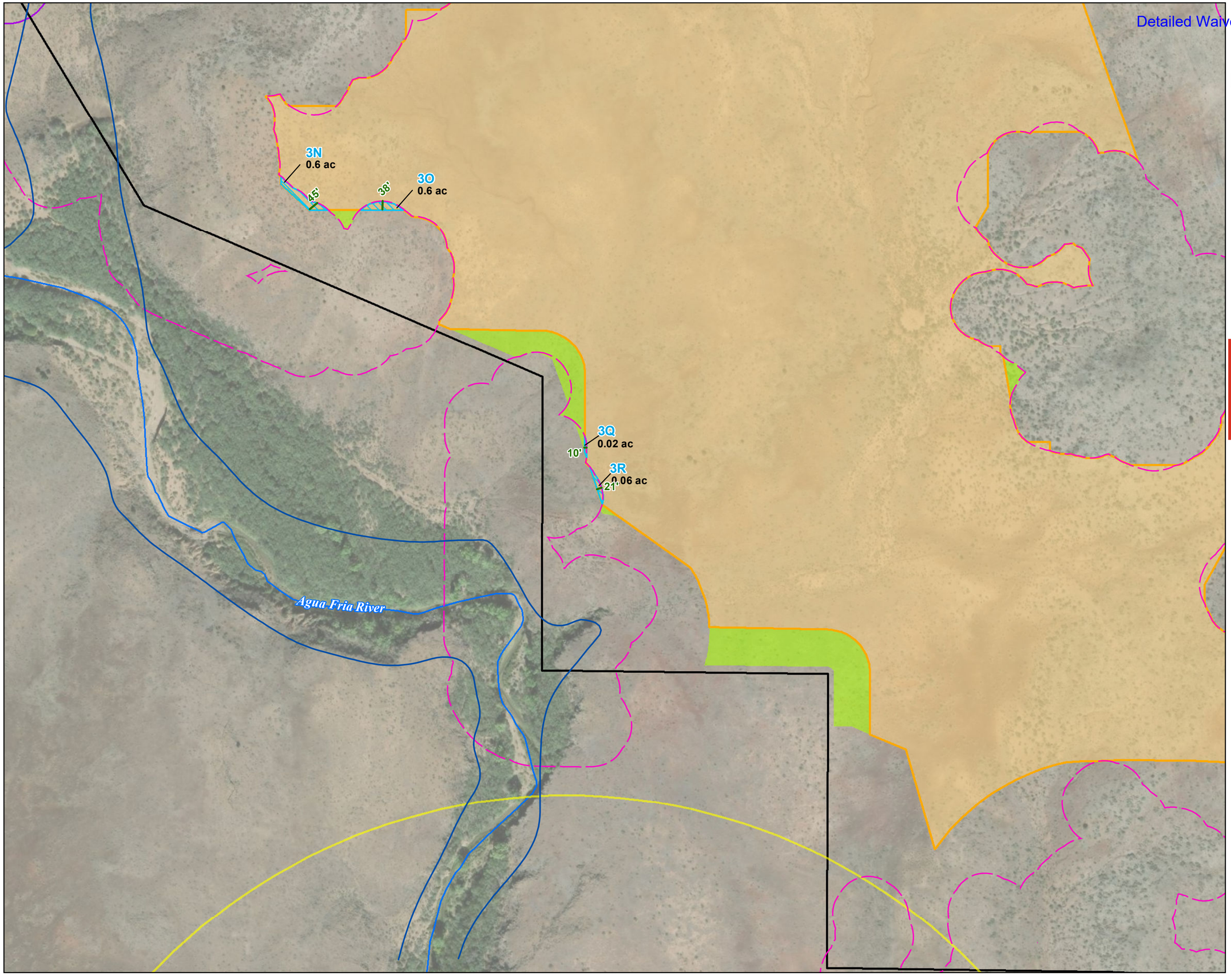
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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26 | Author: ckv



Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features

- Dwelling
- Watercourse
- ALTA - mapped Floodplain

Yavapai County Solar Ordinance/ Waiver Request Setbacks

- 150' 10% Slope Setback
- 300/500' Interstate ROW Setback
- 0.5 mi Residence Buffer

Waiver Area

- Waiver #3 Areas adj to AFR & AC
- Waiver #3 Areas w/in 500ft of I-17
- Waiver #3 Areas w/in .5 mi of Dwelling

Development Area Edits

- Removed Development Area

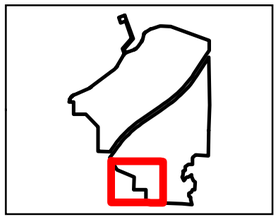
Waiver Area Distance

- #' Distance from Dev Area to maximum Slope Setback

Page 10

0 200 400 600
Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



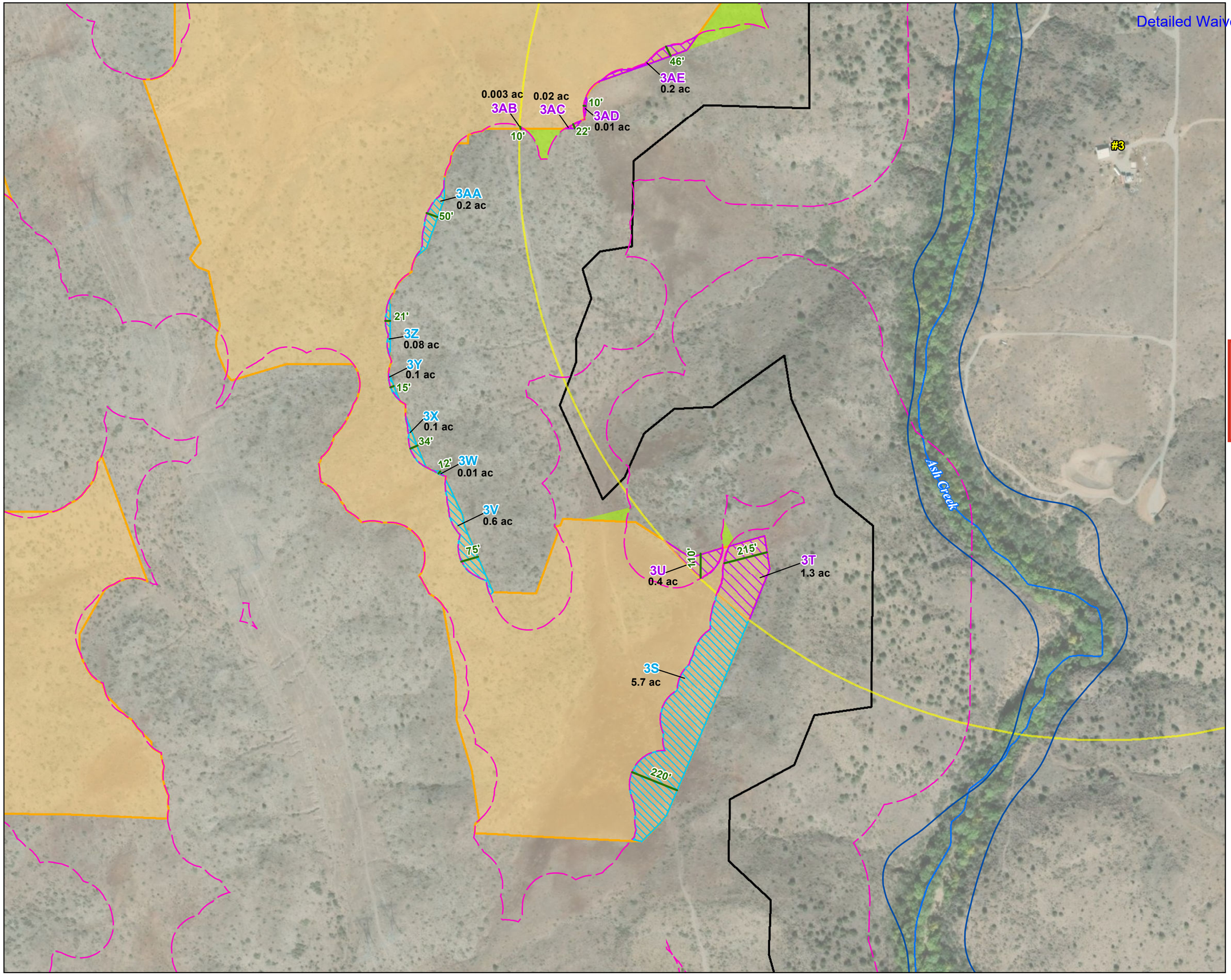
longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26		Author: ckv



Legend

Proposed Project
- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features
- Dwelling
- Watercourse
- ALTA - mapped Floodplain

Yavapai County Solar Ordinance/ Waiver Request Setbacks
- 150' 10% Slope Setback
- 300/500' Interstate ROW Setback
- 0.5 mi Residence Buffer

Waiver Area
- Waiver #3 Areas adj to AFR & AC
- Waiver #3 Areas w/in 500ft of I-17
- Waiver #3 Areas w/in .5 mi of Dwelling

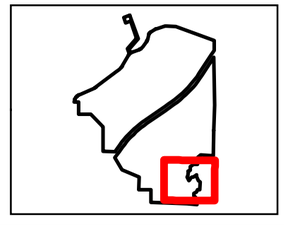
Development Area Edits
- Removed Development Area

Waiver Area Distance
- #' Distance from Dev Area to maximum Slope Setback

Page 11

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Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



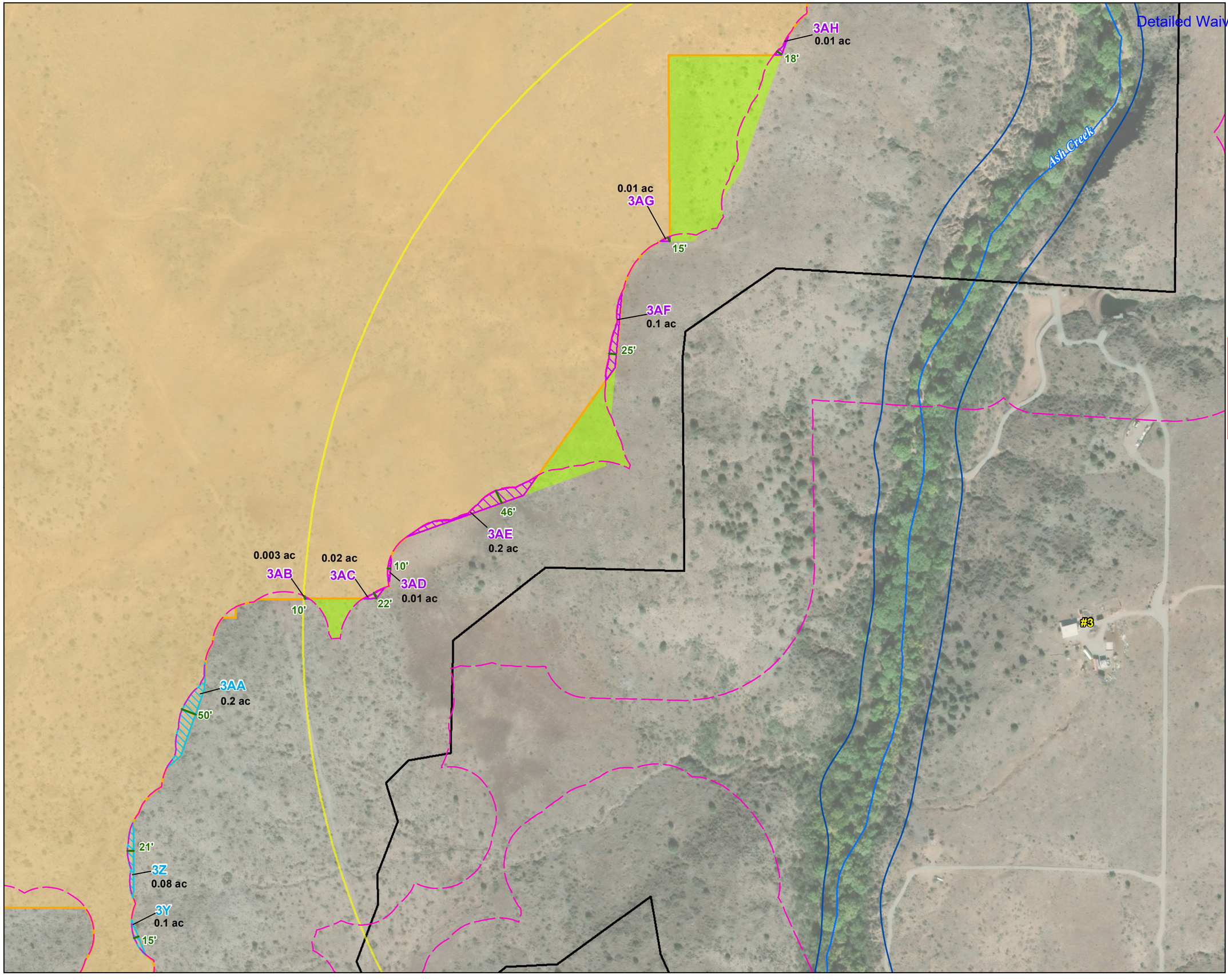
longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26 | Author: ckv



Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Existing Features

- Dwelling
- Watercourse
- ALTA - mapped Floodplain

Yavapai County Solar Ordinance/ Waiver Request Setbacks

- 150' 10% Slope Setback
- 300/500' Interstate ROW Setback
- 0.5 mi Residence Buffer

Waiver Area

- Waiver #3 Areas adj to AFR & AC
- Waiver #3 Areas w/in 500ft of I-17
- Waiver #3 Areas w/in .5 mi of Dwelling

