



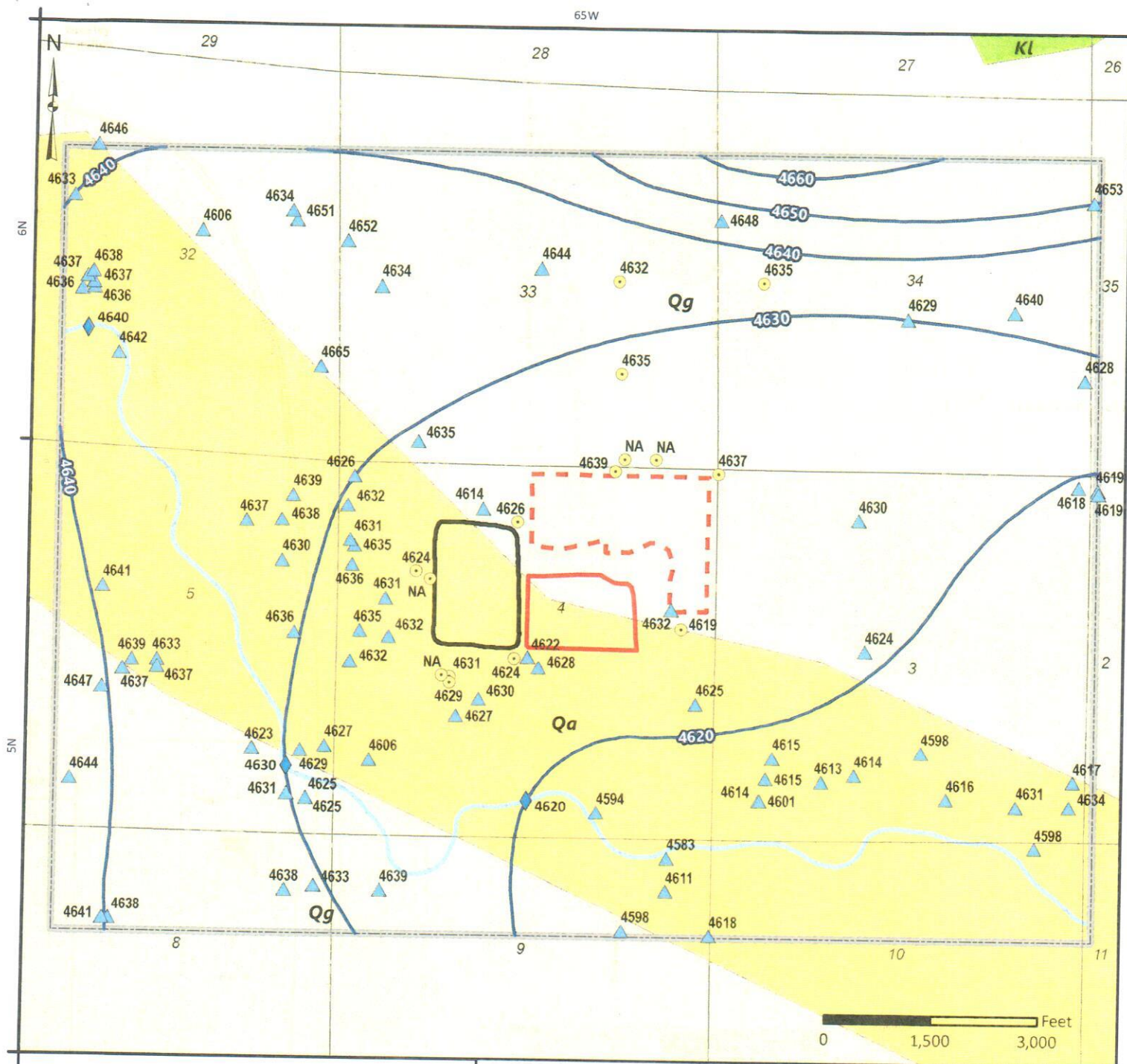


Figure 2

Surficial Geology and Predevelopment Water Table

Derr Pit
Weld County, Colorado

Map Legend

- ◆ Point Where Contour Crosses River (10m DEM)
- Registered Well Used for Monitoring
- ▲ DWR Water Well
- ~ Water Table Elevation Contour Based on Well Data
Contour Interval = 10'
- Well points labeled with SWL elevation.
- Note: Water table elevation at wells are estimated based on subtracting the depth to water from the estimated ground elevation based on 10m DEM data.
- ▭ Model Extent
- ▭ Loloff Pit with Slurry Wall
- ▭ Derr Pit with Planned Slurry Wall (2020)
- - - Derr Pit Amendment with Future Slurry Wall
- Geologic Units (from Tweto, 1979)
Qa - Alluvial Deposits
Qg - Gravels and Alluvium
Kl - Laramie Formation

