



Technical Memorandum

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To: Alan Tabachnick, Federal Preservation Officer, Surface Transportation Board

From: Kris Powell, Senior Archaeologist
Glennnda Luhnnow, Cultural Resources Manager

Date: August 14, 2023

Subject: Initial Archaeological Site Damage Summary

Project: Surface Transportation Board Docket No. 36501
Union Pacific Railroad Company Pecos Industrial Rail Access and Train
Extension (PIRATE)

On the morning of Friday, July 28, 2023, during comment resolution for the Draft Environmental Assessment (EA), review of Google Earth imagery showed significant ground disturbance within Union Pacific Railroad Company's (UP) right-of-way and the project's area of potential effects (APE) in the wye and east of Sossaman Road (Attachment A–Figures). This information was shared with the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) and UP. A meeting (attended by OEA, Jacobs Engineering Group Inc. [Jacobs], and UP) was held in the afternoon of July 28 to discuss the disturbance. At that meeting, UP stated that they had no knowledge of the disturbance within the APE.

On Tuesday, August 1, 2023, the Board sent UP a formal letter requesting immediate actions to be taken (Attachment B–Board Letter) to prevent any further disturbance. Also on Tuesday, August 1, 2023, Jacobs' archaeologists Walter Punzmann and Pamela Rainey visited the APE to assess the extent of the disturbance.

Additional meetings between UP, OEA, and Jacobs were held on August 2, 2023, and August 3, 2023, to discuss steps UP was taking to comply with OEA's requests.

On August 10, 2023, review of aerial imagery revealed additional ground disturbance in the [REDACTED]. Jacobs' archaeologist Walter Punzmann assessed the damage on August 11, 2023.

SUMMARY OF SITE DISTURBANCE

Four areas of site disturbance were noted and are summarized as follows. The information herein is based on Jacobs' site assessments on August 1 and August 11, 2023, as well as publicly available project data on the City of Mesa's "Active Developments in Mesa" portal¹.

- **Damage Area 1.** Damage Area 1 is [REDACTED]. Clayco, the general contractor for the Power Industrial private development adjacent [REDACTED], excavated a large

¹ <https://www.selectmesa.com/business-environment/active-developments>

retention basin up to 5 feet deep. Adjacent to the retention basin, additional grading to 1 foot deep was also noted. Clayco is using this area as a construction staging and storage area during construction of Power Industrial. This disturbance is entirely within the boundary of [REDACTED]. The construction has almost wholly removed [REDACTED] and partially removed [REDACTED]. A large spoils pile is located within the retention basin [REDACTED]. Based on communication with Clayco, this spoils pile is derived from grading within their development area and is not associated with the retention basin. Soil from the retention basin was used to build pads now underlying the Power Industrial buildings [REDACTED]. Additional materials were trucked from the site (Tim Graves [Clayco] to Glennda Luhnnow [Jacobs], personal communication, August 14, 2023)

- **Damage Area 2.** Damage Area 2 is on the proposed PIRATE alignment [REDACTED]. A large retention basin has been excavated on the east side of Sossaman Road [REDACTED]. This basin is approximately 2 feet deep and is partially within the boundary of [REDACTED]. In addition, grading and construction of a drainage channel has occurred within the site boundary. This appears to be associated with the private Unbound Gateway / Gateway Grand development [REDACTED].
- **Damage Area 3.** Damage Area 3 is on the proposed PIRATE alignment [REDACTED] approximately 800 feet east of Damage Area 2. Grading to an approximate 6 inch depth has occurred within the boundary of [REDACTED]. Additionally, the disturbed area [REDACTED] was used for construction storage at the time of the damage site assessment. This disturbance is associated with the private Pecos Gateway Industrial Complex.
- **Damage Area 4.** Damage Area 4 is [REDACTED]. Clayco, also the general contractor for the Pecos Pacific private development [REDACTED], graded to an approximate 6- inch depth within the boundary of [REDACTED]. This disturbance totals approximately 0.7 acre.

Approximately 25 acres of the APE has been damaged, [REDACTED]

Major and extensive damage has occurred to [REDACTED] as result of the construction activities. Approximately 15 acres of this site has been subject to damage within the APE (7 percent of the site within the APE).

