



# Site Specific Final Reclamation Completion Notice – Land Use Change Drone Imagery

## Permit Closure Report – Land Use Change

**Well Location ID:** 323660

**Well Location Name:** BRIGGS-65N66W/17SWSE

### Report Date:

11/14/2024

H2E has conducted a thorough review of the data provided in this report. This report was developed in accordance with ECMC Operator Guidance – Operator supplied land use change drone imagery and information for submitting a final reclamation completion notice.

### Land Use Year and Type

Land Use 2024 – Housing Development

Land Use 2023 – Housing Development Construction

Land Use 2019 – Oil and Gas Operations

### Inspection:

Performed by	H2E Inc.
Date	10/30/2024

All pertinent data, imagery, and materials are included at the end of this report.

## Location Checklist



<b>Operator / #</b>	PDC ENERGY INC - 69175			
<b>Name / Location ID</b>	BRIGGS-65N66W/17SWSE - 323660			
<b>County</b>	Weld			
<b>Well Information</b>	<b>Well Name:</b> BRIGGS #17-1			
	<b>Well API #:</b> 05-123-13332			
	<b>Lat/Long As Drilled:</b> 40.394394 / -104.800984			
	<b>Plug date &amp; Form 6S Doc. #:</b> 3/21/3019 - #402011035			
<b>Facility Entities</b>	<input type="checkbox"/>	Tank Battery	<input type="checkbox"/>	Pits
	<input checked="" type="checkbox"/>	Wells	<input type="checkbox"/>	On-Location Flowlines (Form 42): Doc. #
	<input type="checkbox"/>	Domestic Taps	<input checked="" type="checkbox"/>	Off-Location Flowlines (Form 44): Doc. # 403906769
<b>Equipment on Site</b>	<input checked="" type="checkbox"/>	None	<input type="checkbox"/>	Debris
	<input type="checkbox"/>	Pit mouse/rat holes, cellars backfilled		
<b>Access Road</b>	<input checked="" type="checkbox"/>	Regraded	<input checked="" type="checkbox"/>	Contoured
	<input type="checkbox"/>	Culverts removed	<input type="checkbox"/>	Gravel removed
	<input type="checkbox"/>	Pre-existing: must provide supporting documentation		
<b>Reclamation Status</b>	<input checked="" type="checkbox"/>	Location and associated disturbances reclaimed		
	<input type="checkbox"/>	Subsidence		
<b>Spills or Releases (Form 19)</b>	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Yes
<b>Remediation (Form 27/27A)</b>	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Yes
<b>On-Location Flowlines</b>	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Yes
<b>Off-Location Flowlines</b>	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Yes
<b>Inspection Corrective Actions</b>	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Yes
<b>Sundry Notice (Form 4)</b>	<b>Form 4 Doc. # &amp; Date:</b> N/A			
	<b>Purpose:</b> N/A			
	<b>Comments:</b> N/A			
	<b>Attachments:</b> N/A			
<b>Drone Information</b>	<b>Make &amp; Model:</b> DJI M300			
	<b>Image Processing Software:</b> Pix4Dmapper			
	<b>Pilot Name &amp; FAA Certificate #:</b> Peter Nelson - 4974559			
	<b>Date of FAA Certificate Issuance:</b> 3/19/2024			



## Designated Land Use Observations

Previous Land Use	Current Land Use
Reference Imagery for Infrastructure: NAIP 2015	Remotely Sensed Imagery: 10/30/2024
Designation: Oil and Gas Facility	Designation: Housing Development

### **The following imagery sources were reviewed during this investigation:**

NAIP Imagery from 2015, 2023, and historic Google Earth imagery from 1985-2023.

## Site Observation Notes

No Additional Information

## Closure Information

This final reclamation completion notice is intended to close the BRIGGS-65N66W/17SWSE location which consists of the Briggs #17-1 (API # 05-123-13332) wellhead. This wellhead does not share a disturbance with any other wells and has its own associated tank battery. The associated tank battery has its own location ID (464272) and is being closed in a separate submittal.

The Briggs location is in Weld County, Colorado and is directly north of Highway 34 and 0.35 miles west of 71<sup>st</sup> Ave. The Briggs #17-1 wellhead and tank battery were plugged in 2019, reclaimed and returned to the landowner for agricultural use. Since then, the land has been converted to a housing development.

There is one off-location flowline associated with this well that transported produced fluids to the associated tank battery. The flowline was fully removed March 21, 2019, via Form 44 (Doc. #: 403906769).

The wellhead and tank battery were accessed from an unnamed access road off Highway 34. The access road was reclaimed in 2019 and returned to the landowner for agricultural use; the current use is a housing development.