Development Area Edits

- Removed Development Area

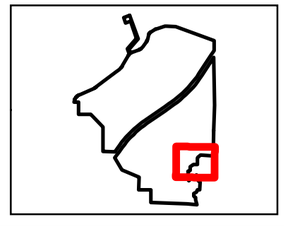
Waiver Area Distance

- #' Distance from Dev Area to maximum Slope Setback

Page 12

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Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



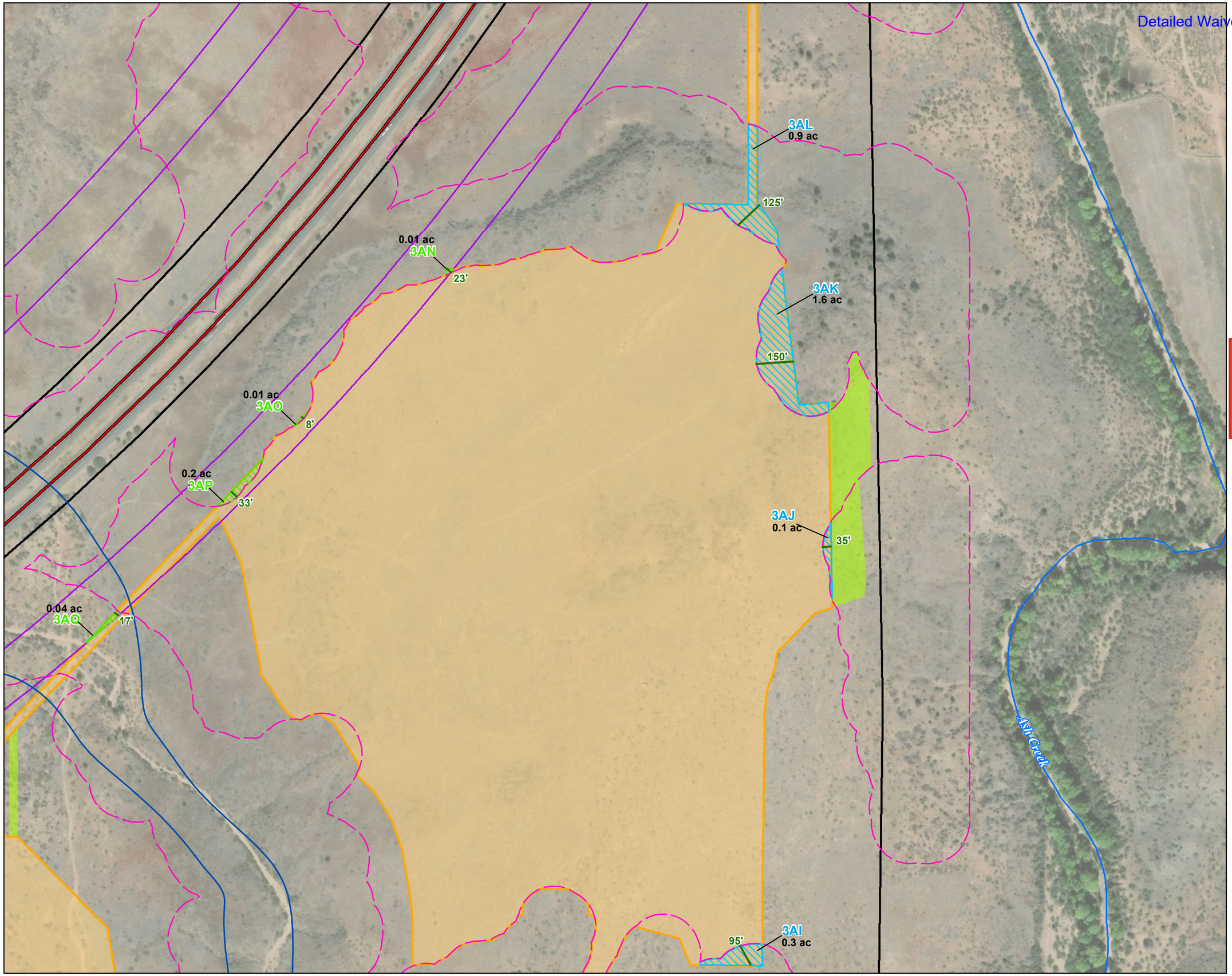
longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

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Legend

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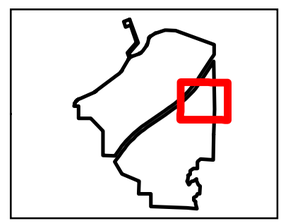
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Page 13

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SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



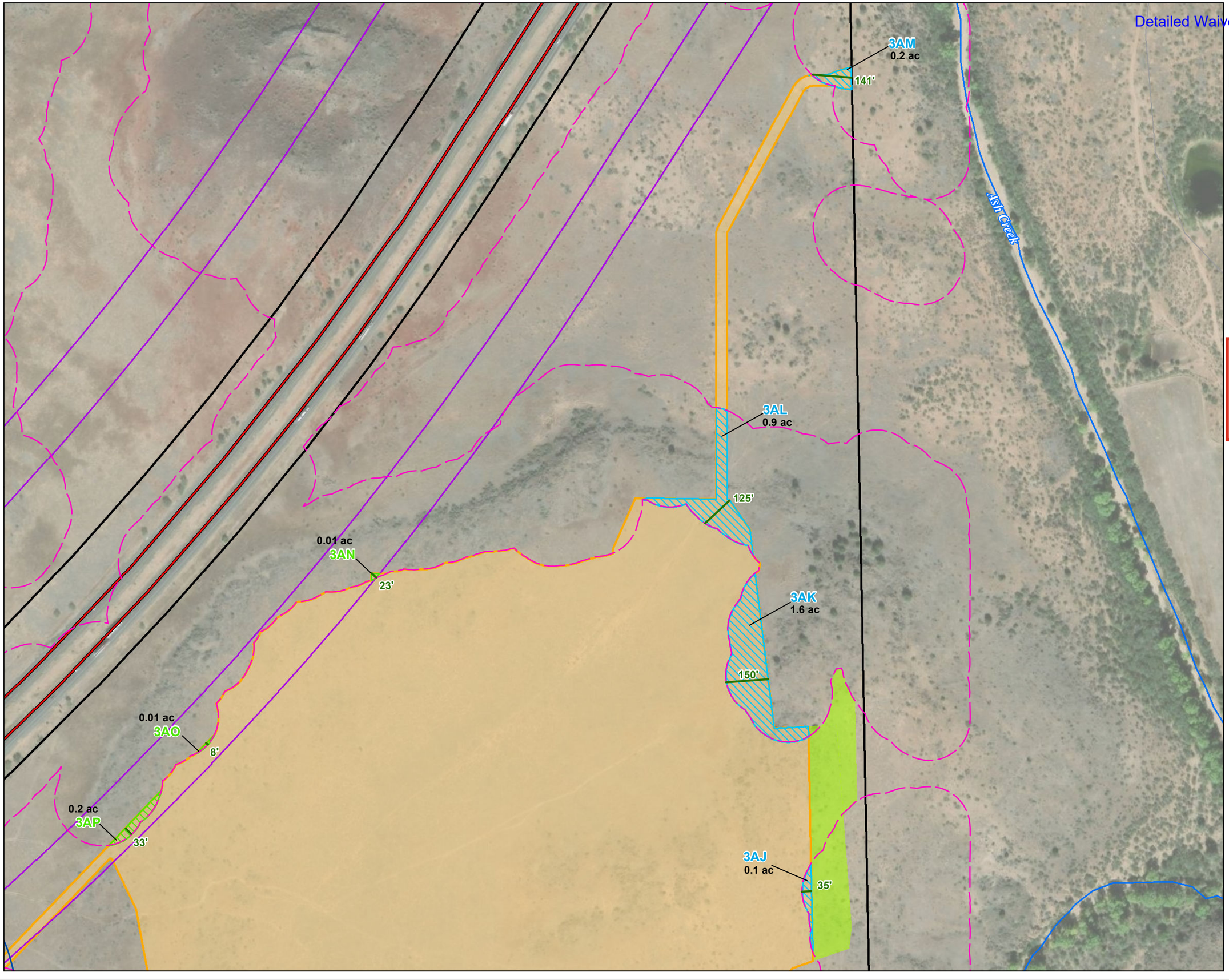
longroad ENERGY

AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26		Author: ckv



Legend

Proposed Project

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- Agua Fria Solar and Storage Lease Boundary

Existing Features

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- ALTA - mapped Floodplain

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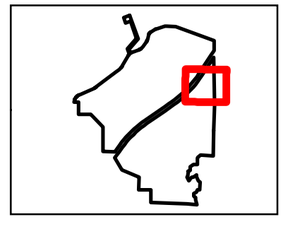
Waiver Area Distance

- #' Distance from Dev Area to maximum Slope Setback

Page 14

0 200 400 600
Feet

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Waiver Request #3 Distances

Map Extent: Yavapai County, AZ

Date: 6.19.26		Author: ckv

Development Area: Waiver Locations

Dugas Substation

YAVAPAI CO.

Old Sycamore Rd

Agua Fria River

Orme Rd

17

Ash Creek

Dugas Rd

FR 686

Legend

Proposed Project

- Development Area
- Agua Fria Solar and Storage Lease Boundary

Other Components

- Existing Substation
- Existing 500 kV Transmission Line
- Interstate Highway
- Road
- Watercourse
- 200' Buffer Zone - ASLD Property
- ALTA - FEMA Floodplain
- Agua Fria National Monument

Jurisdictional Land Ownership

- Bureau of Land Management Land
- US Forest Service Land
- State Land
- Private Land (No Shading)

Yavapai County Solar Ordinance Setbacks

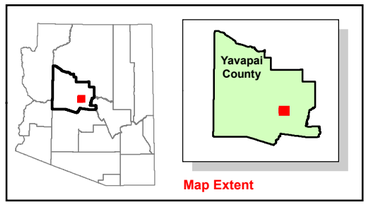
- 500' Buffer Zone - Lease Area
- 500' FEMA Floodplain Setback
- 300' Interstate ROW Setback
- 150' 10% Slope Setback
- 500' Federally Managed Land National Forest Setback
- 1,000' National Monument Setback

Waiver Area

- Waiver #1 Areas
- Waiver #3 Areas

0 0.25 0.5 Miles

SPCS NAD 83, AZ Central, US Ft.
Data Sources: ADOT, BLM, ESRI, Yavapai Co., USFS, USGS.



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AGUA FRIA SOLAR AND STORAGE PROJECT

Development Area Map - Waiver Area

Map Extent: Yavapai County, AZ

Date: 6.30.26 | Author: ckv

ARIZONA DEPARTMENT OF TRANSPORTATION
NORTHWEST DISTRICT PERMITS

To: Yavapai County Development Services
Planning & Zoning
1120 E. Commerce Drive
Prescott, AZ 86305

From:
Northwest District Permits Supervisor
1109 E. Commerce Drive
Prescott, AZ 86305

Review Comments Summary:

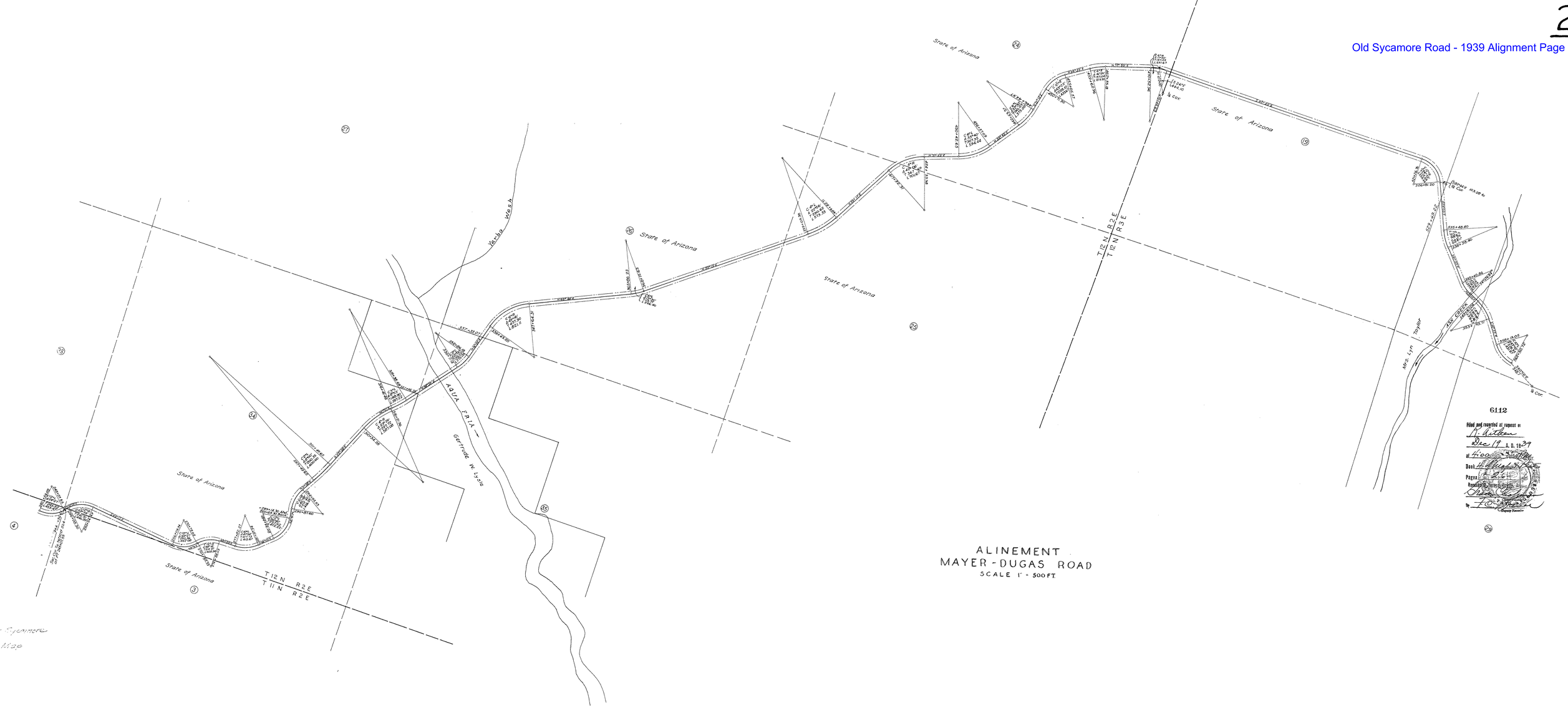
Comments on Preliminary Review for Aqua Fria Solar & Storage Project