Moderate damage has occurred to [REDACTED] as a result of the grading. 2 acres of this site has been subject to damage within the APE.

No damage has occurred to [REDACTED] in the APE to date.

Implications

This damage is serious. [REDACTED] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] [REDACTED]
[REDACTED]

Treatment measures for all of the project's cultural resources sites have been outlined in a draft Memorandum of Agreement (MOA) and Historic Properties Treatment Plan (HPTP). Prior to discovery of the disturbance within the APE, the level of treatment was reviewed and agreed to by OEA, the Four Southern Tribes, the State Historic Preservation Office (SHPO), UP, and the project's Section 106 (of the National Historic Preservation Act) consulting parties.

This level of treatment is no longer possible due to the extensive damage that has occurred from the unauthorized construction activities. The MOA and HPTP will likely require substantial revisions.

Timeline

The following list presents a general timeline of relevant project activities.

- On September 1, 2022, UP was notified of a project adverse effect and the National Register of Historic Places (NRHP) eligibility of [REDACTED] [REDACTED] and told that construction could not occur in those site areas without clearance by OEA.
- On October 18, 2022, and January 26, 2023, UP attended OEA's MOA meetings and discussed the MOA and future treatment of the [REDACTED] sites.
- On January 26, 2023, UP requested that construction be allowed to proceed outside of the [REDACTED] sites prior to mitigation. OEA denied this request.
- Between October 2022 and April 2023, construction in [REDACTED] Area 1 (within the APE) occurred without the knowledge of OEA or Jacobs. Construction was conducted by the Power Industrial contractor, Clayco, based upon an agreement with UP.
- On April 14, 2023, Jacobs conducted a small Class III addendum survey [REDACTED] [REDACTED]. No damage was observed [REDACTED] at that time, presumably because the area of disturbance was not visible from the addendum survey area. Adjacent buildings associated with Power Industrial and Pecos Pacific were under construction at the time of the addendum survey.
- Between April and June 2023, construction along [REDACTED] within the APE occurred. Construction was conducted by Unbound Gateway's contractor based upon an agreement with UP. Again, neither OEA nor Jacobs were apprised of this construction.
- On July 28, 2023, review of aerial imagery showed noticeable damage [REDACTED] [REDACTED]

- On the same day, July 28, 2023, OEA and Jacobs contacted UP and had initial discussions about this damage to find out if UP knew about the unauthorized disturbances and excavations on their land.
- On August 1, 2023, the Director of OEA wrote a letter to UP outlining the damage based on the aerial imagery and requested that UP investigate the cause of the disturbance and take steps to immediately cease any further disturbance.
- On August 1, 2023, Jacobs' archaeologists conducted an initial field assessment to document the extent of the disturbance.
- On August 2, 2023, OEA, Jacobs, and UP discussed the developments [REDACTED] in a meeting. At that time, OEA and Jacobs learned that UP had entered into an agreement with Power Industrial to construct a retention basin in [REDACTED] (within the APE). The retention basin excavated by Clayco is smaller than a retention basin shown in the same general location on UP's 60 percent plans. The retention basin excavated by Clayco was intended to serve Power Industrial's temporary offsite drainage during construction.
- On August 3, 2023, OEA, Jacobs, and UP had an additional meeting and learned that UP also had entered into an agreement with Unbound Gateway to construct a retention basin. The retention basin excavated by Unbound Gateway matches the extent of a retention basin shown on UP's 60 percent plans. It is entirely within UP's right-of-way.
- On August 4, 2023, OEA notified SHPO and the Gila River Indian Community and Salt River Pima-Maricopa Indian Community Tribal Historic Preservation Officers (THPOs) of the extent of this damage and to schedule a field visit in the coming days.
- On August 7, 2023, SHPO contacted the Advisory Council on Historic Preservation (ACHP) to notify them of the site damage. ACHP subsequently contacted OEA's Federal Preservation Officer (FPO) for a summary.
- On August 8, 2023, OEA contacted ACHP electronically. ACHP requested OEA to initiate contact with Emily Choi (ACHP staff assigned to the project).
- On August 8, 2023, OEA, Jacobs, and UP discussed the steps UP was taking to install protective measures for the sites. OEA requested that UP attend an in-person meeting on August 17, 2023, to review the damage and discuss future steps.
- On August 9, 2023, OEA's FPO was contacted by the Tohono O'odham Nation THPO, who requested a summary of the damage and an invitation to the site visit.
- On August 9, 2023, OEA notified the Pascua Yaqui Tribe and the Hopi Tribe of the site damage.
- On August 10, 2023, the Pascua Yaqui THPO contacted OEA's FPO and requested a summary of the site damage. The Pascua Yaqui THPO did not ask for an individual site visit but expressed alarm at the situation and a desire to be kept informed.
- On August 10, 2023, Jacobs developed an electronic data layer to document the protective measures to be implemented in the coming weeks. UP will install the protective measures.