There were no Spills (Form 19) identified for this location, well, or the associated tank battery during the record search.

There was one Remediation Workplan (Form 27) identified (Remediation Project #13064). This project was for the removal of a partially buried produced water vault. The vault was removed, and soil sampling was conducted. All results were within Table 910-1 limits. As planned and approved, the vault was then backfilled. The Commission approved the request for closure on June 3, 2019. No further action is necessary under this Remediation Project.

During field inspections there was one violation related to tank berms. Linda Pavelka noted during the May 18, 1995, inspection that the tank berms were not large enough. This violation was cleared during the follow-up inspection on September 15, 1995.



Two Corrective Actions (CA's) were identified during the records review. The inspection by Jason Gomez on 4/30/2014 (#673800844 – 4/30/2014) stated the wellhead sign was lying on the ground. In addition, a NFPA label was needed on the produced water tank. The CA required installing signs to comply with rule 210. Corrective Actions were due by May 30, 2014. A follow-up inspection noted the CAs were completed and in compliance (#673802912 – 3/1/2016). The second CA was from the inspection on 8/20/2019. Inspector Santistevan stated that an unused gas meter house was left at the tank battery location. All other equipment had been removed. The CA required compliance with Rule 603.f. (Insp #679601376 – 8/20/2019). A FIR Resolution Form was submitted September 17, 2019, stating the gas meter was removed and the location was in compliance with Rule 603.f (Doc #402179969).

Drone imagery confirms that no equipment was left on site at this location after reclamation activities occurred.

### Summary Acreage Table

Description	Acres
Historic Disturbance Extent	1.15
Access Road	1.0
Flowline	Not Included
Tank Battery	Not Included
Well Pad	0.15

## Location Summary



<b>Name</b>	BRIGGS-65N66W/17SWSE		
<b>Type</b>	Well		
<b>Location ID</b>	323660		
<b>Operator / #</b>	PDC ENERGY INC - 69175		
<b>Field</b>	Wattenberg - #90750		
<b>County, State</b>	Weld, Colorado		
<b>Lat/Long</b>	40.394324 / -104.800963		
	<input type="checkbox"/> Planned Location	<input checked="" type="checkbox"/> X	<input type="checkbox"/> As Drilled
<b>Location</b>	SWSE 17 5N66W		
<b>Location Status - Date</b>	CL - 3/21/2019		
<b>Facility Entities</b>	<input type="checkbox"/>	Tank Battery	<input type="checkbox"/> Pits
	<input checked="" type="checkbox"/> X	Wells	<input checked="" type="checkbox"/> X Off-Location Flowlines (Form 44)
	<input type="checkbox"/>	Domestic Taps	<input type="checkbox"/> On-Location Flowlines (Form 42)
	<input type="checkbox"/>	Electric Utilities	<input type="checkbox"/>
<b>Equipment on Site</b>	<input checked="" type="checkbox"/> X	No	<input type="checkbox"/> Yes
	If yes, list:		
	<input type="checkbox"/>	Pit mouse/rat holes, cellars backfilled	
<b>Access Road</b>	<input checked="" type="checkbox"/> X	Regraded	<input checked="" type="checkbox"/> X Contoured
	<input type="checkbox"/>	Culverts Removed	<input type="checkbox"/> Gravel Removed
	<input type="checkbox"/>	Pre-Existing (Must provide supporting documentation):	
<b>Variance Requests</b>	No variance requests identified during review.		
<b>Sundry Notice (Form 4)</b>	No sundry notice pertaining to series 900-1200 rules was identified.		
<b>On Location Flowlines (Form 42)</b>	N/A		
<b>Off-Location Flowlines (Form 44)</b>	<b>Form 44 Doc # &amp; Date:</b> #403906769 - 8/30/2024		
	<b>Purpose:</b> Flowline Removal		
	<b>Abandonment Date:</b> 3/21/2019		
	<b>ECMC Approval Date &amp; Signee:</b> N/A		
	<b>Operator Comments:</b> N/A		
	<b>Flowline Facility Information</b>		
	<b>ECMC Flowline ID:</b> 479253		
	<b>Operator Flowline ID:</b> PDC Flowline System		
	<b>Status &amp; Date:</b> AC - 11/8/2024		
	<b>Flowline Type:</b> Wellhead Line		
	<b>Type of Fluids Transported:</b> Produced Fluids		
	<b>Start Point Location ID:</b> 245537		
	<b>Start Point Riser Lat/Long:</b> 40.394392 / -104.800979		
	<b>Equipment at Start Point:</b> Wellhead		
	<b>End Point Location ID:</b> 464272		
<b>End Point Riser Lat/Long:</b> 40.396020 / -104.803640			
<b>Equipment at End Point:</b> Separator			