SUBMITTAL:	1	PROJECT NAME:	Agua Fria Solar & Storage Project
REVIEWED BY:	ADOT Northwest District Prescott ReviewTeam	APPLICANT/TENANT:	Longroad Development Company, LLC
DISCIPLINE /OFFICE	Northwest District Prescott	SITE ADDRESS:	See Site Map
		PARCEL #:	N/A
		CURRENT ZONED:	RCU-2A
RETURN DATE:	8/5/2026	DESIGNER / CONSULTANT	
ADOT PROJECT MANAGER:		RETURN TO: PrescottPermits@azdot.gov or KingmanPermits@azdot.gov	

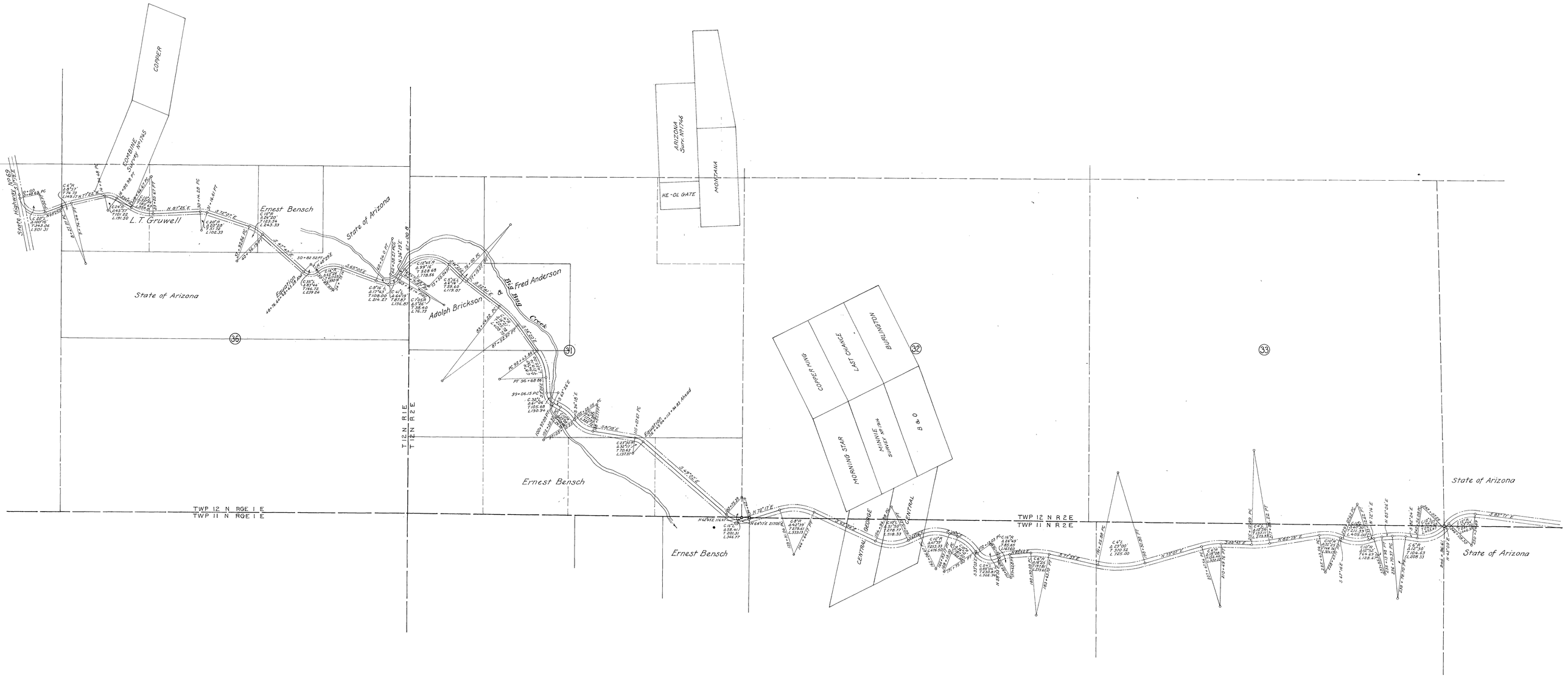
ACTION CODES A= WILL COMPLY *B= CONSULTANT/DESIGNER TO EVALUATE
C= ADOT TEAM TO EVALUATE D= DISREGARD COMMENT
* REQUIRES A WRITTEN EXPLANATION BY CONSULTANT/DESIGNER
**FINAL DISPOSITION REQUIRES ADOT APPROVAL IF ANY COMMENT IS DISREGARDED

COMMENT NO.	DWG/SPEC. PAGE NO.	REVIEWER COMMENT	CONSULTANT/DESIGNER EXPLANATION/INITIALS*
1	General	The proposed aerial crossing of I-17 will need to be defined and detailed. The Aerial crossing will have to be done at night. Cross-sections labeling lowest point of new wire and elevation difference between roadway on northbound and southbound I-17 will be required.	
2	General	Construction access and what types of equipment will be needed on both sides of I-17. Truck hauling size and phasing when arrays are brought in and constructed need to be defined. Truck turning templates will need to be developed for the interstate access and approximate numbers a day determined with an overall schedule. Hauling the equipment to the site needs more detail.	
3	General	Any drainage or retention improvements will need to be identified and new drainage toward I-17 right-of-way must be avoided. On-Site plans will be needed for review including drainage plan.	
4	General	Array glare onto I-17 needs to be studied and eliminated as much as possible when arrays are operational.	
5	General	Improvements to I-17 access may be necessary depending on the types of vehicles and numbers anticipated including shoulder widening and ramp intersection stabilization. Hauling the equipment to the site needs more detail.	
6	General	Any and all work within the ADOT Right of Way will require an encroachment permit application with all supporting documentation.	
7	General	Address comments above and submit to Northwest District Prescott Permits for further review.	
8	General	ADOT reserves the right to comment further during Yavapai County's review process.	
9			
10			
11			

*Consultant/Designer must provide where plans/specifications have changed and detail on how Reviewer Comment has been incorporated. This description must provide enough detail to be clear. If the Consultant/Designer does not agree with the comment, an explanation of why must be provided and further reviews may be needed.



ALINEMENT
MAYER - DUGAS ROAD
SCALE 1" = 500 FT.


COPPER
SOMBINE SURVEYING
L. T. Gruwell
Ernest Bensch
State of Arizona
Adolph Brickson
Big Fred Anderson & Big Hog Creek
ARIZONA
MONTANA
HE-OL GATE
COPPER KING
LAST CHANCE
BURLINGTON
MORNING STAR
SUNRISE NO. 1 & 2
B & O
CENTRAL
T12N R1E
T12N R2E
TWP 12 N RGE 1 E
TWP 11 N RGE 1 E
TWP 12 N R2E
TWP 11 N R2E
36
31
32
33

August 14, 2026

RE: Agua Fria Solar and Storage Project
Solar Facility Use Permit Application
Response to Technical Comments

Yavapai County Development Services Department,

We appreciate the thorough review of the Application materials for the Agua Fria Solar and Storage Project (Project). The insights shared in the comments will support greater compatibility between the Project and the County. We are committed to addressing the concerns and suggestions raised by the County and various third parties.

The table below includes our responses to comments from the following documents:

- **A)** AF Third Party Summary Review Comments (Shums Coda, received 7/27/2026)
- **B)** AF Third Party Summary Review Comments – Draft Conditions of Approval (Shums Coda, received 7/27/2026)
- **C)** 2024 IFC/NFPA 855 Code Alignment and Compliance Matrix (Shums Coda, received 7/27/2026)
- **D)** Agua Fria Solar Stormwater Management Plan 2nd Review Comments (Westwood, dated 7/29/2026)
- **E)** ADOT Requirements for Agua Fria Solar & Storage Project (ADOT Northwest District Permits Supervisor – Comments on Preliminary Review for the Agua Fria Solar & Storage Project, dated 8/5/2026)

Agua Fria Solar and Storage Project – Response to Comment Matrix for Solar Facility Use Permit Application

Item	Comment	Response
A) AF Third Party Summary Review Comments (Shums Coda, 7/27/2026)		
1	Upon reviewing the project in conjunction with Yavapai Ordinance Section 608 Solar Facilities it appears the project meets the purpose of this section such that it: a. Minimizes and mitigates impact on natural, cultural, and Recreational Resources with recommended action items to provide further detail for consideration as detailed below, b. Maintains and protects wildlife populations and corridors, viewsheds, vegetative communities, dark skies, air quality and noise with recommended action items to provide further detail for consideration as detailed below c. Protects property values, d. Provides private landholders (State) economic diversity, e. Provides a decommissioning plan, with recommended action items to provide further detail for consideration as detailed below	No comment or action required by the Applicant.
2	As stated in Subsection C - General provisions 2(c), one mile is required between other Solar facilities. Yavapai County will need to verify this requirement is being met before considering this application.	The Applicant can confirm via aerial imagery that there are no solar projects located within 1 mile of the Project Boundary. No action required.
3	The application has been submitted and complies with the application requirements found in 608-D-2(a)(b) and (l). The plan did not include items (c) Wildlife Protection Plan; (e) Stormwater Management Plan; (f) Visual Impact Study; (g) Landscape Plan; (i) Traffic Plan; (j) Airport study; and (k) Land Use Impacts and mitigation. Yavapai County should	The Applicant confirms that the Application did include items (c) Wildlife Protection Plan, (e) Stormwater Management Plan, (f) Visual Impact Analysis, (g) Landscaping Plan, (i) Traffic Plan, (j) Airport Study, and (k) Land Use Impacts and Mitigation, initially submitted via the County portal on August 5, 2025 and resubmitted on December 5, 2025 following comments from Yavapai County Development Services. Yavapai County Development Services issued an Applicant Submittal Verification

	verify if this information has been received and request any additional information.	Letter to the Applicant on January 9, 2026, deeming the Application complete.
4	As stated in Subsection C - General Provisions 4(a), the site plan identifies the required 500' foot buffer zone and there are areas on the plan that encroach this area Including fencing and retention. The applicant is asking for a waiver in this regard which the county will need to approve a waiver in this regard. As stated in Subsection C – General provisions 4(b), there are wildlife corridors identified on the plan. The Arizona Game and Fish Department should review the plan to ensure these corridors are efficient for the wildlife in the area.	The Applicant has included a Waiver Proposal from the 500' buffer zone, included in Section 3 of the Solar Facilities Report, as revised and submitted to the County on July 9, 2026. The Applicant is requesting approval of the Waiver Proposals from Board of Supervisors via a stipulation requiring development of the site to be in general conformance to the Solar Facilities Report and waiver requests therein (See proposed Stipulation #1). The Applicant has reviewed plans with Arizona Game and Fish Department and has received a letter from Arizona Game and Fish Department, dated August 28, 2025, documenting this review process (See Appendix A, Agency Coordination and Correspondence, of the Wildlife Protection Plan).
5	As stated in 608 - F Development and Performance Standards, The project Location and dimensions are accurately zoned (RCU-2A) and is under the maximum 3,000 acre development area. The plan identifies the development area as being 1,930 acres.	Per the revised Development Plan Map submitted to the County on July 2, 2026 and included in the revised Solar Facility Report dated July 2026, the Applicant has further reduced the Development Area to approximately 1,909 acres. The Applicant confirms this is the planned Development Area acreage and it is under the maximum allowed area.
6	In regards to Yavapai County ordinance 608 - F(d) - Preferred sites, the proposal is adjacent to and/or near transmission lines which is identified as being an option for a preferred site as provided in 608 - F(d)(7). Based on the data provided, this application should be considered as a preferred site due to the proximity of the transmission lines. Yavapai County ordinance 608 - F(d)(7) reads "project sites that use or are near an existing or planned substation, or transmission line or other satisfactory inter-tie location." Yavapai County should consider any/all characteristics of this site to ensure it is a preferred site.	The Application should be considered as a Preferred Site per the characteristics described in Section 608. No action or comment from the Applicant.
7	The buildout of the site encroaches slopes greater than 10% as required by 608 F(2)(g). This area is minimal but	Section 608 F(2)(g) requires a setback of 150' from any Hillsides with slopes of ten percent (10%) or greater. The Applicant has revised the Project design to align with this requirement in all areas

	Yavapai County will need to consider a waiver in this regard.	where feasible, however, the Applicant has included a Waiver Proposal from this setback as described in the Solar Facility Report Section 3. The Applicant is proposing an encroachment of this setback by approximately 20.57 acres (0.51% of the leased area). The waiver is proposed to straighten fence lines and achieve standard solar array block dimensions necessary for electrical efficiency and constructability, allowing for a reduction in the fragmented footprint caused by the setback requirement. The Applicant is requesting approval of the Waiver Proposals from Board of Supervisors via a stipulation requiring development of the site to be in general conformance to the Solar Facilities Report and waiver requests therein (See proposed Stipulation #1).
8	The following setbacks were observed: The required one-mile separation from a residence is not being met as noted on the plan (1,620 ft.) and required in 608 F(2)(a) The project also has areas that encroach the required 500' ft floodplain setback required in 608 F(2)(b). The county will need to consider a waiver in this regard.	The Applicant is requesting a Waiver for the required one-mile setback from residences, as described in the Solar Facility Report Section 3 and previously discussed with Development Services staff. The waiver proposal has been modified to reflect discussions with Development Services staff and the Applicant is committed to maintaining a 200' setback from private property. The Applicant is requesting approval of the Waiver Proposals from Board of Supervisors via a stipulation requiring development of the site to be in general conformance to the Solar Facilities Report and waiver requests therein (See proposed Stipulation #1). The Applicant does not request a waiver from the 500' Floodplain Setback Section 608 F(2)(b). The FEMA Floodplain boundaries shown in plans are to be updated with the Project A.L.T.A. Survey and any encroachment shown within this setback will be removed in the Development Plan prior to issuance of construction permits. The Project is committed to maintaining a 500' setback from all FEMA Floodplains and will reflect this in plans at time of construction permits.
9	Solar panel heights are shown at 10 feet 11 inches fully extended. This height meets the maximum 20' feet from grade height when fully tilted as required by 608 F (3)(a,b).	The Applicant confirms the solar panel heights are within the allowed maximum height. No action or comment from the Applicant.