Sources:
CDSS Well Permit Database 100119, USGS 10m DEM
(National Map), Tweto Geologic Map of Colorado (1979),
ESRI World Topo Map

Date: November 22, 2019
Datum/Projection: NAD83/Colorado State
Plane North, ft



McGrane Water
Engineering, LLC

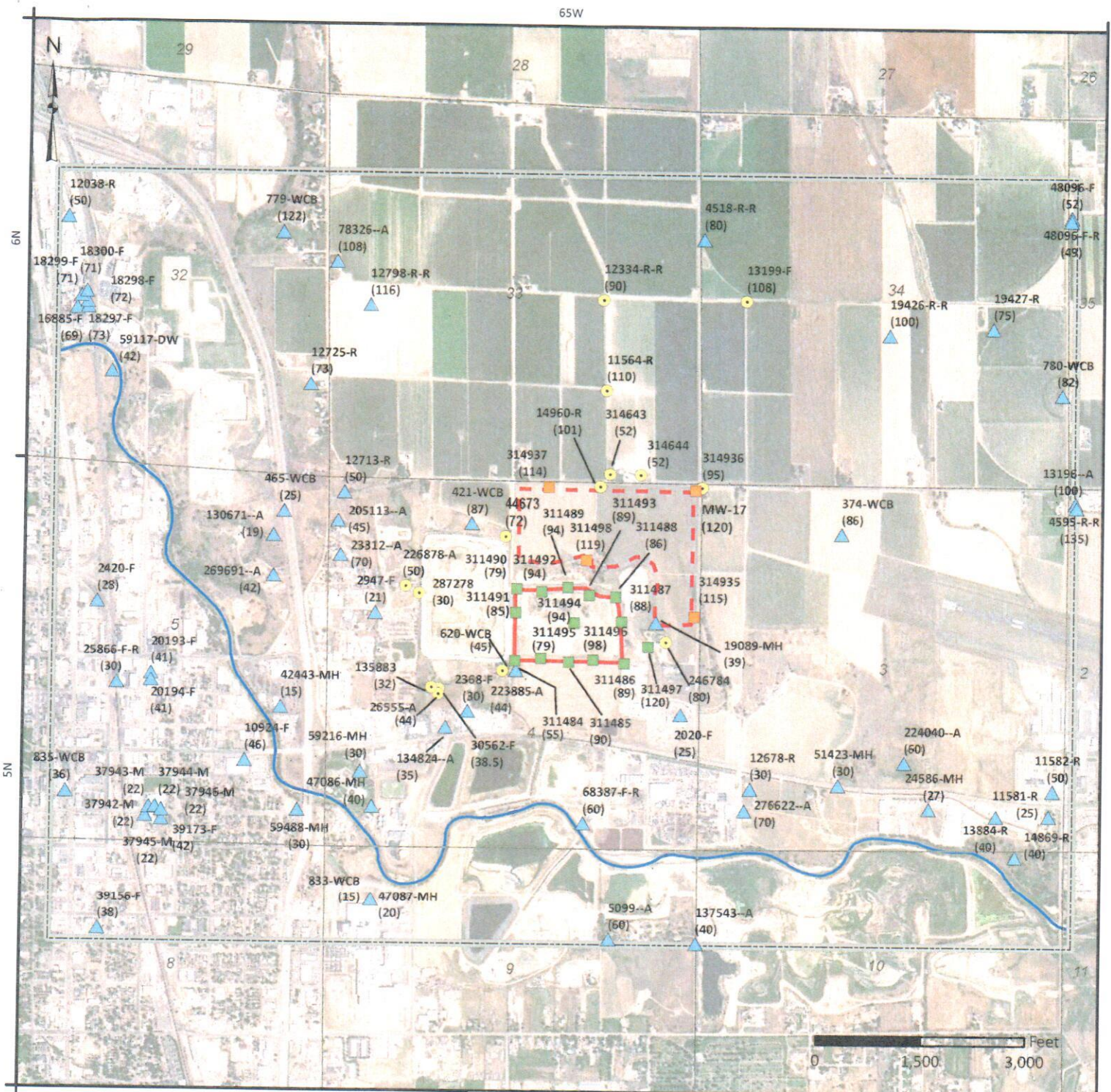


Figure 3

Vicinity Well Depth

Derr Pit
Weld County, Colorado

Map Legend

- Derr Monitoring Well
- Derr Pit Amendment Monitoring Well
- Registered Well Used for Monitoring
- ▲ DWR Water Well
- Model Extent
- Loloff Pit with Slurry Wall
- Derr Pit with Planned Slurry Wall (2020)
- Derr Pit Amendment with Future Slurry Wall

Labeled with:
DWR permit number
(well depth)

Only wells with well depth given in construction log are displayed.

Sources:
CDSS Well Permit Database 100119, Tweto Geologic Map
of Colorado (1979), ESRI World Topo Map