Field Inspection Form (Form INSP)	<b>Form INSP Doc # &amp; Date:</b> #500169783 - 5/18/1995
	<b>Status Summary:</b> Fail - Violation
	<b>Inspected Facilities:</b> Wellhead and Tank Battery
	<b>Inspection Status:</b> PR
	<b>Inspection Date &amp; Inspector:</b> 5/18/1995 by Linda Pavelka
Field Inspection Form (Form INSP)	<b>Form INSP Doc # &amp; Date:</b> #500169784 - 9/15/1995
	<b>Status Summary:</b> Pass
	<b>Inspected Facilities:</b> Wellhead and Tank Battery
	<b>Inspection Status:</b> PR
	<b>Inspection Date &amp; Inspector:</b> 9/15/1995 by Linda Pavelka
Field Inspection Form (Form INSP)	<b>Form INSP Doc # &amp; Date:</b> #673800844 - 4/30/2014
	<b>Status Summary:</b> Satisfactory; 2 CAs
	<b>Inspected Facilities:</b> Wellhead and Tank Battery
	<b>Inspection Status:</b> PR
	<b>Inspection Date &amp; Inspector:</b> 4/30/2014 by Jason Gomez
Field Inspection Form (Form INSP)	<b>Form INSP Doc # &amp; Date:</b> #673802912 - 3/1/2016
	<b>Status Summary:</b> Satisfactory - This is a follow up inspection
	<b>Inspected Facilities:</b> Wellhead and Tank Battery
	<b>Inspection Status:</b> PR
	<b>Inspection Date &amp; Inspector:</b> 3/1/2016 by Jason Gomez
Field Inspection Form (Form INSP)	<b>Form INSP Doc # &amp; Date:</b> #673800844 - 4/30/2014
	<b>Status Summary:</b> Satisfactory - This is a follow up inspection
	<b>Inspected Facilities:</b> Wellhead and Tank Battery
	<b>Inspection Status:</b> PR
	<b>Inspection Date &amp; Inspector:</b> 3/1/2016 by Jason Gomez
Field Inspection Form (Form INSP)	<b>Form INSP Doc # &amp; Date:</b> #679601376 - 8/20/2019
	<b>Status Summary:</b> Follow Up Inspection Required - one CA
	<b>Inspected Facilities:</b> Wellhead and Tank Battery
	<b>Inspection Status:</b> AC
	<b>Inspection Date &amp; Inspector:</b> 8/20/2019 by Brittani Santistevan
Inspection Corrective Actions (CAs)	<b>Comments:</b> Wellhead sign lying on ground. No NFPA label on produced water tank.
	<b>Comments:</b> Corrective actions from Doc#673800844 have been completed to comply with COGCC rules.
	<b>Comments:</b> Unused gas meter house left where tank battery resided. All other equipment has been removed since wellhead has been plugged and abandoned.
	500169783 - INADEQUATE BERMS-NEED TO HOLD 110% OF TANK VOLUMN;PLEASE FIX BERMS/FIREWALS
	673800844 - Install sign to comply with rule 210. Due by 5/30/2014 679601376 - Comply with Rule 603.f. (CA response FIRR Doc #402179969 - 9/17/2019)