	The other structures (facilities maintenance building and construction trailer) are less than the 35' feet maximum.	
10	The proposal includes 3 crossings for wildlife and the fences appear to not create dead ends or areas to trap wildlife. The plan should be reviewed by the Arizona Game and Fish Department as stated in 608 F(4)-Wildlife corridors.	The Applicant has reviewed plans for wildlife crossings, fencing, and post-construction wildlife monitoring with Arizona Game and Fish Department and has received a letter from Arizona Game and Fish Department, dated August 28, 2025, documenting this review process (See Appendix A, Agency Coordination and Correspondence, of the Wildlife Protection Plan).
11	As stated in 608 F(6) - screening, It appears screening is adequate for the project (secured fencing around the site); however, Yavapai County may want to consider additional screening requirements for the development as seen from the highway and may request a visual impact study, photo matched renderings or photomontages to illustrate and better understand the proposal as seen from driving on the highway.	The Applicant submitted a Visual Impact Analysis (VIA) on August 5, 2025, and a revision of this Analysis on December 5, 2025. The VIA includes multiple photo simulations from various Key Observation Points (KOPs), including several locations along Interstate 17. Prior to the Applicant preparing the simulations, all KOPs were reviewed with Development Services during the Pre-Application review phase of the Project. Development Services staff provided comments on these KOPs on June 13, 2025, at which point the Applicant added additional simulation points intended to simulate visual impacts along I-17. The applicant is also proposing enhanced metal corrugated fencing for additional screening surrounding the BESS and O&M area to alleviate concern of visual impact for drivers along I-17.
12	As stated in 608-F(1) noise is limited to 50 DBA which the Noise Report indicates will be maintained. The plan identifies the development to be between 35 and 45 DBA on average with the worst case scenario being 47 DBA.	The Applicant confirms the Project is within required noise limits as detailed in the Noise Report. No action or comment from the Applicant.
13	The county should consider approving the decommissioning and reclamation plan with the total being $13,729,133. Ordinance 608-M states "The estimate shall establish the full amount of the decommissioning and reclamation cost without regard to the possibility of salvage value unless the Board of Supervisors accepts the value of the salvage as part of a third-party engineer's analysis, as updated every five (5)	No action or comment from the Applicant.

	years with the rest of the cost estimate to ensure reasonable and accurate estimates."	
14	In regards to 608 F(9) - Glare Impact, and as indicated in subsection D.2.j of this Section, Yavapai County may want to require a glare impact study for the Federal Aviation Administration (FAA) to review and determine impacts on any nearby airports if applicable.	The Applicant submitted an Airport Study on August 5, 2025, which was then revised and re-submitted on December 5, 2025. The Federal Aviation Administration (FAA) Notice Criteria Tool determined the Project does meet or exceed the FAA's notice criteria thresholds (See Appendix A, FAA Notice Criteria Tool, of the Airport Study.) The need for a glare study was not indicated by the FAA. As detailed in the Solar Facilities Report, Section 2.13, PV panels associated with the Project are designed to absorb sunlight for electricity generation, rather than reflect sunlight. Panels are coated with an anti-reflective coating to minimize glare and panels should not impact road or air traffic.
B) AF Third Party Summary Review Comments – Draft Conditions of Approval (received 7/27/2026)		
1	Approval of a Development Agreement as outlined in 608-E.	The approval of a Development Agreement is required prior to issuance of construction permits. The Applicant will adhere to this requirement, as outlined in Section 608-E.
2	Approval of a Site Maintenance Agreement to ensure the site is kept orderly as outlined in 608-G(1).	The approval of a Site Maintenance Agreement is required prior to start of construction. The Agreement is to be mutually executed between the owner/operator of the site and Yavapai County. The Applicant has suggested a stipulation to address this requirement (See draft Stipulation #7).
3	The proposal shall be constructed and maintained as portrayed in the exhibits approved.	The Applicant has suggested stipulations to address this requirement (See draft Stipulations #1 and #2).
4	As stated in 608 Section D solar use permits may be approved for a 40 year period with the applicant able to apply for a single ten year extension if the project remains in compliance with ordinance and the approved plan. The renewal shall be approved by the Board of Supervisors. The approval of this permit shall address the length of the use permit and if an extension(s) will be allowed.	The ordinance does not specify how the extension is approved. A stipulation is proposed to clarify that the 10-year extension may be approved by the Development Services Director (See draft Stipulation #3).

	(Ordinance allows up to 40 yrs and one 10year extension if the site remains in compliance).	
5	Disturbance of land shall not exceed outside of the project scope. This is a condition commonly added by legislative bodies for new development projects.	The Applicant has suggested a stipulation to address this requirement (See draft Stipulation #4).
6	The applicant shall (at a minimum of 1 yr. Prior to the expiration of the solar use permit) notify staff in writing of future plans for the facility which may include decommissioning, reclamation and/or renewal.	The Applicant will adhere to this as it is a requirement of Section 608.
7	In regards to 608 F(8), outdoor lighting should be limited to levels that do not cross into wildlife corridors and shall comply with section 603 light pollution control. Light poles shall not exceed 18' feet tall and be approved by the county.	The Applicant will adhere to this as it is a requirement of Section 608.
8	In regards to 608 F(11), Signs shall comply with section 601 sign code and a sign permit shall be obtained	The Applicant will adhere to this as it is a requirement of Section 608.
9	In regards to 608 F(12), the Solar Facility shall be designed, constructed, tested, and operated to fully comply with all applicable County, state, and federal laws, regulations, codes, and requirements. The Solar Facility shall also comply with the most current standards set forth by industry regulating bodies, including the Western Electricity Coordinating Council (WECC) and North American Electric Reliability Corporation (NERC)planning standards, as approved by the Federal Energy Regulatory Commission (FERC),the National Electric Safety Code (NES) standards, and Federal Aviation Administration(FAA) regulations.	The Applicant will adhere to this as it is a requirement of Section 608.
10	A construction management plan shall be submitted prior to construction	The approval of a Construction Management Plan is required prior to start of construction. The Applicant will adhere to this requirement, as outlined in Section 608-G(4).
11	All undeveloped portions of the subject property shall be maintained in a natural undisturbed, and debris-free	The Applicant will adhere to this as it is a requirement of Section 608.

	condition. The project operator shall monitor noxious weed density and provide mitigation to eradicate or prevent the spread of such weeds.	
12	A public road improvement, repair and maintenance plan should be reviewed and approved by public works	Should Public Works require this plan, it would be submitted by the Applicant for approval prior to issuance of construction permits.
13	The project owner shall be responsible to maintain all of their stormwater facilities	The Applicant understands that maintenance of all stormwater facilities is a requirement of the Solar Facilities Use Permit, as required by Section 608. Details of the Drainage Components and Maintenance proposed for the Project are included in Section 14 of the Stormwater Management Plan, submitted on August 5, 2025. The Stormwater Management Plan will be finalized prior to issuance of construction permits. The Applicant is proposing a stipulation to address this comment (See draft Stipulation #9)
14	County employees and designated third party inspectors shall have access to the site within 48 hours notice to conduct inspections	The Applicant will adhere to this as it is a requirement of Section 608-L(1).
C) 2024 IFC/NFPA 855 Code Alignment and Compliance Matrix (Shums Coda, Received 7/27/2026)		
Executive Summary	The three project documents establish a useful zoning, emergency-management, and decommissioning framework, but they do not yet demonstrate complete compliance with the 2024 IFC and NFPA 855 for a utility-scale lithium-ion battery energy storage system (BESS). The principal deficiency is not an identified design violation; it is the absence of final-design evidence and explicit commitments for the fire-code submittals, listings, large-scale fire-test data, site layout, fire-department access, water supply analysis, detection, suppression, gas detection, explosion control, emergency operations, commissioning, maintenance, and damaged-battery disposition required for approval of construction permit.	The Application materials required by Section 608 and reviewed by the Third Party reviewer for this Technical Review included the Solar Facility Report, Public Safety, Fire Protection & Emergency Management Plan, and Preliminary Decommissioning Plan. As noted in the comments, the reviewed materials do not include the level of detail necessary for approval of construction level permits and the current determination is CONDITIONAL/FINAL DESIGN REQUIRED. All requested documentation and analysis will be addressed and submitted during the construction permit application phase. This includes, but is not limited to, BESS Specific Emergency Response Plan (ERP), UL9540 listing as certified by a National Recognized Testing Laboratory (NRTL), and UL9540A testing reports.

		The Project BESS will be designed to, and comply with, 2024 IFC, NFPA 855 Code, be tested and certified to UL 9540A and UL9540, and will include fire and gas detection systems, and explosion controls. These codes will be followed for the life of the project through decommissioning.
D) Agua Fria Solar Stormwater Management Plan 2nd Review Comments (Westwood, dated 7/29/2026)		
	Westwood has requested a revised Stormwater Management Plan incorporating the comments from EVS Engineering, Agua Fria Solar-Drainage Report – 1st Review Comment Reponses letter, dated June 18, 2026.	The Applicant will submit a revised Stormwater Management Plan and will resolve all comments from Westwood and Yavapai County Flood Control prior to the issuance of building permits. The Applicant has suggested a stipulation to address this requirement (See draft Stipulation #9).
E) ADOT Requirements for Agua Fria Solar & Storage Project (ADOT Northwest District Permits Supervisor – Comments on Preliminary Review for the Agua Fria Solar & Storage Project, dated 8/5/2026)		
1	The proposed aerial crossing of I-17 will need to be defined and detailed. The Aerial crossing will have to be done at night. Cross-sections labeling lowest point of new wire and elevation difference between roadway on northbound and southbound I-17 will be required.	The Project does not propose an aerial crossing of I-17. The Applicant will coordinate response to comment directly with ADOT, but will not be seeking an aerial crossing for any infrastructure associated with the Project.
2	Construction access and what types of equipment will be needed on both sides of I-17. Truck hauling size and phasing when arrays are brought in and constructed need to be defined. Truck turning templates will need to be developed for the interstate access and approximate numbers a day determined with an overall schedule. Hauling the equipment to the site needs more details.	Construction, anticipated to last 18 24 months, will involve approximately 400 workers and 20 daily semi-truck deliveries, primarily using Interstate-17 (I-17) Exit 268 (Orme/Dugas Road) and Old Sycamore Road for site access, avoiding local communities such as Cordes Lakes and Mayer. Once operational, up to five full time operations and maintenance employees will be employed on site. Existing road capacities, including I-17 and county minor collector roads, are sufficient to accommodate the project, and no roadway improvements are required by the Applicant. The Applicant will coordinate with ADOT on construction access and equipment hauling prior to construction permit issuance.
3	Any drainage or retention improvements will need to be identified and new drainage toward I-17 right-of-way	The Project Stormwater Management Plan outlines the design of drainage or retention improvements, which follow the stormwater

	must be avoided. On-Site plans will be needed for review including drainage plan.	runoff and retention requirements of the Yavapai County Drainage Manual. New drainage towards I-17 is avoided. Final drainage designs will be submitted as part of construction permits for the Project.
4	Array glare onto I-17 needs to be studied and eliminated as much as possible when arrays are operational.	The Applicant will conduct a glare study prior to construction permits if deemed necessary by ADOT. As detailed in the Solar Facilities Report, Section 2.13, PV panels associated with the Project are designed to absorb sunlight for electricity generation, rather than reflect sunlight. Panels are coated with an anti-reflective coating to minimize glare and panels should not impact road or air traffic.
5	Improvements to I-17 access may be necessary depending on the types of vehicles and numbers anticipated including shoulder widening and ramp intersection stabilization. Hauling the equipment to the site needs more detail.	Construction, anticipated to last 18 24 months, will involve approximately 400 workers and 20 daily semi-truck deliveries, primarily using Interstate-17 (I-17) Exit 268 (Orme/Dugas Road) and Old Sycamore Road for site access, avoiding local communities such as Cordes Lakes and Mayer. Once operational, up to five full time operations and maintenance employees will be employed on site. Existing road capacities, including I-17 and county minor collector roads, are sufficient to accommodate the project, and no roadway improvements are required by the Applicant. The mobilization and demobilization of equipment used for earthwork, including scrapers, graders, water trucks, compactors, truck mounted post drivers, skid loaders, and forklifts, is anticipated to generate a minimal amount of traffic. Due to the existing I-17 infrastructure and the low traffic volumes associated with the Project, traffic impacts to the adjacent road system will be minimal. The Applicant is committed to coordinating with ADOT to provide additional detail as needed on construction traffic prior to Project construction.