- On August 10, 2023, on behalf of OEA, Jacobs sent a formal invitation and agenda for the site visit (to be held on August 16, 2023) to the Four Southern Tribes and SHPO.
- On August 10, 2023, Jacobs (utilizing SOI qualified personnel) began monitoring the demobilization of Clayco's Power Industrial equipment [REDACTED]. This is ongoing.
- On August 10, 2023, review of aerial imagery revealed additional ground disturbance in [REDACTED].
- On August 11, 2023, Jacobs assessed the newly identified damage [REDACTED].
- On August 11, 2023, on behalf of OEA, Jacobs sent a formal invitation and agenda for the UP site visit (to be held on August 17, 2023) to UP.
- On August 11, 2023, OEA contacted Emily Choi at ACHP.
- On August 14, 2023, Jacobs met with UP's contractor for the protective measures in the field to begin installing signage on existing fences on UP's land, and to demarcate locations of interim signage.
- On August 15, 2023, UP began staking their right-of-way for avoidance.

NEXT STEPS

The next steps listed below are general and include several recent actions that are either in progress or complete to provide a full picture of the protective measures and proposed future actions. Details will be more formally established following initial communications with SHPO and the THPOs.

- OEA has requested that UP provide documentation of their requests to Power Industrial and Unbound Gateway to immediately demobilize equipment **(complete)**.
- OEA has instructed UP to direct Clayco to remove all Power Industrial vehicles and equipment [REDACTED]. All demobilization is being monitored by a qualified archaeologist to limit any potential for further damage **(in progress)**.
- OEA has instructed UP to promptly notify all adjacent landowners that they are not allowed to access UP's property and to notify UP that no construction may take place unless the Board decides to authorize the construction and operation of PIRATE. **(complete)**. The Board's decision will consider the merits of the proposed project, including the environmental record, and will occur following the completion of environmental and historic review.
- OEA has notified SHPO and the THPOs of the damage (via phone and email) and will continue to consult with them about how best to address the situation **(in progress)**.
- OEA will notify all Consulting Parties of the damage (via letter), followed by continuing Section 106 consultation with the Consulting Parties.
- UP has agreed to promptly install appropriate signage on their right-of-way boundaries prohibiting entry to their property and to install temporary construction fencing within the entire APE to prevent any additional encroachment or land disturbance. The fencing will first focus on areas near sites and where new development is occurring. The purpose of the fencing is to ensure that no further damage occurs within UP's right-of-way. A

qualified archaeologist will be present during signage installation and fencing activity (**in progress**).

- UP will promptly assign security staff to patrol the area (**in progress**).
- OEA has arranged a site visit on August 16, 2023, with Jacobs, SHPO, and the THPOs (**complete**).
- OEA has arranged a site visit with UP on August 17, 2023 (**complete**).
- Jacobs will prepare a PowerPoint presentation showing the damage within the APE and assist OEA in presenting the information at the Four Southern Tribes Working Group meeting on August 18, 2023 (**in progress**).
- Following consultation with the Consulting Parties, Jacobs will prepare a formal damage assessment report in accordance with current standards and guidelines.
- Additional steps, such as revising the MOA, the HPTP, and the EA, will follow after consultation with the THPOs, SHPO, and Consulting Parties. Given the extent of the site damage, the ACHP may now decide to participate in the consultation process.