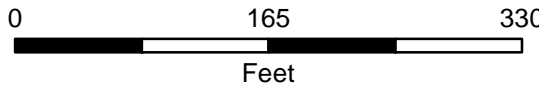
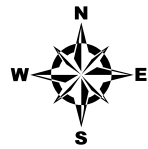
<b>Environmental Incidents &amp; Remediation</b>	None	Spill or Release (Form 19)
	X	Remediation (Form 27/27A)
<b>Spill or Release (Form 19)</b>	There were no spills reported for this location or facility.	
<b>Site Investigation and Remediation Workplan (Form 27/27A)</b>	<b>Remediation Project #:</b> 13064	
	<b>Form 27 Initial Doc # &amp; Date:</b> #401994063 - 4/3/2019	
	<b>Purpose:</b> Removal of partially buried produced water vault.	
	<b>Notes:</b> Any remediation action, if any, is dependent on pit soil sample analysis results from the lab. If lab results show no impacts, the pit will be backfilled. If lab results show any impact, it will trigger an assessment of impact extent.	
	<b>Form 27 Supplemental Docs # &amp; Date:</b> #402062023 - 6/3/2019	
	<b>Purpose:</b> Closure of Remediation Project from removal of partially buried produced water vault	
	<b>Operator Comments:</b> The partially buried produced water vault was removed by Unlimited. All results were within Table 910-1 limits. The pit will be backfilled.	
	<b>ECMC Comments:</b> N/A	
	<b>ECMC COAs:</b> Based on the information presented, it appears that no further action is necessary at this time and the COGCC approves the closure request. However, should future conditions at the site indicate contaminant concentrations in soils exceeding COGCC standards or if groundwater is found to be impacted, then further investigation and/or remediation activities may be required. In addition, the surface area disturbed by the remediation activity shall be reclaimed in accordance with the 1000 Series Reclamation Rules.	
	<b>Closure Request Approved:</b> 6/3/2019 by Candice (Nikki) Graber	
	<b>Final Resolution:</b> No Further Action	
<b>COGIS Tank Location Information (Scout Card)</b>	<b>Tank Battery Name:</b> BRIGGS-65N66W/17SWSE	
	<b>Location ID:</b> 464272	
	<b>Status &amp; Date:</b> AC - 6/20/2019	
	<b>Lat/Long:</b> 40.394392 / -104.800979	
	<b>Notes:</b> N/A	
	<b>Form 4 Doc # &amp; Date:</b> N/A	
<b>COGIS Well Information (Scout Card)</b>	<b>Well Name:</b> BRIGGS #17-1	
	<b>Facility ID:</b> 245537	
	<b>Status &amp; Date:</b> PA - 3/21/2019	
	<b>Lat/Long:</b> 40.396020 / -104.803640	
	<b>Notes:</b> N/A	
	<b>Form 4 Doc # &amp; Date:</b> N/A	
<b>Purpose:</b> N/A		

## **Pre-Plugging Active Operations Location Overview**



# PDC Form 4 Final Reclamation - Pre Plugging Overview

BRIGGS 17-1

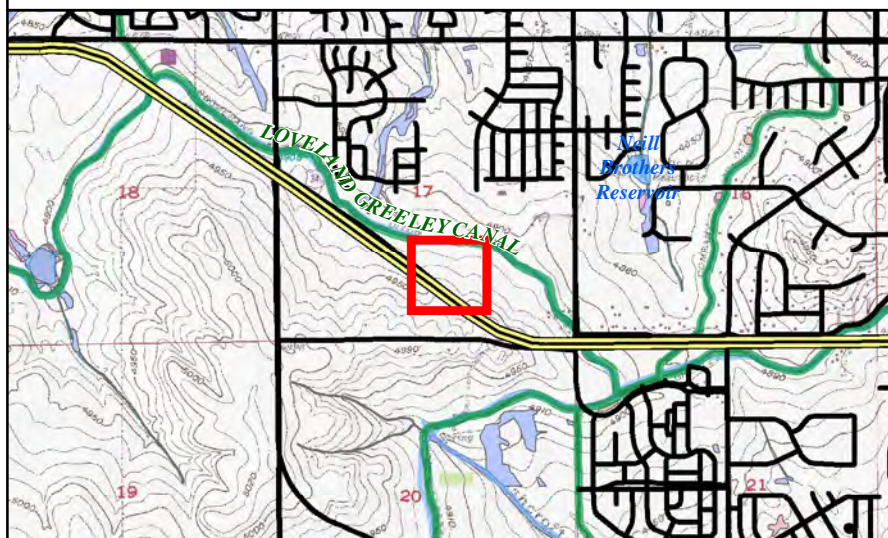


Editor: CDenison  
File: PDC\_Drone\_Rec\_PrePlugging\_DDP

Prepared by:  
Scale: 1:1,500  
Date: 11/22/2024

- Well Head
- Former Tank Battery Disturbance
- Reclaimed Well Pad Disturbance
- Reclaimed Access Road Disturbance
- Flowline - Removed
- Highway

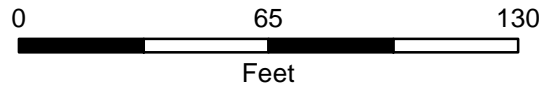
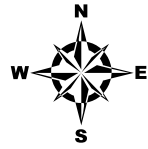
NAIP 2015 Imagery