		The Applicant has suggested a stipulation to address the resolution of ADOT comments prior to the issuance of construction permits (See draft Stipulation #8).
6	Any and all work within the ADOT Right of Way will require an encroachment permit application with all supporting documentation.	The Applicant will seek an encroachment permit from ADOT for any encroachment within ADOT Right of Way prior to start of construction.
7	Address comments above and submit to Northwest District Prescott Permits for further review.	The Applicant will respond and submit the completed comment table to Northwest District Prescott Permits for further review.
8	ADOT reserves the right to comment further during Yavapai County's review process.	No comment or action from the Applicant.

August 14, 2026

RE: Agua Fria Solar and Storage Project
Solar Facility Use Permit Application
Dwellings within One Mile of the Project – Summary of Landowner Coordination

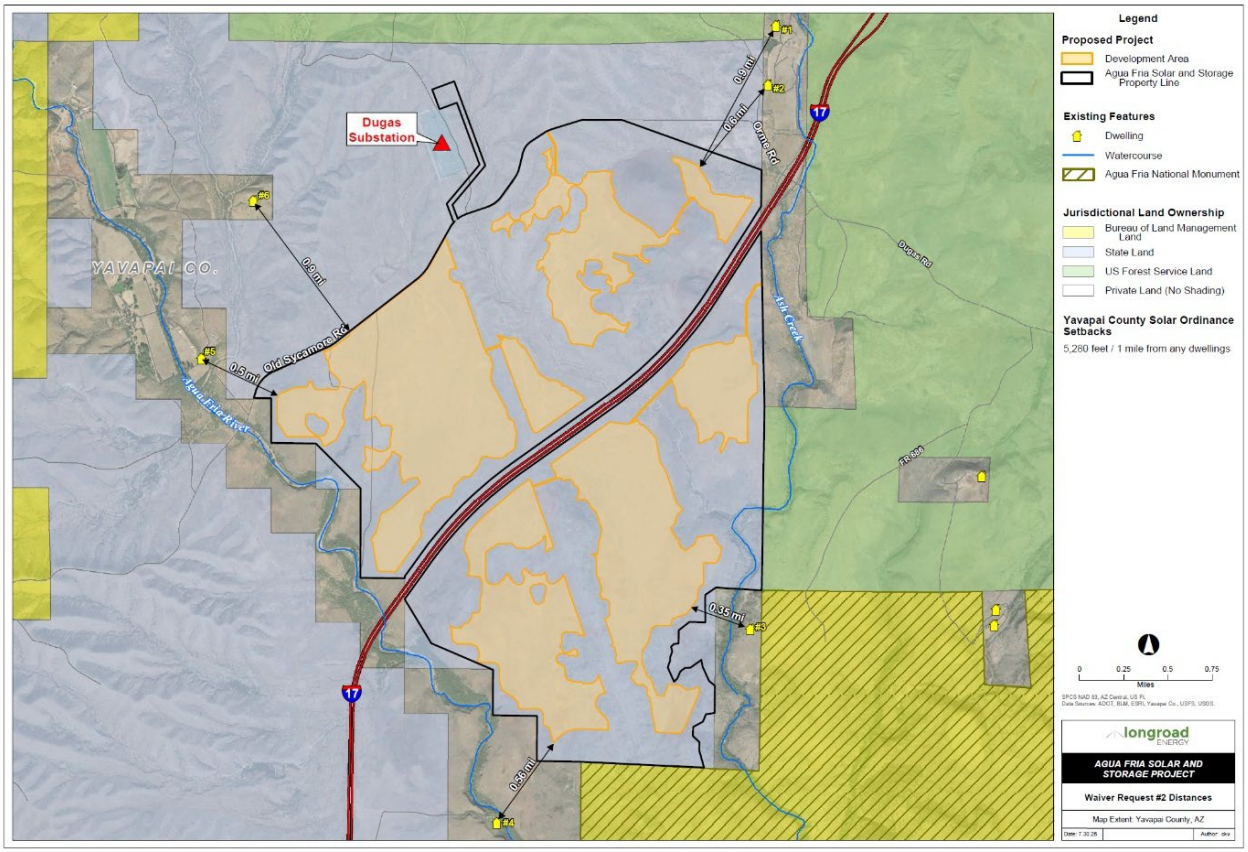
Yavapai County Development Services Department,

The purpose of this letter is to document the coordination conducted with the owners of the dwellings located within one mile of the Project. These efforts were undertaken to inform neighboring property owners about the Project, provide opportunities for questions and feedback, discuss project-related activities occurring in the vicinity of their properties, and maintain an open line of communication throughout Project development.

As part of the Agua Fria Solar Project development process, the Applicant has conducted extensive outreach and coordination efforts with nearby landowners and residents. This outreach included in-person meetings, telephone discussions, email correspondence, mailed project notifications, invitations to public open houses, and follow-up discussions regarding project design, permitting process, and landowner questions and concerns. Public outreach has been ongoing for several years prior to beginning the permitting process with Yavapai County and prior to the Arizona State Land lease becoming effective. Full details of the Project's public process are outlined in the Citizen Participation Report. **Appendix A**, attached to this letter, includes a limited scope of letters or comments received by the Project from the neighboring dwellings within one-mile of the Project. For a complete compilation of support letters received by the Project outside of the one-mile limited scope, please see separate submittal (Project Letters of Support – included in August 14, 2026 submittal).

Figure 1 below identifies the locations of the 6 dwellings included as part of the Waiver #2 proposal and the distances of each of these dwellings to the Development Area.

Figure 1. Waiver #2 Distances



The following **Table 1** summarizes outreach and coordination activities conducted with each identified dwelling located within one mile of the Project.

Table 1. Summary of Neighboring Dwelling Coordination

Dwelling	APN	Owner	Coordination Activities
1 & 2	501-31-002N	Orme Ranch Inc.	The Project has coordinated with Orme Ranch since the first stages of development in 2020, prior to the State Land Lease becoming effective in 2023. The Orme Ranch Forever Conservation Easement, held by the Central Arizona Land Trust, encompasses 907 acres of the historic Orme Ranch property. The nearest land in the Orme Ranch Forever Conservation Easement is located adjacent to the eastern boundary of the Project. The conservation easement was established in 2023; the Project was among the donors to the Orme Ranch Forever

			Campaign, supporting the conservation of historic ranch lands and the promotion of sustainable agricultural practices in the Project vicinity. Recent correspondence with Orme Ranch: **August 28, 2024:** In-person meeting to introduce the Longroad project team and provide project updates. **November 2024:** Phone call regarding geotechnical survey work on the Project site. **December 2024:** Project mailer sent with invitation to virtual open house. Email to notify owner of upcoming public open houses **January 2025:** Project mailer distributed sent with invitation to both in-person and virtual open houses. Email and phone call to notify of upcoming public open houses. Landowner attended open house and submitted comments, see **Appendix A**. **June 2025:** Phone call to discuss Project updates. **September 2025:** Phone call to review Project status and provide updates on County process. **December 2025:** Teams meeting to discuss Project updates. **February 2026:** Phone call with landowner to discuss water supply analysis for the project and updates on Project schedule. **June 2026:** Updated support letter received from Orme Ranch regarding waiver request, see **Appendix A**. **August 2026:** Email to landowner to provide update on Project status and upcoming County hearings.
3	501-27-006	Steven Howard	**December 2024:** Project mailer sent with invitation to virtual open house. Landowner attended virtual open house and asked questions. Project team followed up and

			provided a copy of the County Solar Ordinance at the landowner's request. **January 2025:** Project mailer sent with invitation to both in-person and virtual open houses. Phone call to notify of upcoming public open houses and offered an in-person meeting opportunity. **August 2026:** Contacted regarding Project status and upcoming County hearings. The Project has heard no concerns from this neighbor to date.
4	500-04-001	Cosanti Foundation	The Project has coordinated with the Cosanti Foundation since the first stages of development in 2020, prior to the State Land Lease becoming effective in 2023. The Cosanti Foundation provided a letter of support to the Arizona State Land Department prior to the auction of the State Land Lease, **Appendix A**. The Cosanti Foundation has been engaged with the Applicant over the past several years and continues to support the Project's development. Recent Correspondence with the Cosanti Foundation: **August 28, 2024:** In-person meeting to introduce the Longroad project team and provide project updates. **December 2024:** Project mailer sent with invitation to virtual open house. **January 2025:** Project mailer sent with invitation to both in-person and virtual open houses. Email to notify of upcoming public open houses. Arcosanti representatives attended open house and submitted comments, see **Appendix A**. **February 2025:** Email correspondence regarding the CEC Application and project survey activities. **March 2025:** Arcosanti representatives attended and provided comments during the CEC hearing process.

			April 2025: Email discussions regarding project fencing and open space areas. **September 2025:** Email correspondence providing project updates and offering an in-person meeting. **January 2026:** In-person meeting with Cosanti Foundation Board members to discuss project updates and next steps. **August 2026:** Email to Cosanti Foundation Board members to discuss project updates and next steps.
5	500-25-014C	Gaia Academy LLC	This dwelling location was formerly the Chauncey Ranch Camp. During early stages of Project development and prior to the State Land Lease becoming effective, the Project coordinated with the Chauncey Ranch Camp and received a letter of support for the Project given the minimal impacts the Project would have for the camp, see **Appendix A**. The property was sold in 2025. Since the change of ownership of the property, the Project has continued efforts to keep new owners informed of Project progress. **December 2024:** Project mailer sent with invitation to virtual open house. Email to notify of upcoming public open houses. **January 2025:** Project mailer sent with invitation to both in-person and virtual open houses. Email to notify of upcoming public open houses. **February 2025:** Public notice published and project signage posted. **June 2026:** Contacted regarding Project and provided updates. The Project has heard no concerns from this neighbor to date.
6	500-25-015	Shetler Family Trust& Shetler Jadon Ray &	**December 2024:** Project mailer sent with invitation to virtual open house. **January 2025:** Project mailer sent with invitation to both in-person and virtual open houses.

		Charlene Kay Ttees	**February 2025:** Public notice published and project signage posted. **August 2026:** Phone call to landowner to provide update on Project status and upcoming County hearings. The Project has heard no concerns from this neighbor to date.

Conclusion

The Applicant has conducted a variety of outreach efforts with landowners located within one mile of the Project boundary, including in-person meetings, phone calls, email correspondence, informational mailers, and invitations to public engagement opportunities. These efforts have given neighboring landowners multiple opportunities to learn about the Project, ask questions, and provide feedback throughout Project development. The Applicant remains committed to continuing communication with these landowners and stakeholders as the Project advances through the County review process and into pre-construction, construction, and operational phases.

The documented outreach and ongoing engagement efforts reflect substantial coordination with nearby landowners and support the Project's proposal for a waiver of the one-mile setback requirement from dwellings.

APPENDIX A – Neighboring Dwelling Comment & Support Letters

Agua Fria Solar, Storage and Gen-tie Project

Open House | January 28, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: SHAWN ORME Phone: [redacted]

Address [redacted]

Organization: ORME RANCH INC

Email:

Comments: Excellent & informative !

Thank you for your time and interest!

Please visit longroadenergy.com/agua-fria
or call 1 (833) 367-7889 for more information.

longroad ENERGY

Agua Fria Solar, Storage and Gen-tie Project

Open House | January 28, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: PAUL OSME Phone: [redacted]

Address OSME RANCH, MAYER, AZ. 86333

Organization: OSME RANCH

Email: [redacted]

Comments: Very well conceived project which we support

Thank you for your time and interest!

Please visit longroadenergy.com/agua-fria
or call 1 (833) 367-7889 for more information.

longroad ENERGY

Re: Support for Agua Fria Solar and Storage Project – PLA25-000070

To Whom it May Concern:

As a landowner adjacent to the proposed Agua Fria Solar and Storage Project, I am writing to express my support for the Project's application for a Solar Energy Facility Use Permit in Yavapai County. I appreciate the Applicant's efforts to engage neighboring property owners throughout the planning process.