ATTACHMENT 1

FIGURES



Key map of Damage Areas.



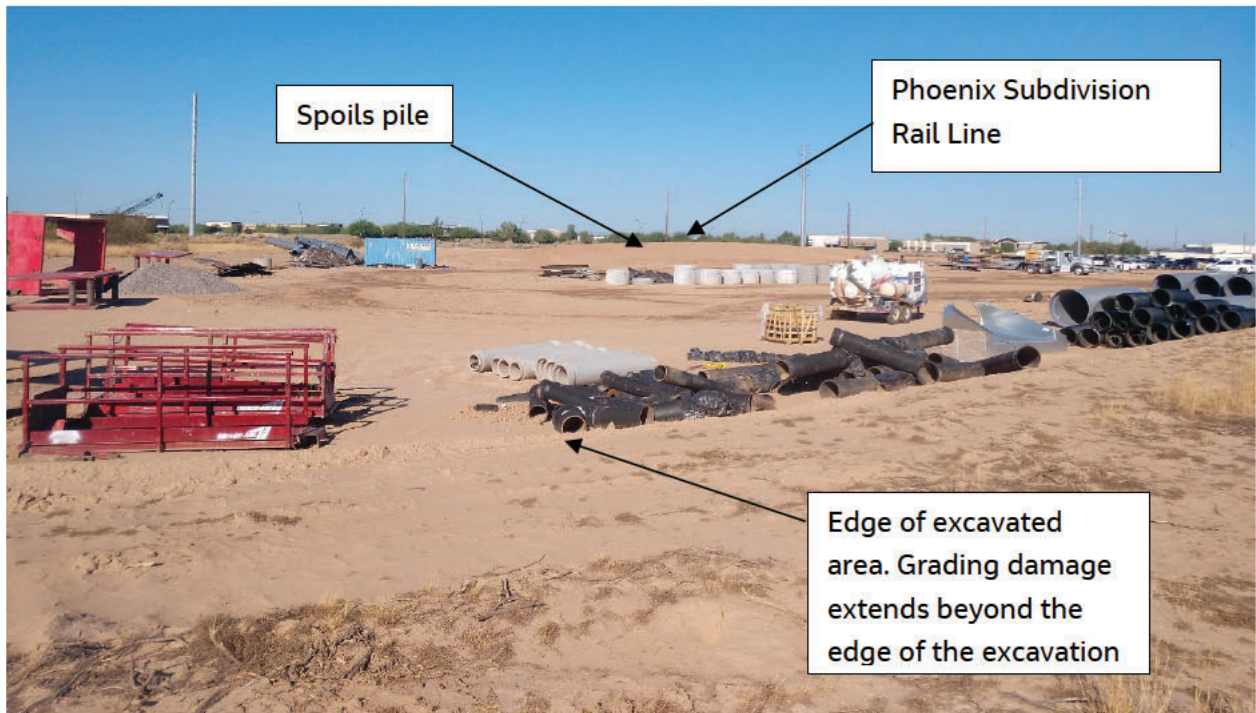
Aerial map of Damage Area 1, pre-disturbance, aerial dated October 2022. [REDACTED].



Aerial map of Damage Area 1, post-disturbance, aerial dated April 2023.



Damage Area 1, pre-disturbance, [REDACTED], view north, May 2022.



Damage Area 1, post-disturbance, [REDACTED]. View to southwest showing large spoils pile, retention basin, and staging use, August 2023.



Aerial map of Damage Area 2, pre-disturbance, aerial dated June 2022.



Aerial map of Damage Area 2, post-disturbance, aerial dated April 2023.



Phoenix-Mesa
Gateway Airport

Damage Area 2, pre-disturbance, [REDACTED]
[REDACTED] view east, May 2022.



Damage Area 2, post-disturbance, [REDACTED]
[REDACTED] showing retention basin cut, view south, August 2023.



Aerial map of Damage Area 3, pre-disturbance, aerial dated June 2022.



Aerial map of Damage Area 3, showing disturbance limits, aerial dated April 2023.