PDC Form 4 Final Reclamation - Pre Plugging Overview

BRIGGS 17-1

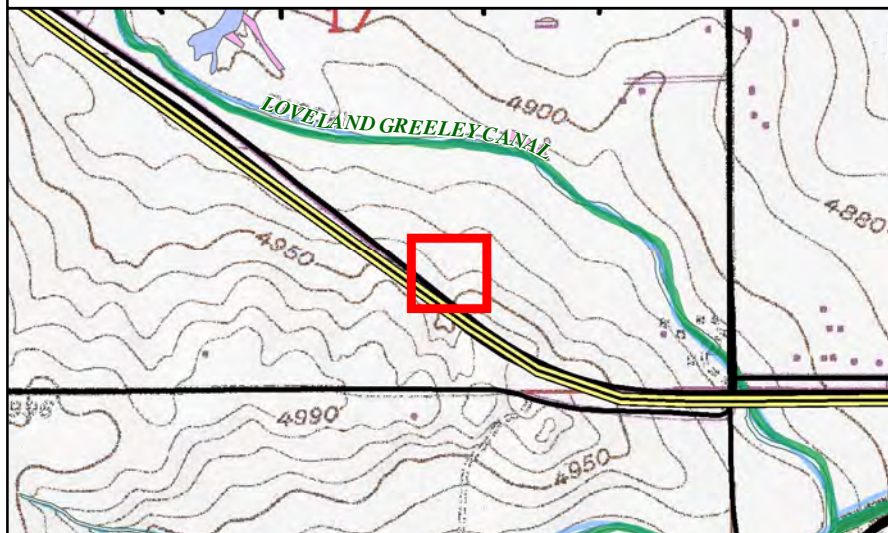


Prepared by:  
Scale: 1:600  
Date: 11/22/2024

Editor: CDenison  
File: PDC\_Drone\_Rec\_PrePlugging\_DDP

- Well Head
- Reclaimed Well Pad Disturbance
- Reclaimed Access Road Disturbance
- Flowline - Removed