Date: November 11, 2019
Datum/Projection: NAD83/Colorado State
Plane North, ft

McGrane Water
Engineering, LLC

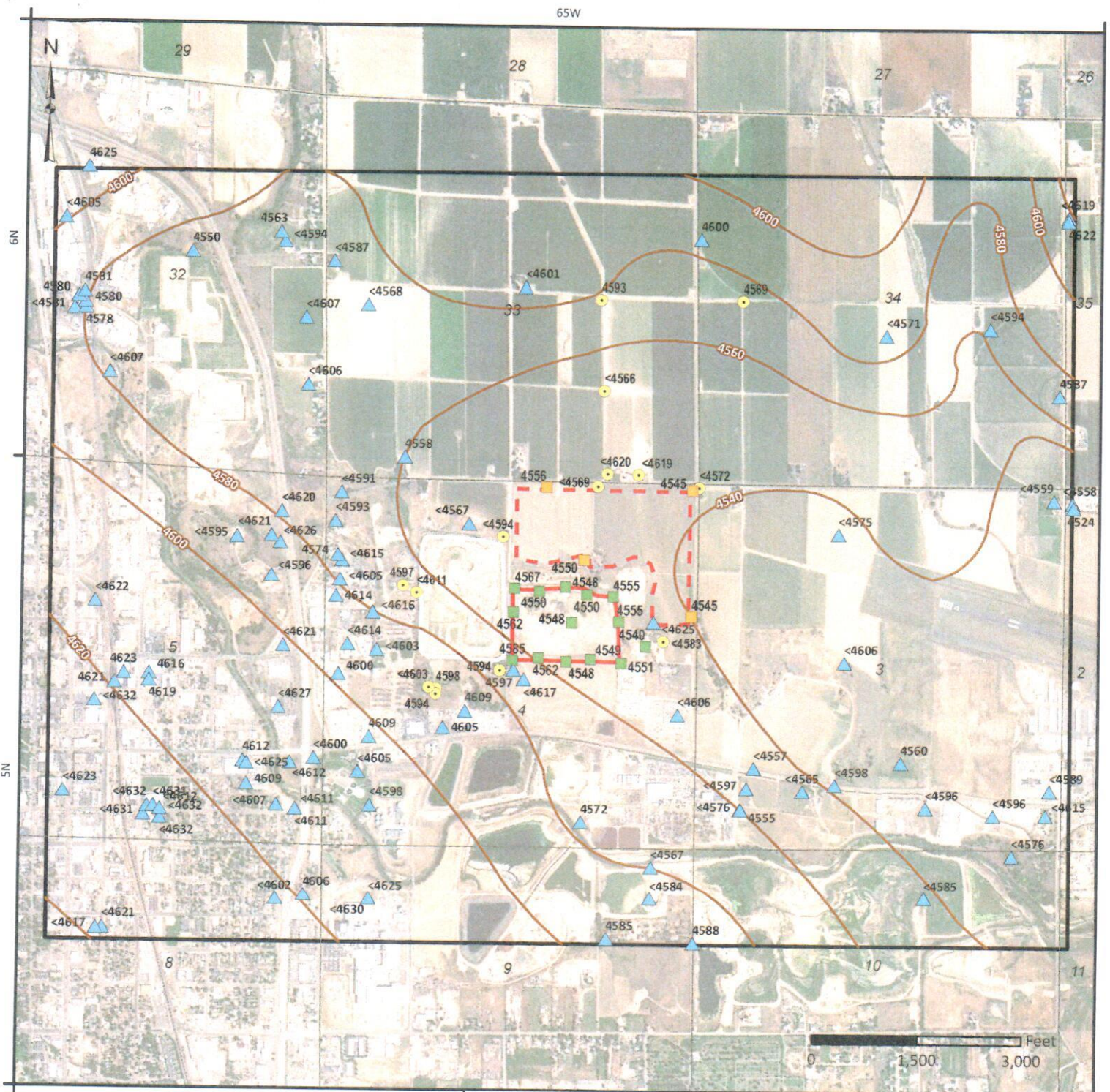


Figure 4

Bedrock Elevation

Derr Pit
Weld County, Colorado

Map Legend

- Derr Monitoring Well
 - Derr Pit Amendment Monitoring Well
 - Registered Well Used for Monitoring
 - ▲ DWR Water Well
 - Model Extent
 - Loloff Pit with Slurry Wall
 - Derr Pit with Planned Slurry Wall (2020)