Damage Area 3, pre-disturbance, [REDACTED]
[REDACTED] view north, May 2022.



Phoenix-Mesa Gateway Airport
Damage Area 3, post-disturbance, [REDACTED]
[REDACTED] showing grading [REDACTED]. Pipes and a water tank have been placed within UP's right-of-way. View is to east-northeast.



Aerial map of Damage Area 4, pre-disturbance, aerial dated June 2022.



Aerial map of Damage Area 4, showing disturbance limits, aerial dated April 2023.



Damage Area 4, pre-disturbance, [REDACTED] view north, May 2022. Overview of existing fence line partially removed by adjacent Pecos Pacific Industrial Park Project.



Damage Area 4, post-disturbance, [REDACTED], view east-northeast, August 2023. The fence line has been removed.

ATTACHMENT 2
SURFACE TRANSPORTATION BOARD LETTER
TO UNION PACIFIC RAILROAD COMPANY



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

August 1, 2023

Kevin Rice
Sr. Manager M/W Environmental
Union Pacific Railroad
1400 Douglas Street, 9th Floor
Omaha, NE 68179

RE: Docket No. FD 36501, Union Pacific Railroad Company – Construction and Operation Exemption in Maricopa County, Arizona; Recently Discovered Ground Disturbance Within the APE

Dear Mr. Rice,

As you know, the Surface Transportation Board's (Board) Office of Environmental Analysis (OEA) is close to finishing its environmental and historic review of Union Pacific Railroad Company's (UP) proposed 6-mile rail construction in Mesa, Arizona (known as PIRATE). On Friday, July 28, 2023, OEA discovered land altering activities within the current Area of Potential Effects (APE) for the historic review of PIRATE under Section 106 of the National Historic Preservation Act, resulting in damage to sensitive archaeological sites that are eligible for listing in the National Register of Historic Places. Specifically, during analysis of current aerial photography of the project area, OEA noted that approximately six acres of land on UP property and within the APE had been graded and disturbed in the area of the proposed new wye connection to the UP mainline. Additional research revealed that this land is being prepared for a drainage basin tied to the Power Industrial development, which is currently under construction. OEA also identified three other possible locations within current UP property where the APE may have been disturbed. Enclosed is a map noting the locations of these disturbances.

These developments are very concerning and improper because the environmental and historic review for this project is still ongoing, and the Board has yet to issue a decision authorizing the proposed construction and operation of PIRATE. In addition, these land disturbances could end up significantly delaying completion of the historic review because a Memorandum of Agreement setting out agreed-to historic mitigation has not yet been executed. OEA plans to consult with the Section 106 consulting parties to appropriately address this issue.

Furthermore, OEA strongly recommends that UP implement the following measures immediately to protect the property within the APE from any additional disturbances while this matter remains pending:

- Contact Power Industrial and instruct them to stop all further activities on land owned by UP located in the area of the proposed WYE until this case is no longer pending before the Board;
- Secure UP's property within the APE and protect known archaeological sites;
- Place "Private Property/Do Not Enter" signs along UP-owned property within the APE; and
- Take appropriate steps to contact all adjacent property owners and instruct them not to undertake any construction or land disturbing activities within the APE while this case is pending before the Board.

As noted previously, OEA will be reaching out shortly to the Section 106 consulting parties to inform them of this situation and to consult with them about treatment options to address the newly discovered construction/disturbances and damage within the APE. The construction and clearing activities in the area of the proposed wye (and possibly three other locations) while the environmental and historic processes are ongoing is very unfortunate. OEA urges UP to address this situation immediately to ensure that any current construction activities cease and that additional damage does not occur while this case is pending before the Board.

If you have any questions, please feel free to contact me at 202-245-0300 or by email at danielle.gosselin@stb.gov or Alan Tabachnick, the Board's Federal Preservation Officer, at 202-934-8469 or by email at alan.tabachnick@stb.gov.

Sincerely,



Danielle Gosselin
Director
Office of Environmental Analysis

Enclosure: Map

Cc: James Boles, Vice President
Tanya Spratt, Senior General Attorney