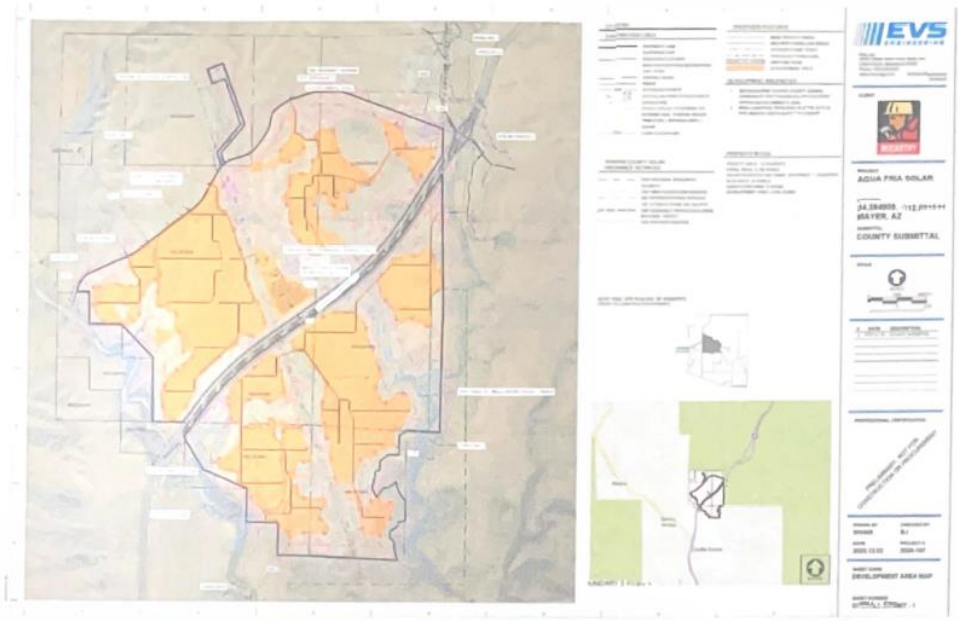
I understand that the application proposes waivers from certain development standards contained in Section 608 of the Yavapai County Zoning Ordinance. This letter reflects my support for the Project and its waiver requests associated with the proposed development footprint depicted in the application materials and attached to this letter.

Sincerely,

Paul R Orme

President, Orme Ranch, Inc.

APN: 501-31-002N


EVS
AGUA FRIA SOLAR
COUNTY SUBMITTAL

Agua Fria Solar, Storage and Gen-tie Project

Open House | January 28, 2025

Comment Form

Thank you for your interest. Please complete this form and provide any comments about the Project.

Please Print

Name: MICHAEL BITTMAN Phone: _____

Address ARCOSANTI

Organization: SAME

Email: [redacted]

Comments: VERY WELL PRESENTED WITH EVERYONE INFORMED ON SENDING PEOPLE TO THE EXPERT OF EACH SUBJECT - GOOD VISUAL PRESENTATION

Thank you for your time and interest!

Please visit longroadenergy.com/agua-fria
or call 1 (833) 367-7889 for more information.

longroad ENERGY



John Walsh, Interim Executive Director
The Cosanti Foundation | Arcosanti
13555 South Cross L Road
Mayer, AZ 86333

August 9, 2021

Lisa Atkins, Commissioner
Arizona State Lands Department
1616 West Adams Street
Phoenix, AZ 85007

Re: Candela Renewables' Dugas Solar Project

Dear Commissioner Atkins:

We are writing on behalf of The Cosanti Foundation to express support for the Dugas Solar Project currently being developed by Candela Renewables, LLC.

Since its inception in 1965, The Cosanti Foundation, a 501(c)(3) nonprofit organization, has sought to influence the way the built environment is created to ensure compatibility with the surrounding ecology. It is our current mission “to inspire a reimagined urbanism that builds resilient and equitable communities sustainably integrated with the natural world." Through year-round public tours and programming offered at our two experimental architecture- and sustainability-minded locations—Cosanti (in Paradise Valley) and Arcosanti (near Cordes Lakes)—The Cosanti Foundation has shaped and contributed to the global conversation about balancing humankind’s needs with the planet’s natural resource capacity for more than 50 years. In that time, more than 8000 people have participated in our hands-on construction workshops, building both Cosanti and Arcosanti, and becoming part of an international network of Cosanti Foundation alumni. More than 50,000 people visit Cosanti and Arcosanti annually (both sites are open to the public on a daily basis), and another 25,000 people follow us across our social media platforms every day. The Cosanti Foundation additionally owns and operates a world-famous bronze and ceramic windbell business, Cosanti Originals, with manufacturing and gallery sales taking place onsite at both Cosanti and Arcosanti.

In addition to being our signature site and a cultural/educational/tourism hub for central Arizona, Arcosanti will be an immediate neighbor of the Dugas Solar Project. The Cosanti Foundation’s staff and board and the residents of Arcosanti (about 60 people live at Arcosanti full-time and year-round) have a deep interest in the construction and operation of a solar project in the vicinity of Arcosanti, and have given thoughtful consideration to both the impacts and the benefits of the project. Portions of our land and grazing lease will be directly affected by the project, and portions of the project will be clearly visible from various vantage points at Arcosanti. The land itself,

as well as the local desert ecosystem, will be significantly altered for decades to come. We are confident, however, that Candela Renewable's project will have a positive impact on our local community and help foster better use and deeper stewardship of the land:

- Given Arcosanti's ongoing commitment to ecological accountability and a limited carbon footprint, there is a natural synergy between our mission priorities and Candela Renewables' project goals. We anticipate increased public and media interest in visiting Arcosanti in order to see both our property and theirs, which in turn provides us with opportunities to provide programming that further educates the public on desert ecology, sustainable energy, district infrastructure, land use, environmental stewardship, and numerous other important issues.
- Given our longtime relationship with local rancher Lane Malouff (who subleases some of the land in question) and our recently-renewed interest in expanding our own agriculture program, the Candela Renewables proposal offers a natural incentive to move forward with consolidating these plans, which including shifting grazing away from Candela Renewables' project site.
- Given our stewardship of and dependence on the Agua Fria River and watershed, a portion of which is on our land, Candela Renewables has been responsive to our requests to have a larger buffer zone placed between their project and the river's sensitive riparian habitat, and to have significant ecological considerations in place throughout project development.
- Given our own fifty-year history with the region, we are pleased to see Candela Renewables taking the time to build relationships not only with us, but throughout our community. We are aware that Candela Renewables' proposal is receiving support from The Orme School, Orme Ranch, the Cordes Lakes Community Association, the High Desert Heritage Museum, and others, all of which are significant local partners for Arcosanti and the Cosanti Foundation, too.

Thus, despite early concerns about the Dugas Solar Project when the initial paperwork was filed two years ago, The Cosanti Foundation now recognizes Candela Renewables' proposal as a boon to our work as a nonprofit, as well as being a boon to our local community, regional economy, and to the state's energy infrastructure. While it certainly represents a paradigm shift for land use in and around Arcosanti, we view this project as a good thing, and one that carries numerous opportunities that can be effectively leveraged to fulfill key aspects of our core mission to educate the public about resiliency and sustainability in the built environment and the natural world.

The Cosanti Foundation hereby supports the Dugas Solar Farm project proposal from Candela Renewables, LLC.

Thank you for your consideration. Please feel free to contact us should you have any questions.

Sincerely,

John Walsh
Interim Executive Director

October 25, 2021

To: Lisa Atkins, Arizona State Land Commissioner
1616 W. Adams, Phoenix, 85007

Re: Candela Renewables, Dugas Solar Lease Application No. 03-120951

As a neighbor and current lessee I am writing in support of Candela's above referenced solar lease application for the Dugas Solar Project that is being developed on Arizona State Lands. This support is on behalf of several of our affiliated non-profits Tonto Creek Camp dba Camp Tontozona and Chauncey Ranch.

Pathways to Learning operates various outdoor learning platforms in Arizona, including the Chauncey Ranch. The Chauncey Ranch occupies approximately 660 acres in the vicinity of the proposed Dugas Solar Project, located on lands deeded to the YMCA north of Old Sycamore Road. In addition to Chauncey Ranch, the YMCA also leases adjacent lands from the Arizona State Lands Department to the South of Old Sycamore Road. These leased lands are currently subleased for cattle grazing. The facility is accessed from Old Sycamore Road and is bounded to the East by the Ash Creek.

The Chauncey Ranch provides an immersive outdoor experience for young Arizonans, such as K-12 school children, church groups and other youth organizations. The facility has camper housing, a cafeteria, dining hall and community meeting and education spaces. In addition, the outdoor facilities include a large pond for fishing, canoeing and kayaking; an archery range; a ropes course; a swimming pool, and playing fields. The historic ranch also includes equestrian facilities. With access to regional trail systems, the facility provides a variety of outdoor experiences using these facilities with curriculum focused on sustainability, conservation and climate change.

Chauncey Ranch has partnered with ASU and with Phoenix-area K-12 programs to develop experiences and curriculum that are focused particularly on opportunity youth. We have already developed models for sustainable agriculture and for solar energy that can be used here at the ranch or in a classroom setting. We are also developing National Climate Changemaker Corp a program of climate ambassadorship which empowers youth to become advocates and changemakers at their schools. We believe that the Dugas Solar Project can be a real-world example of how solar energy can coexist with conservation values in the Central Arizona Highlands. We hope to work with Candela to develop curriculum and teaching using the adjacent solar facility.

Pathways to Learning
8776 E. Shea Blvd.
Ste. 106-472
Scottsdale, AZ. 85260

Camp Tontozona
235 S. Camp Tontozona Rd
Payson, AZ. 85541

Chauncey Ranch
18970 Old Sycamore
Mayer, AZ. 86333

I and my on-site staff have met on several occasions with representatives from Candela Renewables, which is developing the Dugas Solar Project. Over the course of these meetings, we have explained the Chauncey Ranch operation to Candela, and, in turn, we have learned about Candela's plans for the Dugas Solar Project. On the basis of these meetings, Chauncey Ranch has concluded that the solar project will have minimal direct impacts on the operations and experience at Chauncey Ranch. Among other things, we have discussed the potential impacts on viewshed, impacts from fugitive dust, impacts from light and noise and impacts from traffic. We are convinced that construction and operations of the facility will not directly impact Chauncey Ranch.

We have also had many lively and positive discussions with Candela regarding our shared missions of sustainability. We believe that Candela's commitments to construction and maintenance protocols that tread lightly on the land is consistent with our core values of conservation and sustainability. Additionally, we believe that the presence of the Dugas Solar Project in proximity to the Chauncey Ranch will augment and enable teaching about climate change. Candela has offered to assist in integrating information about solar energy into our curriculum and programs at Chauncey Ranch.

We are also aware that Candela has assisted with funding conservation easement at the Orme Ranch, one of our closest neighbors. The conservation in perpetuity of several miles of the Ash Creek upstream from Chauncey Ranch will assist in conserving and important riparian area at our facility.

Of course, the Dugas Solar Project will change the character and use of the land adjacent to our facility. However, on balance, we believe that Candela's proposed use of State Lands is preferable to foreseeable alternatives, such as residential housing or light industrial use on the I-17 corridor.

Candela has shown itself to be a "good neighbor" and we look forward to working with the Candela team going forward to accomplish our complementary missions and goals.

Very Truly Yours,

Tom Fraker
Founder & CEO
844-411-2267 EXT. 5
480-220-6588
tom@pathwaystolearning.org
pathwaystolearning.org
@PathwaystolearningAZ

August 14, 2026

RE: Agua Fria Solar and Storage Project
Solar Facility Use Permit Application
Project Letters of Support

Yavapai County Development Services Department,

Please find attached to this letter a compilation of the letters of support and letters of review associated with the Project. A list of the included documents is below.

Letters included with this submittal:

- Orme Ranch – Letter of Support
- Mayer Fire District – Letter of Support
- Mayer Fire District Board – Letter of Approval of Intent for Inclusion of Real Property into Mayer Fire District (approved by Mayer Fire District Board on November 19, 2025)
- Cordes Lakes Community Association – Letter of Support
- Arizona Game and Fish Department – Letter of Review of the Agua Fria Solar Project and Post-Construction Wildlife Monitoring Plan
- Mayer Unified School District – Letter of Support
- Spring Valley Property Owners Association – Letter of Support
- The Cosanti Foundation – Letter of Support
- Tonto Creek Camp dba Camp Tontozona and Chauncey Ranch – Letter of Support

Re: Support for Agua Fria Solar and Storage Project – PLA25-000070

To Whom it May Concern:

As a landowner adjacent to the proposed Agua Fria Solar and Storage Project, I am writing to express my support for the Project's application for a Solar Energy Facility Use Permit in Yavapai County. I appreciate the Applicant's efforts to engage neighboring property owners throughout the planning process.

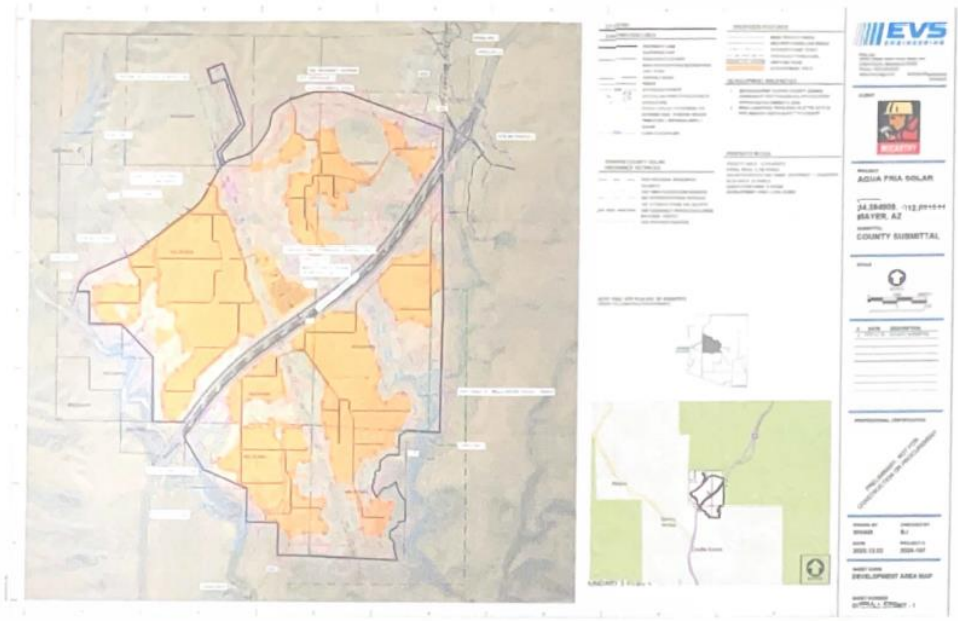
I understand that the application proposes waivers from certain development standards contained in Section 608 of the Yavapai County Zoning Ordinance. This letter reflects my support for the Project and its waiver requests associated with the proposed development footprint depicted in the application materials and attached to this letter.