- Highway

NAIP 2015 Imagery

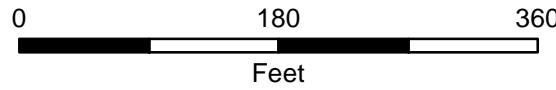
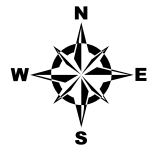


## Post-Plugging and Abandonment Location Overview



# PDC Form 4 Final Reclamation - Post Plugging Overview

BRIGGS 17-1

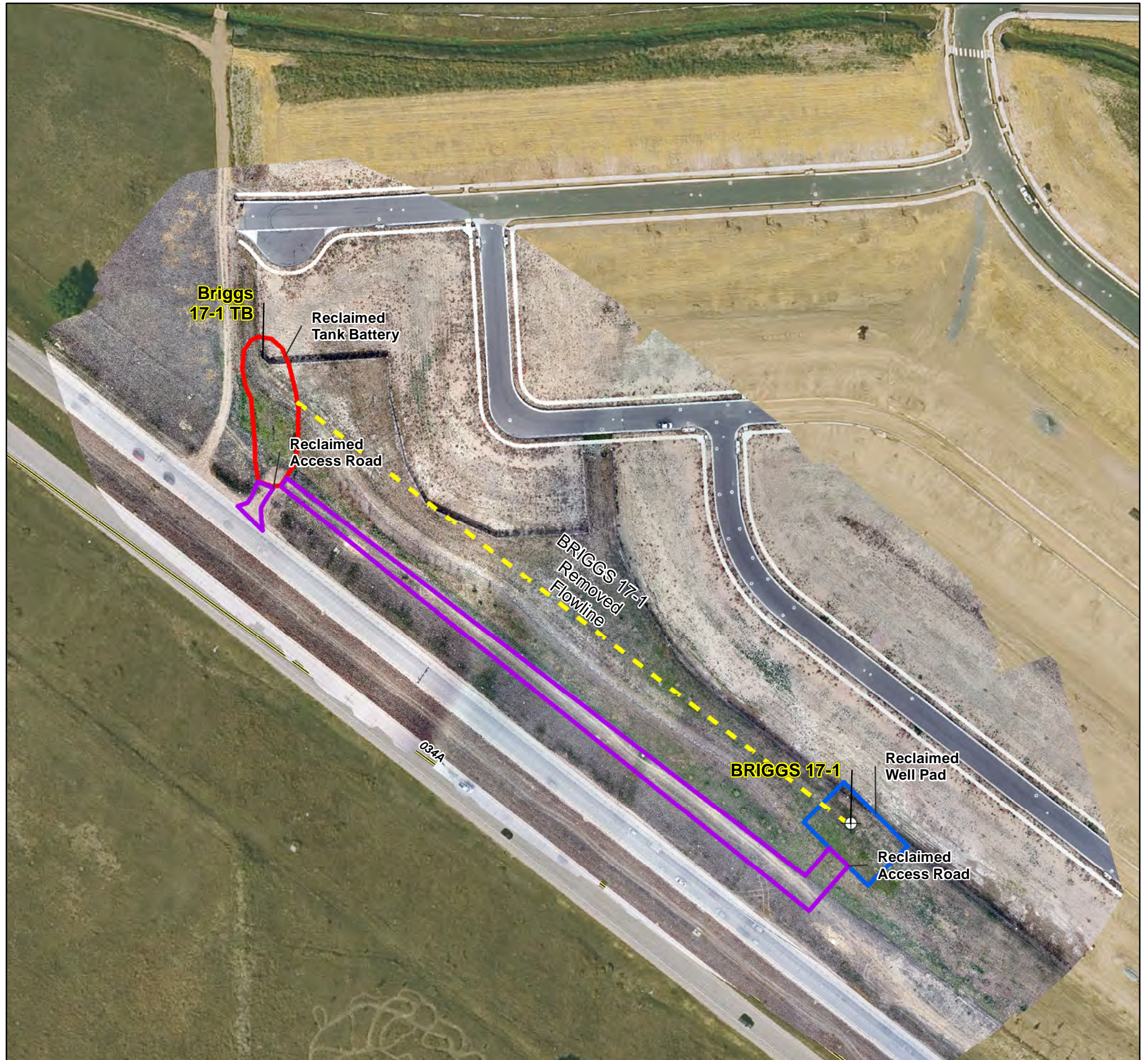
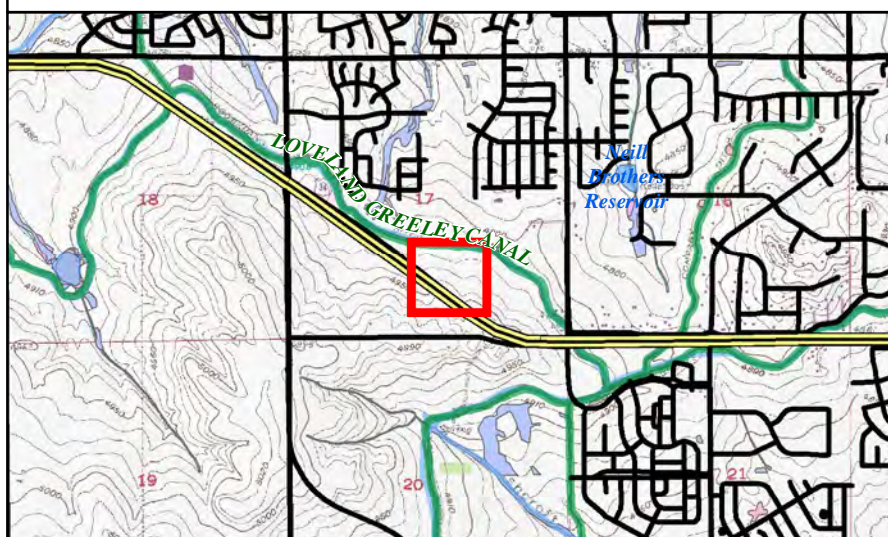