 - Derr Pit Amendment with Future Slurry Wall
 - Bedrock Elevation Contour (interval = 10')
(Revised from Hurr & Schneider)
- Each well point labeled with bedrock elevation.

Sources:
CDSS Well Permit Database 100119, Hurr & Schneider
(OF-93-124), ESRI World Imagery

Date: November 11, 2019
Datum/Projection: NAD83/Colorado State
Plane North, ft



McGrane Water
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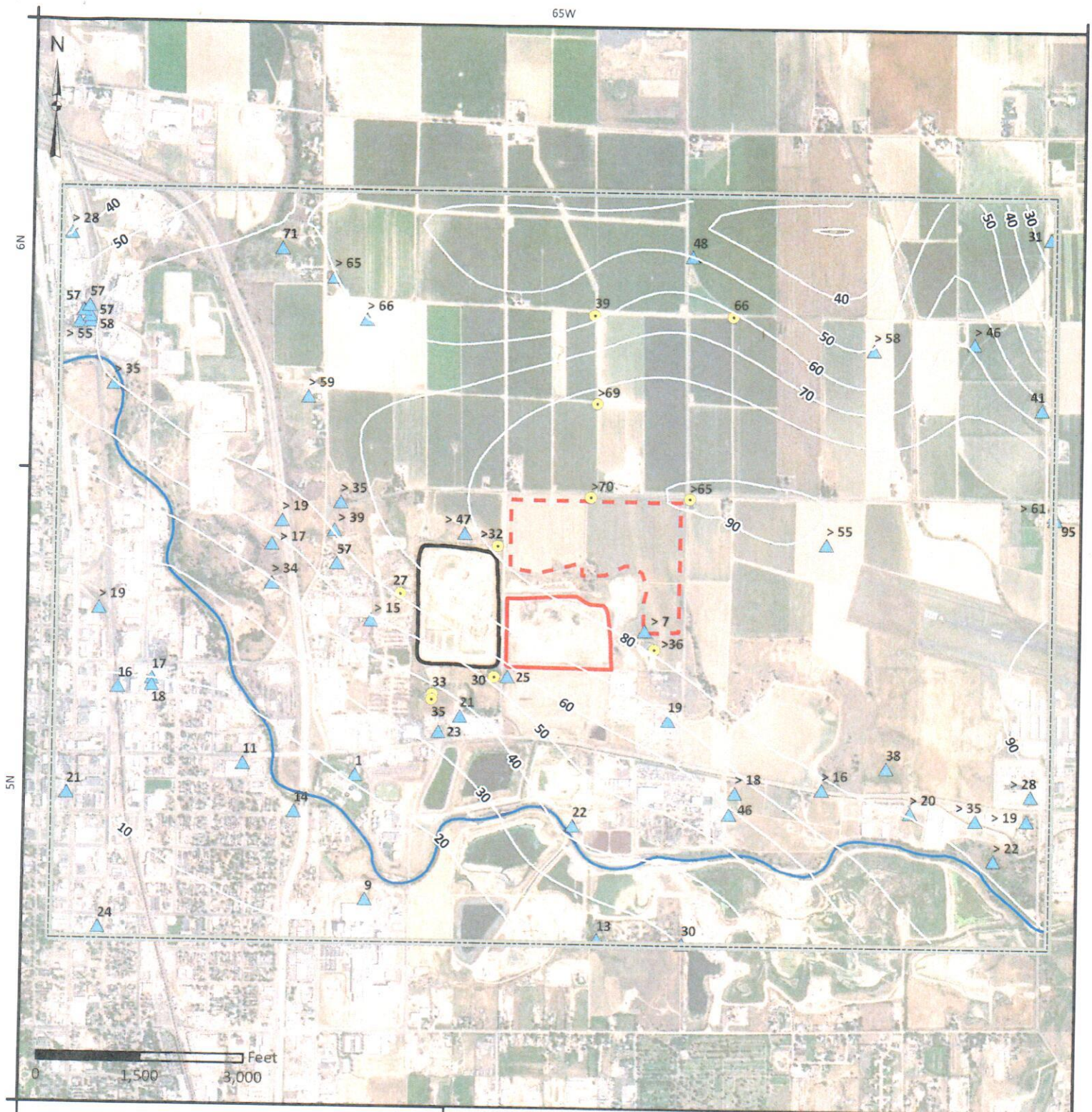