Sincerely,

Paul R Orme

President, Orme Ranch, Inc.

APN: 501-31-002N


EVS
AGUA FRIA SOLAR
COUNTY SUBMITTAL

MAYER FIRE DISTRICT
11975 S. State Route 69
Mayer, AZ 86333

Bryan Smith, Fire Chief

(928) 632-9534
FAX (928) 632-7463

February 13, 2025

To the Yavapai County Board of Supervisors, The Arizona State Land Trust and The Arizona Corporation Commission,

I'm writing this letter on behalf of the Mayer Fire District in support of the Agua Fria solar and storage and gen-tie project that is being proposed on Arizona State Trust Land that adjoins our fire district. This clean energy project is not only very important for the greater Yavapai County area, but also the Mayer Fire District and Mayer School District in particular. This project will bring good paying jobs during the construction phase of the project and a reliable tax base for both the Mayer Fire District and Mayer School District. This will allow for much needed funding for education for the students in Mayer as well as helping the Mayer Fire District provide life and property saving services for not only the residents of the greater Mayer area but also for the hundreds of thousands of people that travel through our community each year.

We are working closely with representatives from the project on design and safety considerations, and look forward to additional coordination as the project advances toward construction.

Respectfully,

Bryan Smith- Fire Chief

longroad ENERGY

Agua Fria, LLC, a Delaware limited liability company
d/b/a Agua Fria AZ, LLC in Arizona
125 High Street
17th Floor High Street Tower, Suite 1705
Boston, MA 02110

Mayer Fire District
11975 S SR 69
Mayer, AZ 86333

Re: Request for Inclusion of Real Property into Mayer Fire District

November 19, 2025

Ladies and Gentlemen:

Agua Fria, LLC ("Agua Fria"), is the lessee of Commercial Lease No. 03-120951 (the "Lease") with the Arizona State Land Department ("ASLD"). Agua Fria will seek a Yavapai County Solar Facility Use Permit for a solar and battery energy storage project. After receiving such permit, and prior to the start of construction of a solar and battery energy storage project on the property under the Lease (the "Property"), an "Application for Voluntary Annexation into Mayer Fire District" in respect of the Property (the "Annexation Application") will be submitted (along with any necessary authorization from ASLD). Agua Fria hereby requests that the Property, which encompasses 4,215 acres and is owned by ASLD and is not located in any incorporated city or town, be included in the Mayer Fire District in Yavapai County, Arizona, and that the Mayer Fire District agree to approve the Annexation Application and the annexation of the Property into the Mayer Fire District.

Agua Fria hereby requests that the Mayer Fire District Board indicate their intent to approve the annexation of the Property into the Mayer Fire District, by countersigning this letter below.

Sincerely,

[signature page follows]

Agua Fria, LLC , a Delaware limited liability company
d/b/a Agua Fria AZ, LLC in Arizona

By: Michael Alvarez
Title: Chief Operating Officer

Effective as of November 19, 2025, the Mayer Fire District hereby agrees to approve the annexation of the Property into the Mayer Fire District.

By: Tuan A. Tang
Title: Clerk of the Board



Cordes Lakes Community Association
16357 South Cordes Lakes Drive
Cordes Lakes, AZ 86333
928-632-9769

To whom it may concern, June 8th, 2021

On May 27th of this year, Dainen Bocsary, the Project Development Analyst, for Candela Renewables, addressed the Cordes Lakes Community Association Board of Directors, regarding the Dugas Solar Project. Mr. Bocsary, explained the benefits of this project for our area and the minimal impact on the environment it would have. He went on to say that this would be a 30 year project that would create 400 local jobs during it's 2 year anticipated construction. They have partnered with Orme Ranch and Central Arizona Land Trust to complete a 900 acre conservation easement for our wildlife and preserve our grazing land. Once construction is complete it will interconnect with the Arizona Public Service bulk system. It is expected to produce over 1,400,000 MW-hours of carbon-free energy annually.

It is the opinion of this board that this project would be in the best interest of our community and to the future generation of our community. It would have far less impact on our natural resources and environment then new homes or new businesses built in the area. Our water supply in our area should be preserved for the existing population and wildlife now and in our immediate future. By allowing this project to proceed, it guarantees for the next 30 years no subdivisions, businesses or development would be built that would deplete much more of our water supply. Candela, guarantees very little water consumption during its construction and 30 year projected project term.

Solar power is the wave of the future, it generates enough renewable energy to aid in reducing climate change and is carbon free.

The Cordes Lakes Community Associations Board of Directors, is proud to endorse this project.

Respectfully,

Mary Seppala
President Cordes Lakes Community Assoc.

August 28, 2025

Ms. Lindsey Kester
Longroad Energy

Electronically submitted to: lindsey.kester@longroadenergy.com

RE: Agua Fria Solar Project and Post-Construction Wildlife Monitoring Plan

Dear Ms. Kester:

The Arizona Game and Fish Department (Department) appreciates the opportunity to review the Agua Fria Solar Project and Post-Construction Wildlife Monitoring Plan. The Department understands that Longroad Energy (Longroad) proposes to construct an up to 450 MW photovoltaic (PV) solar facility with a battery energy storage system (BESS) and associated infrastructure on approximately 4,215 acres of Arizona State Land Department (ASLD) lands near Arcosanti in Yavapai County, Arizona. The facility will be located east of the Agua Fria River in semi-desert grassland. An approximately 1.8-mile 500 kV generation intertie (gen-tie) transmission line would connect the facility to the Dugas Substation. Agua Fria Solar will be the first project submitted to Yavapai County following the adoption of the Section 608 *Solar Facilities* Ordinance Amendment.

Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission (Commission), has jurisdictional authority and public trust responsibilities to conserve and protect the state fish and wildlife resources. In addition, the Department manages threatened and endangered species through authorities of Section 6 of the Endangered Species Act and the Department's Section 10(a)(1)(A) permit. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department recognizes that appropriate coordination, proper planning, and voluntary implementation of best management practices allow projects to be developed that avoid, minimize, or offset potential impacts to wildlife and recreational access during development and operation of the facilities. Longroad has coordinated with the Department on the Agua Fria project since January 2025, and multiple meetings have been held to discuss measures to maintain wildlife movement in the area, incorporate wildlife-compatible fencing designs, conduct wildlife monitoring, and address other conservation measures. The Department appreciates Longroad's coordination and looks forward to continued collaboration during project planning, development, and monitoring. For your consideration, the Department provides the

GOVERNOR: KATIE HOBBS **COMMISSIONERS:** CHAIR MARSHA PETRIE SUE, SCOTTSDALE | JEFF BUCHANAN, PATAGONIA | JAMES E. GOUGHNOUR, PAYSON
KURT KERR, PINETOP | CLAY HERNANDEZ, TUCSON **DIRECTOR:** TOM P. FINLEY **DEPUTY DIRECTOR:** JOSHUA W. HURST

following comments based on the agency's statutory authorities, public trust responsibilities, and special expertise related to wildlife resources and recreation.

Maintaining habitat connectivity is a priority for the Department, and wildlife movement corridors are important for wildlife to respond to changing environmental conditions. Longroad requested pronghorn telemetry data within the project area and worked with the Department to interpret this data and determine the placement of wildlife corridors, with varying widths up to over 1,300 feet, to facilitate movement through the facility. The Department appreciates Longroad's flexibility in incorporating both north-south and east-west corridors into the design and eliminating "dead ends" that could trap wildlife. The Department also appreciates Longroad's decision to increase the planned duration of post-construction wildlife camera monitoring from one to two years to gather more robust data. It is recommended that camera monitoring occurs at least one year after construction to evaluate wildlife use patterns after site conditions have stabilized. Monitoring wildlife use of varying corridor sizes will help assess effectiveness and inform the design of future solar facilities. The Department looks forward to continued coordination with Longroad on post-construction movement monitoring at the facility and the opportunity to review the final monitoring report.

Based on discussions with Longroad, the following measures are also planned to reduce potential impacts to wildlife and habitat:

- The Department understands that Longroad plans to continue to work with species experts to discuss potential impacts to Yellow-billed Cuckoo, a federally Threatened species with designated critical habitat adjacent to the project. The Department appreciates that the project will be set back from suitable riparian habitat surrounding Ash Creek and the Agua Fria River.
- The Department understands that Longroad plans to implement wildlife-compatible fencing designs to allow for smaller wildlife species to move freely through the area and make use of any habitat within the project boundary.
- The Department understands that Longroad will ensure that new power lines follow the Avian Power Line Interaction Committee's current version of the *Suggested Practices for Avian Protection on Power Lines and Reduced Avian Collisions with Power Lines*.
- The Department understands that Longroad plans to conduct surveys for nesting birds prior to vegetation removal and/or construction activities that occur during the breeding season, as per the Migratory Bird Treaty Act, as well as conduct surveys for burrowing species prior to construction.

Finally, the Department offers the following general recommendations to reduce potential impacts to wildlife and habitat:

- The Department recommends conducting minimal grading in the project area and, to the extent possible, retaining habitat features underneath the panels, including vegetation and soils. Keeping the existing soil and root structures intact would serve to minimize erosional run-off and help reduce biodiversity loss within the site (Grodsky and Hernandez 2020[1]).

[1] https://www.nature.com/articles/s41893-020-0574-x

- To help minimize the disturbance to pronghorn and reduce impacts on pronghorn recruitment, the Department recommends that construction activities occur outside the fawning season (mid-May to mid-June) to the extent feasible.
- A variety of Arizona Species of Greatest Conservation Need (SGCN) have the potential to occur within the project area. If wildlife are encountered during project activities, the Department recommends moving them out of harm's way, no more than 0.25 mile outside the project boundary within similar habitat. Please note that the Department has an interactive website, Arizona Wildlife Conservation Strategy[2], that includes the most recent list of SGCN to help navigate and identify conservation opportunities.
- If trenching or digging of large holes will occur, the Department recommends that trenching/digging and backfilling crews work together to minimize the number of open holes/trenches at any given time. Where trenches/holes cannot be backfilled immediately, the Department recommends escape ramps be constructed in each hole and at least every 300 feet in trenches. Escape ramps can be short lateral trenches or wooden planks sloping to the surface, ramp slopes should be less than 45 degrees (1:1). Trenches or holes that have been left open should be inspected for animals and animals removed prior to backfilling.
- Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations (Davies et. al. 2013[3]). The Department recommends using only the minimum amount of light needed for safety. If feasible, "warmer" narrow spectrum lighting (amber, orange, red) is wildlife-friendly and should be used as often as possible to minimize the number of species affected by lighting. It is also beneficial that all lighting is shielded, canted, or cut to minimize the amount of upward shining light.
- Please ensure the project complies with Arizona Native Plant Law[4] regulations. A Native Plant Inventory may need to be conducted to identify, record, and coordinate plant salvage efforts for species that are Protected under the Arizona Native Plant Law.
- To minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects, and pathogens, the Department encourages taking precautions to wash and/or decontaminate equipment before entering and leaving the site. See the Arizona Department of Agriculture website[5] for a list of prohibited and restricted noxious weeds and the Arizona Native Plant Society[6] for recommendations on control methods. To view a list of documented invasive species or to report invasive species in or near the project area, visit iMapInvasives[7], which is a national cloud-based application for tracking and managing invasive species.
- The Department recommends revegetating disturbed areas with native drought-tolerant species that represent the natural surrounding landscape. Landscaping with native plants can help support wildlife and pollinator species in the area while reducing dust and

[2] https://awcs.azgfd.com
[3] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3657119
[4] https://agriculture.az.gov/plantsproduce/native-plants
[5] https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds
[6] https://aznps.com/invas
[7] https://imap.natureserve.org/imap/services/page/map.html

erosion. In addition, the applicable land management agencies should be consulted regarding guidelines for revegetation efforts.

Thank you for the opportunity to provide input on the Agua Fria Solar Project and Post-Construction Wildlife Monitoring Plan. The Department appreciates Longroad's partnership on this project and looks forward to continued collaboration. For further coordination, please contact Jessica Potter at jpotter@azgfd.gov or 623-236-7618.

Sincerely,

Callie Cavalcant

Callie Cavalcant
Habitat, Evaluation, and Lands Branch Chief

cc: Kriselle Colvin – Regional Supervisor, Mesa
Karen Klima – Regional Supervisor, Kingman

AZGFD #M25-08041738

MAYER UNIFIED SCHOOL DISTRICT NO. 43

PO Box 1059 - Mayer, Arizona 86333
(928) 642-1000 - FAX (928) 632-4005

Dean Slaga, Superintendent
Christina Symington, Human Resource Director
Jane Fielding, Finance Director
Donna Bagron, Coordinator of Support Services
Kimberly Valenzuela, Administrative Assistant

High School (928) 642-1200
Elementary (928) 642-1100

10-7-2021

To whom it may concern,

The Mayer Unified School District is located on the southern end of the Prescott region and encompasses nearly nine hundred square miles. This rural area has limited commercial, industrial, or corporate entities that contribute to the local tax burden. The largest tax contributors are a few truck stops, dollar stores, and fast food restaurants. The district is also high poverty, with ninety percent of students qualifying for free and reduced lunch each school year. The tax burden for the school district is based on a state equalization formula to ensure comparable funding with more affluent communities. Local tax payers made up mainly of single family dwellings only generate twenty-five percent of the state student allocations. The remaining seventy-five percent comes from other communities to balance the payment. There has been very little in new development in the region for many years to increase tax revenues and support the school district.