Prepared by:  
Scale: 1:1,600  
Date: 11/24/2024

Editor: CDenison  
File: PDC\_Drone\_Rec\_PostPlugging\_DDP

- Well Head
- Reclaimed Tank Battery Disturbance
- Reclaimed Well Pad Disturbance
- Reclaimed Access Road Disturbance
- Flowline - Removed
- Highway

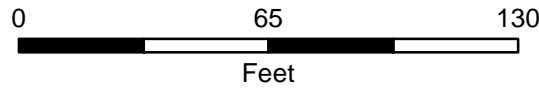
## 2024 Drone Imagery





PDC Form 4 Final Reclamation - Post Plugging Overview

BRIGGS 17-1

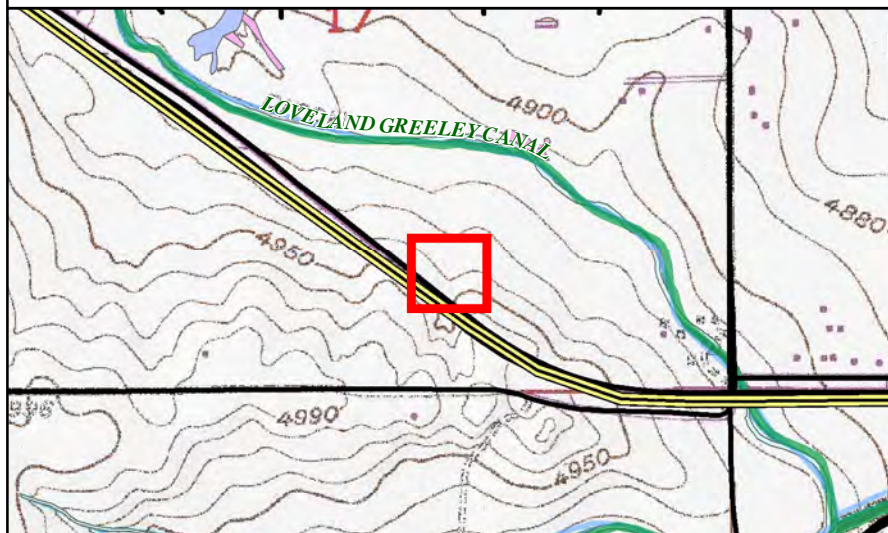


Prepared by:  
Scale: 1:600  
Date: 11/24/2024

Editor: CDenison  
File: PDC\_Drone\_Rec\_PostPlugging\_DDP

- Well Head
- Reclaimed Well Pad Disturbance
- Reclaimed Access Road Disturbance
- Flowline - Removed
- Highway

2024 Drone Imagery





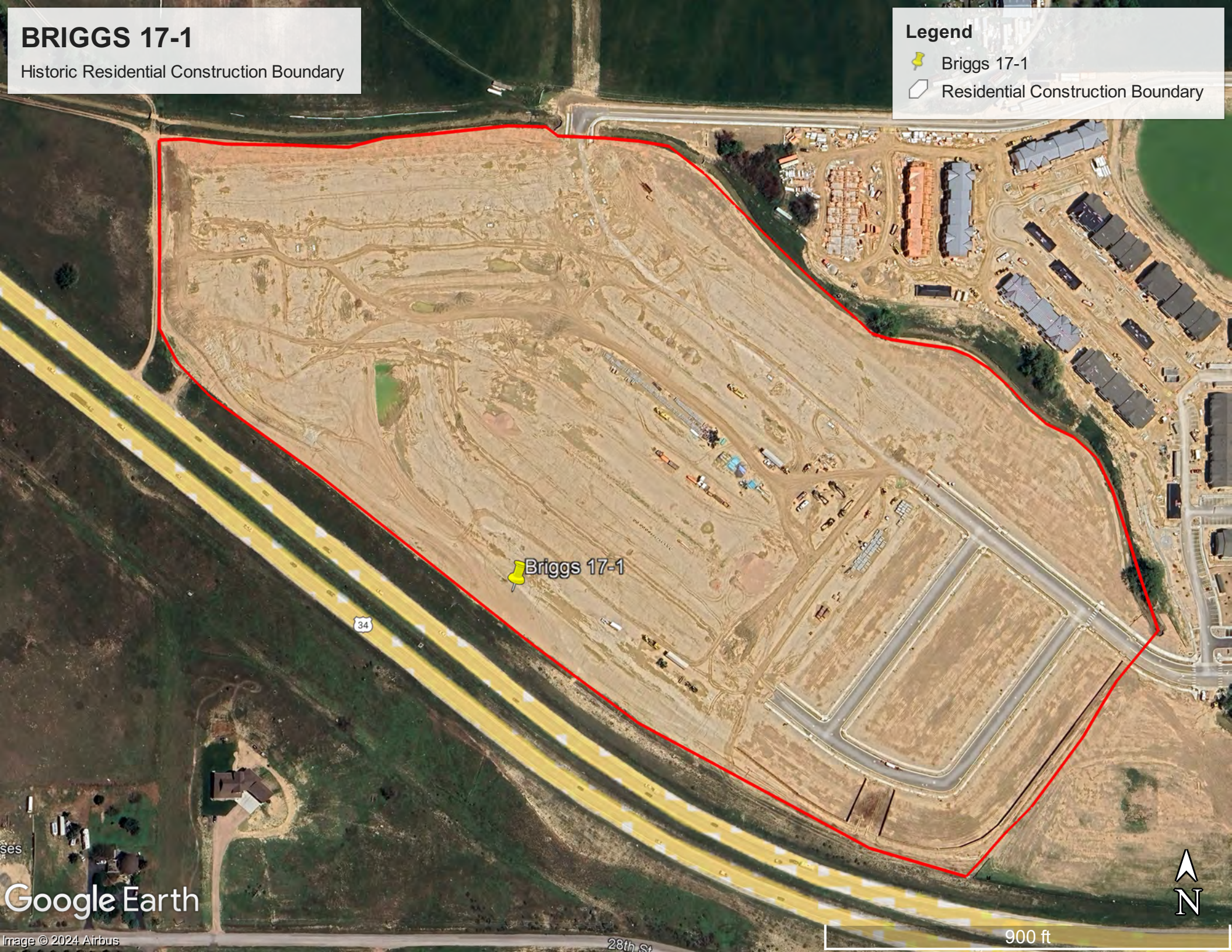
**Historical Residential Construction Boundary (2023)**