Figure 5

Saturated Thickness of Alluvial Material

Derr Pit
Weld County, Colorado

Map Legend

● Registered Well Used for Monitoring

▲ DWR Water Well

Saturated Thickness
(contour interval = 10')

*Modeled predevelopment water
table minus bedrock elevation

Each well point labeled with saturated thickness.

□ Derr Pit Model

□ Loloff Pit Slurry Wall

□ Derr Pit with Planned Slurry Wall
(2020)

□ Derr Pit Amendment with
Future Slurry Wall

Sources:
CDSS Well Permit Database 100119, Hurr & Schneider
(OF-93-124), ESRI World Topo Map

Date: November 11, 2019
Datum/Projection: NAD83/Colorado State
Plane North, ft



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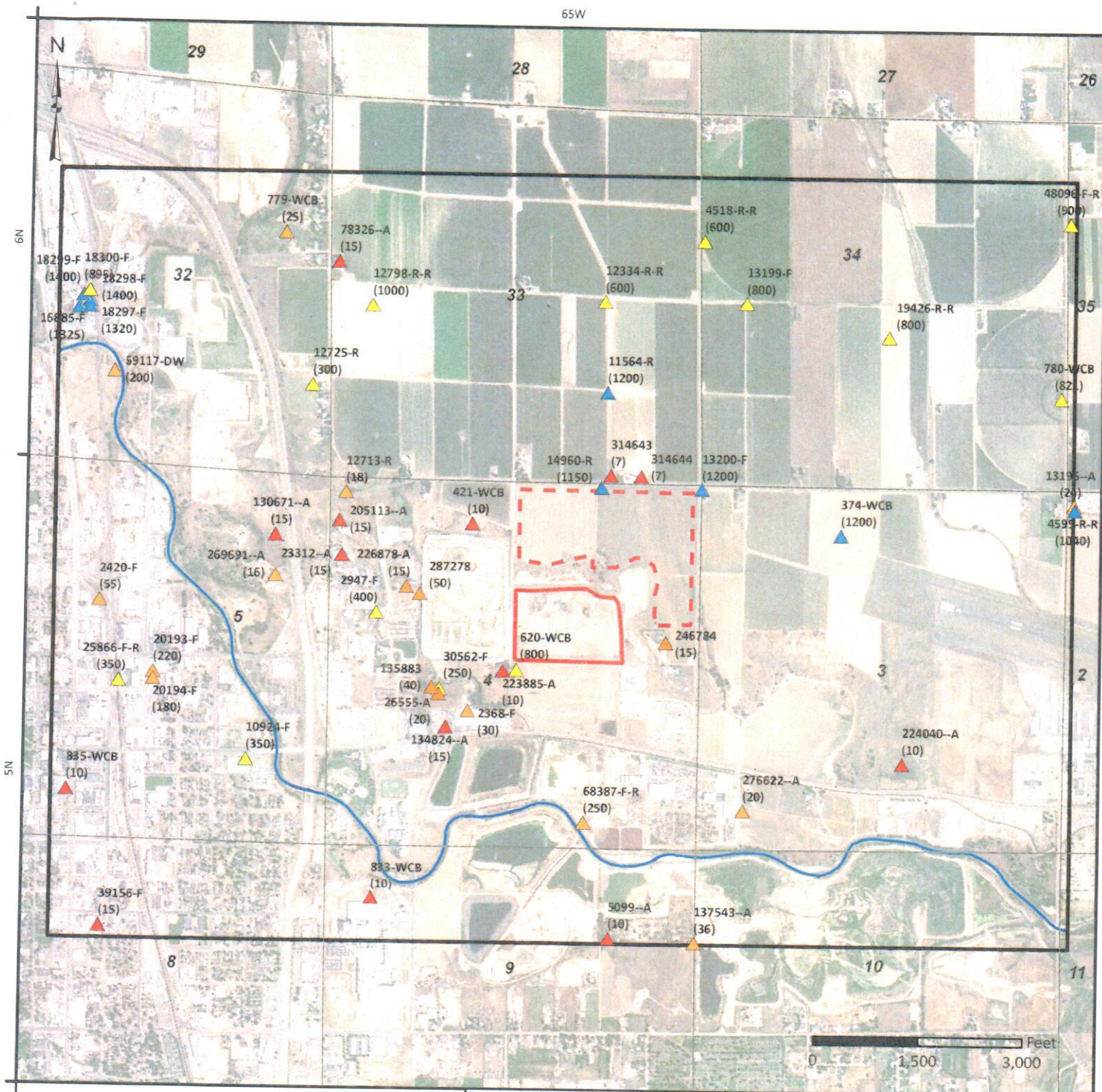


Figure 6

Vicinity Well Yield

Derr Pit
Weld County, Colorado

Map Legend

Well with Yield Data
(gallons per minute)

- ▲ < 15
- ▲ 15 - 250
- ▲ 250 - 1000
- ▲ 1000 - 1200

Labeled with:
DWR permit number
(well yield)

Model Extent

Loloff Pit with Slurry Wall

Derr Pit with Planned Slurry Wall (2020)

Derr Pit Amendment with Future Slurry Wall

Only wells with well yield given in permit information are displayed.