The district is excited to hear of the potential development of the Cadela Solar farm within our region. The large increase in assessed evaluation will impact local tax payers and the school system directly. The reduction in the secondary tax rate will benefit our community and allow the district greater capacity for bonding in the future. In addition, the new job creation in the region is always a welcome circumstance. The increased sales tax revenue will also support the region as growth continues.

The Mayer Unified School District is in full support of bringing the Candela Solar Farm project to our area and look forward to the positive impact that it will have on our community and school district.

Sincerely,

Dean Slaga
Mayer Unified Superintendent

SPRING VALLEY
PROPERTY OWNERS ASSOCIATION

June 7, 2021

RE: Candela Dugas Solar Project

To Whom It May Concern:

The Spring Valley Property Owners Association Board met with officials from Candela Renewables to get an overview of the Dugas Solar Project.

After hearing about this proposed solar project, group discussion, and getting all of our questions answered, we feel that this project is good for this area and solar is also environmentally friendly. We believe that the land will be respected and taken care of properly and this project will bring jobs for local people.

The Dugas Solar Project has our support and we will do our part in educating the Spring Valley community about its benefits.

Sincerely,

Connie Higgs

President, Spring Valley POA

PO Box 397, Mayer, AZ 86333

springvalleyaznw@gmail.com

THE COSANTI FOUNDATION

John Walsh, Interim Executive Director
The Cosanti Foundation | Arcosanti
13555 South Cross L Road
Mayer, AZ 86333

August 9, 2021

Lisa Atkins, Commissioner
Arizona State Lands Department
1616 West Adams Street
Phoenix, AZ 85007

Re: Candela Renewables' Dugas Solar Project

Dear Commissioner Atkins:

We are writing on behalf of The Cosanti Foundation to express support for the Dugas Solar Project currently being developed by Candela Renewables, LLC.

Since its inception in 1965, The Cosanti Foundation, a 501(c)(3) nonprofit organization, has sought to influence the way the built environment is created to ensure compatibility with the surrounding ecology. It is our current mission “to inspire a reimagined urbanism that builds resilient and equitable communities sustainably integrated with the natural world." Through year-round public tours and programming offered at our two experimental architecture- and sustainability-minded locations—Cosanti (in Paradise Valley) and Arcosanti (near Cordes Lakes)—The Cosanti Foundation has shaped and contributed to the global conversation about balancing humankind’s needs with the planet’s natural resource capacity for more than 50 years. In that time, more than 8000 people have participated in our hands-on construction workshops, building both Cosanti and Arcosanti, and becoming part of an international network of Cosanti Foundation alumni. More than 50,000 people visit Cosanti and Arcosanti annually (both sites are open to the public on a daily basis), and another 25,000 people follow us across our social media platforms every day. The Cosanti Foundation additionally owns and operates a world-famous bronze and ceramic windbell business, Cosanti Originals, with manufacturing and gallery sales taking place onsite at both Cosanti and Arcosanti.

In addition to being our signature site and a cultural/educational/tourism hub for central Arizona, Arcosanti will be an immediate neighbor of the Dugas Solar Project. The Cosanti Foundation’s staff and board and the residents of Arcosanti (about 60 people live at Arcosanti full-time and year-round) have a deep interest in the construction and operation of a solar project in the vicinity of Arcosanti, and have given thoughtful consideration to both the impacts and the benefits of the project. Portions of our land and grazing lease will be directly affected by the project, and portions of the project will be clearly visible from various vantage points at Arcosanti. The land itself,

as well as the local desert ecosystem, will be significantly altered for decades to come. We are confident, however, that Candela Renewable's project will have a positive impact on our local community and help foster better use and deeper stewardship of the land:

- Given Arcosanti's ongoing commitment to ecological accountability and a limited carbon footprint, there is a natural synergy between our mission priorities and Candela Renewables' project goals. We anticipate increased public and media interest in visiting Arcosanti in order to see both our property and theirs, which in turn provides us with opportunities to provide programming that further educates the public on desert ecology, sustainable energy, district infrastructure, land use, environmental stewardship, and numerous other important issues.
- Given our longtime relationship with local rancher Lane Malouff (who subleases some of the land in question) and our recently-renewed interest in expanding our own agriculture program, the Candela Renewables proposal offers a natural incentive to move forward with consolidating these plans, which including shifting grazing away from Candela Renewables' project site.
- Given our stewardship of and dependence on the Agua Fria River and watershed, a portion of which is on our land, Candela Renewables has been responsive to our requests to have a larger buffer zone placed between their project and the river's sensitive riparian habitat, and to have significant ecological considerations in place throughout project development.
- Given our own fifty-year history with the region, we are pleased to see Candela Renewables taking the time to build relationships not only with us, but throughout our community. We are aware that Candela Renewables' proposal is receiving support from The Orme School, Orme Ranch, the Cordes Lakes Community Association, the High Desert Heritage Museum, and others, all of which are significant local partners for Arcosanti and the Cosanti Foundation, too.

Thus, despite early concerns about the Dugas Solar Project when the initial paperwork was filed two years ago, The Cosanti Foundation now recognizes Candela Renewables' proposal as a boon to our work as a nonprofit, as well as being a boon to our local community, regional economy, and to the state's energy infrastructure. While it certainly represents a paradigm shift for land use in and around Arcosanti, we view this project as a good thing, and one that carries numerous opportunities that can be effectively leveraged to fulfill key aspects of our core mission to educate the public about resiliency and sustainability in the built environment and the natural world.

The Cosanti Foundation hereby supports the Dugas Solar Farm project proposal from Candela Renewables, LLC.

Thank you for your consideration. Please feel free to contact us should you have any questions.

Sincerely,

John Walsh
Interim Executive Director

October 25, 2021

To: Lisa Atkins, Arizona State Land Commissioner
1616 W. Adams, Phoenix, 85007

Re: Candela Renewables, Dugas Solar Lease Application No. 03-120951

As a neighbor and current lessee I am writing in support of Candela's above referenced solar lease application for the Dugas Solar Project that is being developed on Arizona State Lands. This support is on behalf of several of our affiliated non-profits Tonto Creek Camp dba Camp Tontozona and Chauncey Ranch.

Pathways to Learning operates various outdoor learning platforms in Arizona, including the Chauncey Ranch. The Chauncey Ranch occupies approximately 660 acres in the vicinity of the proposed Dugas Solar Project, located on lands deeded to the YMCA north of Old Sycamore Road. In addition to Chauncey Ranch, the YMCA also leases adjacent lands from the Arizona State Lands Department to the South of Old Sycamore Road. These leased lands are currently subleased for cattle grazing. The facility is accessed from Old Sycamore Road and is bounded to the East by the Ash Creek.

The Chauncey Ranch provides an immersive outdoor experience for young Arizonans, such as K-12 school children, church groups and other youth organizations. The facility has camper housing, a cafeteria, dining hall and community meeting and education spaces. In addition, the outdoor facilities include a large pond for fishing, canoeing and kayaking; an archery range; a ropes course; a swimming pool, and playing fields. The historic ranch also includes equestrian facilities. With access to regional trail systems, the facility provides a variety of outdoor experiences using these facilities with curriculum focused on sustainability, conservation and climate change.

Chauncey Ranch has partnered with ASU and with Phoenix-area K-12 programs to develop experiences and curriculum that are focused particularly on opportunity youth. We have already developed models for sustainable agriculture and for solar energy that can be used here at the ranch or in a classroom setting. We are also developing National Climate Changemaker Corp a program of climate ambassadorship which empowers youth to become advocates and changemakers at their schools. We believe that the Dugas Solar Project can be a real-world example of how solar energy can coexist with conservation values in the Central Arizona Highlands. We hope to work with Candela to develop curriculum and teaching using the adjacent solar facility.

Pathways to Learning
8776 E. Shea Blvd.
Ste. 106-472
Scottsdale, AZ. 85260

Camp Tontozona
235 S. Camp Tontozona Rd
Payson, AZ. 85541

Chauncey Ranch
18970 Old Sycamore
Mayer, AZ. 86333

I and my on-site staff have met on several occasions with representatives from Candela Renewables, which is developing the Dugas Solar Project. Over the course of these meetings, we have explained the Chauncey Ranch operation to Candela, and, in turn, we have learned about Candela's plans for the Dugas Solar Project. On the basis of these meetings, Chauncey Ranch has concluded that the solar project will have minimal direct impacts on the operations and experience at Chauncey Ranch. Among other things, we have discussed the potential impacts on viewshed, impacts from fugitive dust, impacts from light and noise and impacts from traffic. We are convinced that construction and operations of the facility will not directly impact Chauncey Ranch.

We have also had many lively and positive discussions with Candela regarding our shared missions of sustainability. We believe that Candela's commitments to construction and maintenance protocols that tread lightly on the land is consistent with our core values of conservation and sustainability. Additionally, we believe that the presence of the Dugas Solar Project in proximity to the Chauncey Ranch will augment and enable teaching about climate change. Candela has offered to assist in integrating information about solar energy into our curriculum and programs at Chauncey Ranch.

We are also aware that Candela has assisted with funding conservation easement at the Orme Ranch, one of our closest neighbors. The conservation in perpetuity of several miles of the Ash Creek upstream from Chauncey Ranch will assist in conserving and important riparian area at our facility.

Of course, the Dugas Solar Project will change the character and use of the land adjacent to our facility. However, on balance, we believe that Candela's proposed use of State Lands is preferable to foreseeable alternatives, such as residential housing or light industrial use on the I-17 corridor.

Candela has shown itself to be a "good neighbor" and we look forward to working with the Candela team going forward to accomplish our complementary missions and goals.

Very Truly Yours,

Tom Fraker
Founder & CEO
844-411-2267 EXT. 5
480-220-6588
tom@pathwaystolearning.org
pathwaystolearning.org
@PathwaystolearningAZ

COSANTI FOUNDATION

October 9, 2026

Mr. Jacob Armstrong
Director
Yavapai County Development Services
Yavapai County Commerce Drive Annex
1120 Commerce Drive
Prescott, Arizona 86305

SUBJECT: **LETTER OF SUPPORT FROM ARCOSANTI TOWN and THE COSANTI FOUNDATION FOR LONGROAD ENERGY SOLAR PLANT DEVELOPMENT**

Dear Jacob,

Arcosanti, a historic sustainability project and community established in Yavapai County since 1970, is pleased to support the development of Longroad Energy's planned 450mw Aqua Fria Solar, Storage, and Gen-Tie Project located adjacent to the Arcosanti PAD and abutting Cosanti Foundation-owned lands.

There are several reasons Cosanti is excited to express support for this project.

1. We're thrilled to see utility-scale renewable energy come to the County, which reflects the image of a smart growth jurisdiction fostering technologies of the future based on nature's wisdom that contribute in part to combating climate change essential to advancing the health and prosperity of Yavapai County residents.

2. With the advent of the $200B TSMC advanced chip campus located only 35 minutes away coupled with the $10B Halo Vista new town development just north of TSMC, representing one of the most complex industries ever devised and largest foreign direct investment in US history, puts Yavapai County, Prescott, and surrounding towns and cities like Arcosanti right in the epicenter of limitless possibilities to capture economic opportunities in the offing.

3. The timing of TSMC and Longroad landing in Arizona is fortuitous with Arcosanti's own reimagined future, that in addition to advancing its educational mission, is moving towards its next level of expansion called Arco 2.0, transfiguring into a new science and technology center, innovation hub, and special economic zone for the region advancing medical innovation, environmental sustainability, and smart city technologies. Our aim is to benefit Yavapai County residents by helping build a healthy local environment that respects nature, reveres the land, and is powered by clean energy while contributing to the region's economy. And while we are aware that Longroad will primarily supply

COSANTI FOUNDATION

power to APS, there is potential for additional collaboration between Longroad and local communities such as the Arco 2.0 new expansion.

4. Longroad's presence in the region, when positioned as a good corporate partner and neighbor, we believe could serve as important catalyst for Yavapai County communities to benefit, for instance, from delivery of affordable living options to TSMC suppliers and associate industries moving into the region that are powered by Longroad/APS, as a home for training of hi-tech engineers of the future in support of TSMC semiconductors and Longroad solar modules and BESS, and as place for entrepreneurial opportunities that help local residents and businesses expand their horizons, that coupled with increased fiber optic access, creates remote telecommute opportunities with tech related companies around the world.

In conclusion, the County's hard work in collaboration with the State on land acquisition, setting up a friendly business regulatory environment, and facilitating permitting in support of the Longroad solar plant, coupled with the support of surrounding towns and cities including Arcosanti, nearby ranches, and rural residents, represents a shared commitment and smart investment strategy into the future prosperity of the County, connecting its towns and cities both incorporated and unincorporated, as a new 21st Century gateway into Northern Arizona.

On behalf of the Board of Directors of The Cosanti Foundation, while we are yet in the process of ongoing dialogue with Longroad for building a constructive long term relationship, we proudly support the County in its initiative to enable Longroad Energy's development in Yavapai County as a benefit to the local community and economy, naturally, dependent on demonstration of compliance with provisos set forth under Section 608. F2 and D4 pertaining to Solar facilities in the Yavapai County Planning & Zoning Ordinance. We are confident of an affirmative finding on impacts and wish Yavapai County and Longroad the best of luck for success in bringing this important project to fruition.

Sincerely,

David Fordon
Board Member and
Chair of the Development Committee
The Cosanti Foundation