# BRIGGS 17-1

Historic Residential Construction Boundary

**Legend**

-  Briggs 17-1
-  Residential Construction Boundary



 Briggs 17-1

34



# Cardinal Direction Drone Photos of the Reclaimed Well Area

Photo Dates:

10/30/2024

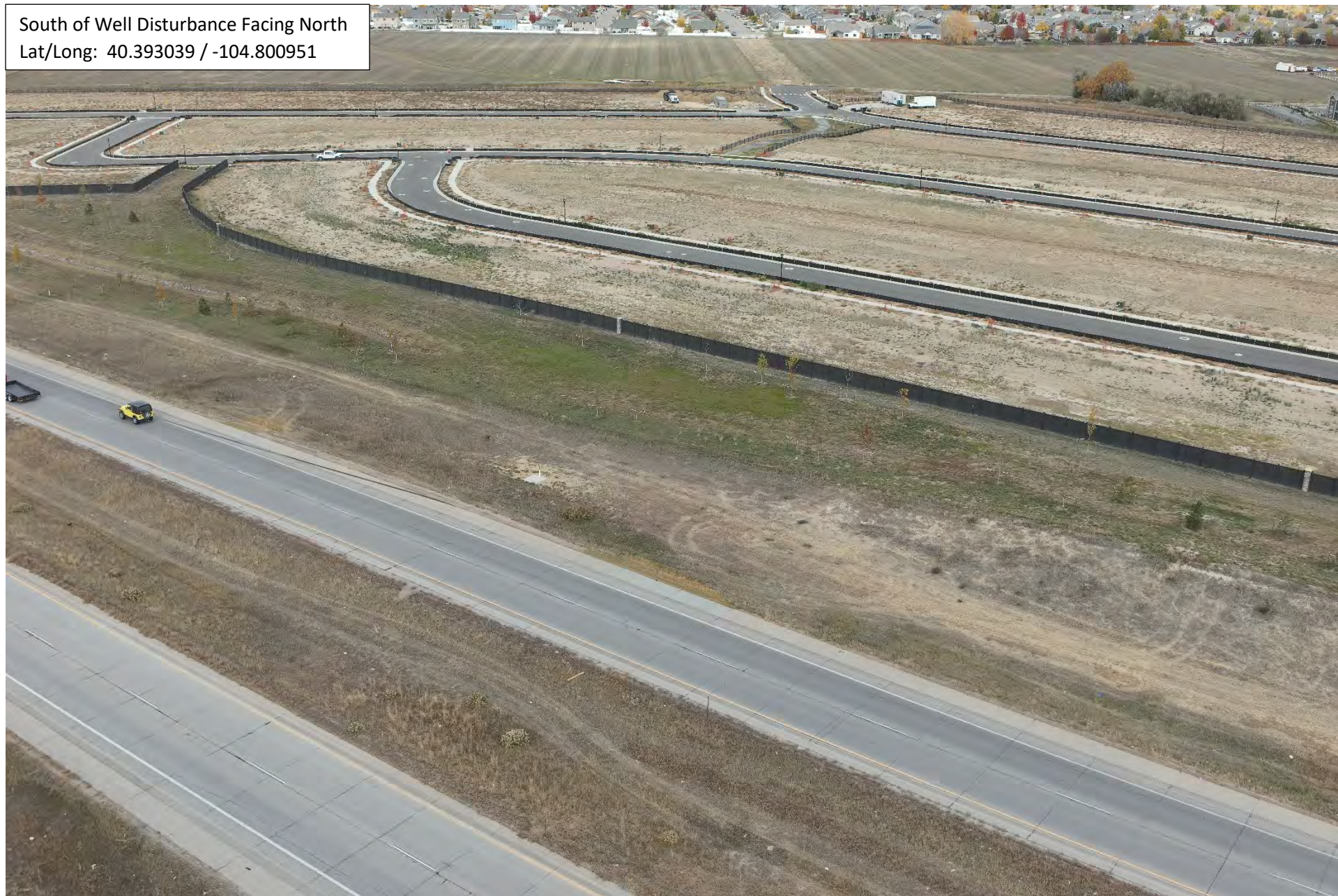
Drone Photo Height:

85'

North of Well Disturbance Facing South  
Lat/Long: 40.395727 / -104.800920



South of Well Disturbance Facing North  
Lat/Long: 40.393039 / -104.800951



West of Well Disturbance Facing East  
Lat/Long: 40.394411 / -104.803032



East of Well Disturbance Facing West  
Lat/Long: 40.394302 / -104.799300



# Handheld Photo to Document Land Use Change

Photo Dates:

10/30/2024

Reclaimed Wellhead Area:  
Lat/Long: 40.394674 / -104.800636



10.30.2024 00:46