Sources:
CDSS Well Permit Database 100119, ESRI World Imagery

Date: November 11, 2019
Datum/Projection: NAD83/Colorado State
Plane North, ft

McGrane Water
Engineering, LLC

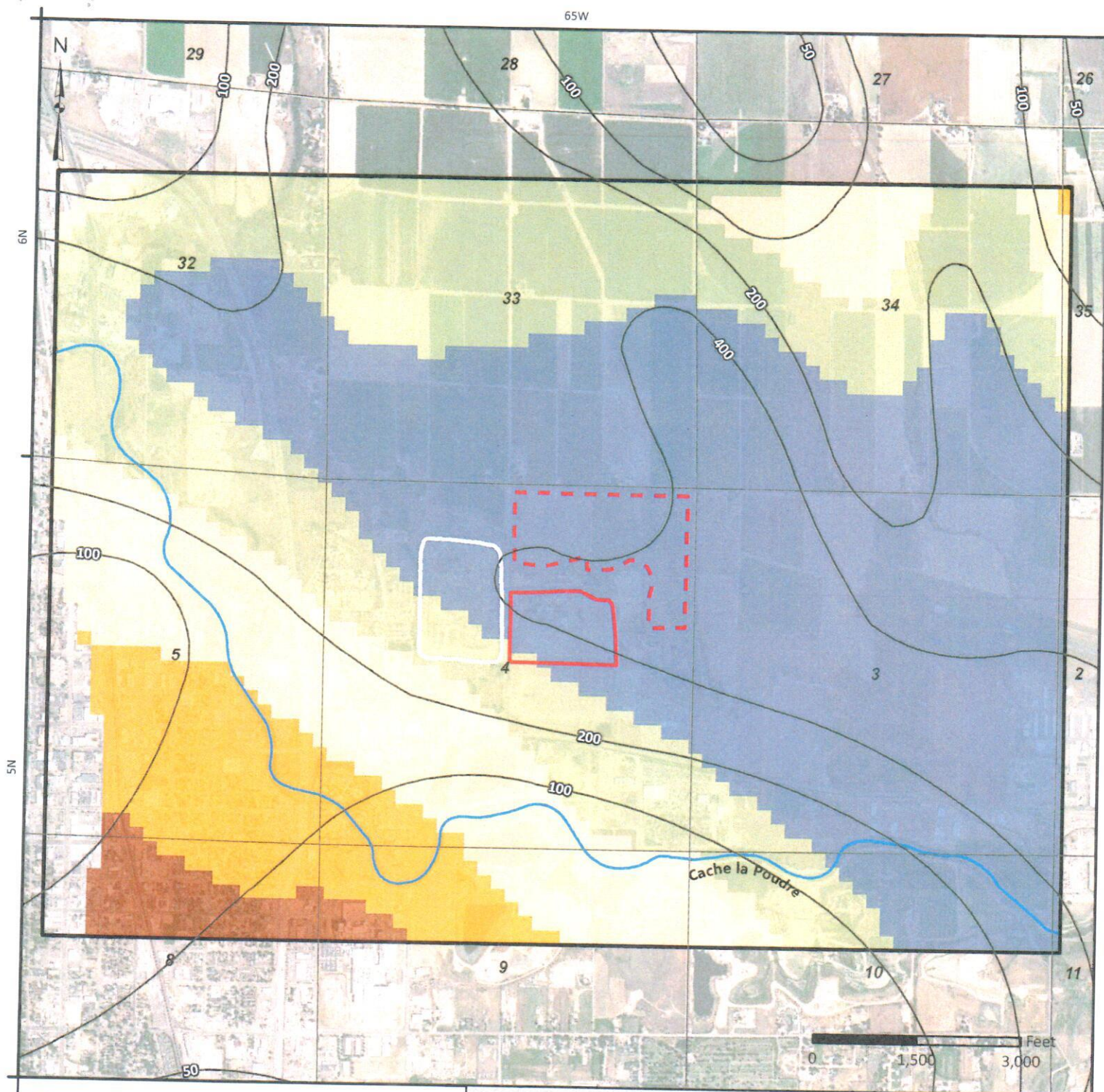


Figure 7

Transmissivity

Derr Pit
Weld County, Colorado

Map Legend

Model Extent

Loloff Pit with Slurry Wall

Derr Pit with Planned Slurry Wall (2020)

Derr Pit Amendment with Future Slurry Wall

Modeled Transmissivity
(1000s gpd/ft)

< 50
 50 - 100
 100 - 200
 200 - 300
 300 - 432

Transmissivity Contour from Hurr & Schneider (Contour intervals varies, 1000s gpd/ft)

Sources:
CDSS Well Permit Database 100119, Hurr & Schneider (OF-93-124), ESRI World Imagery

Date: November 11, 2019
Datum/Projection: NAD83/Colorado State Plane North, ft



McGrane Water
Engineering, LLC

Water Table Elevation Comparison

Derr Pit
Weld County, Colorado

Each well point labeled with water table elevation.

-  DWR Water Well
-  Registered Well used for Monitoring
-  Modeled Water Table Elevation Contour (Contour Interval = 10 feet)
- Water Table Elevation Contour (Contour Interval = 10 feet)
Revised from Hurr & Schneider

Sources:
CDSS Well Permit Database 100119, Modeled Output,
Hurr & Schneider (OF-93-124), ESRI World Topo Map

Date: November 9, 2019
Datum/Projection: NAD83/Colorado State
Plane North. ft

