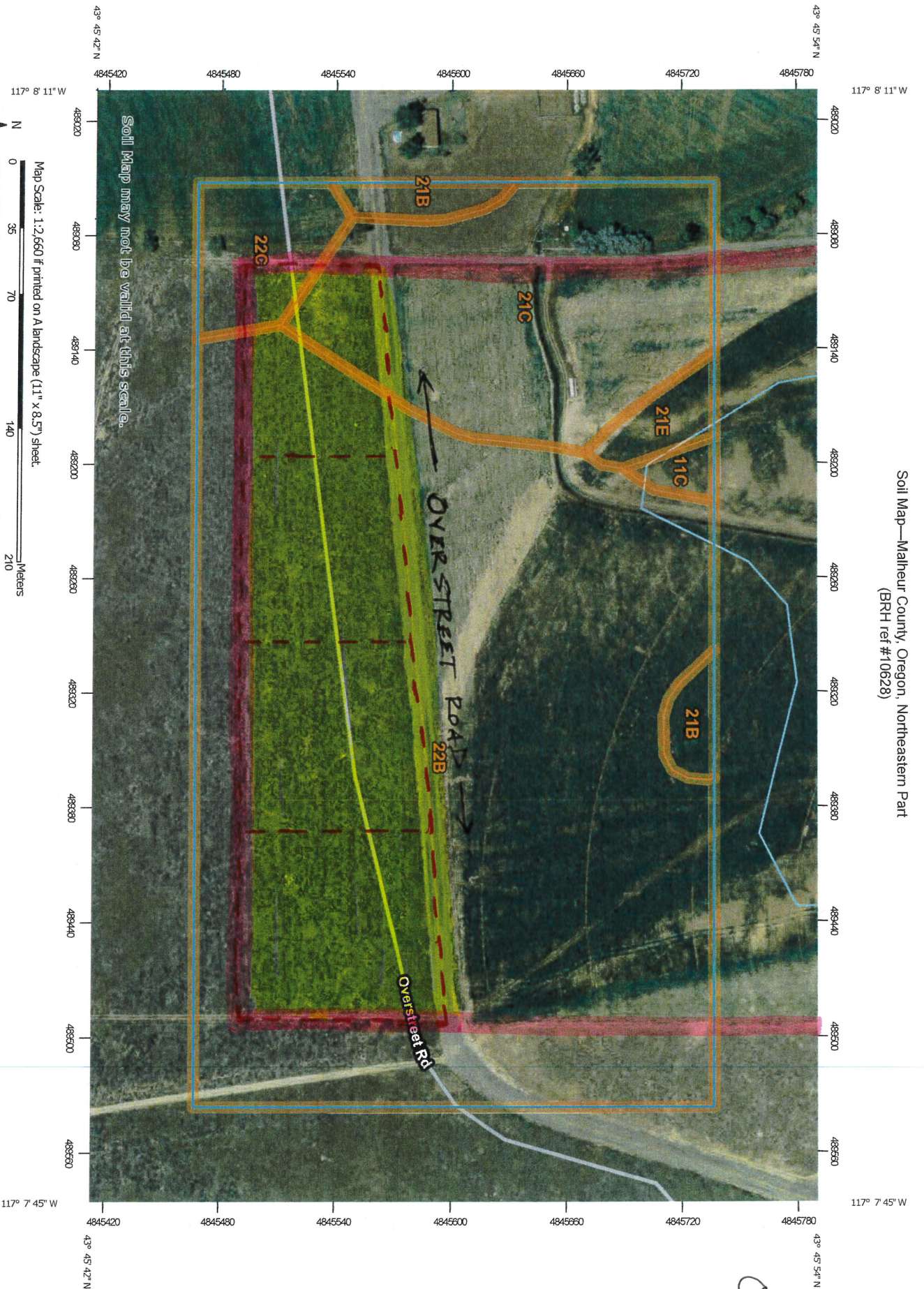


# NRCS SOILS CLASSIFICATION MAP

Soil Map—Malheur County, Oregon, Northeastern Part  
(BRH ref #10628)



Soil Map may not be valid at this scale.

Map Scale: 1:2,660 if printed on A landscape (11" x 8.5") sheet.








































Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

EXHIBIT # 9



## MAP LEGEND

	Area of Interest (AOI)		Spoil Area
	Area of Interest (AOI)		Stony Spot
	Soils		Very Stony Spot
	Soil Map Unit Polygons		Wet Spot
	Soil Map Unit Lines		Other
	Soil Map Unit Points		Special Line Features
	Special Point Features		Water Features
	Blowout		Streams and Canals
	Borrow Pit		Transportation
	Clay Spot		Rails
	Closed Depression		Interstate Highways
	Gravel Pit		US Routes
	Gravelly Spot		Major Roads
	Landfill		Local Roads
	Lava Flow		Background
	Marsh or swamp		Aerial Photography
	Mine or Quarry		
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

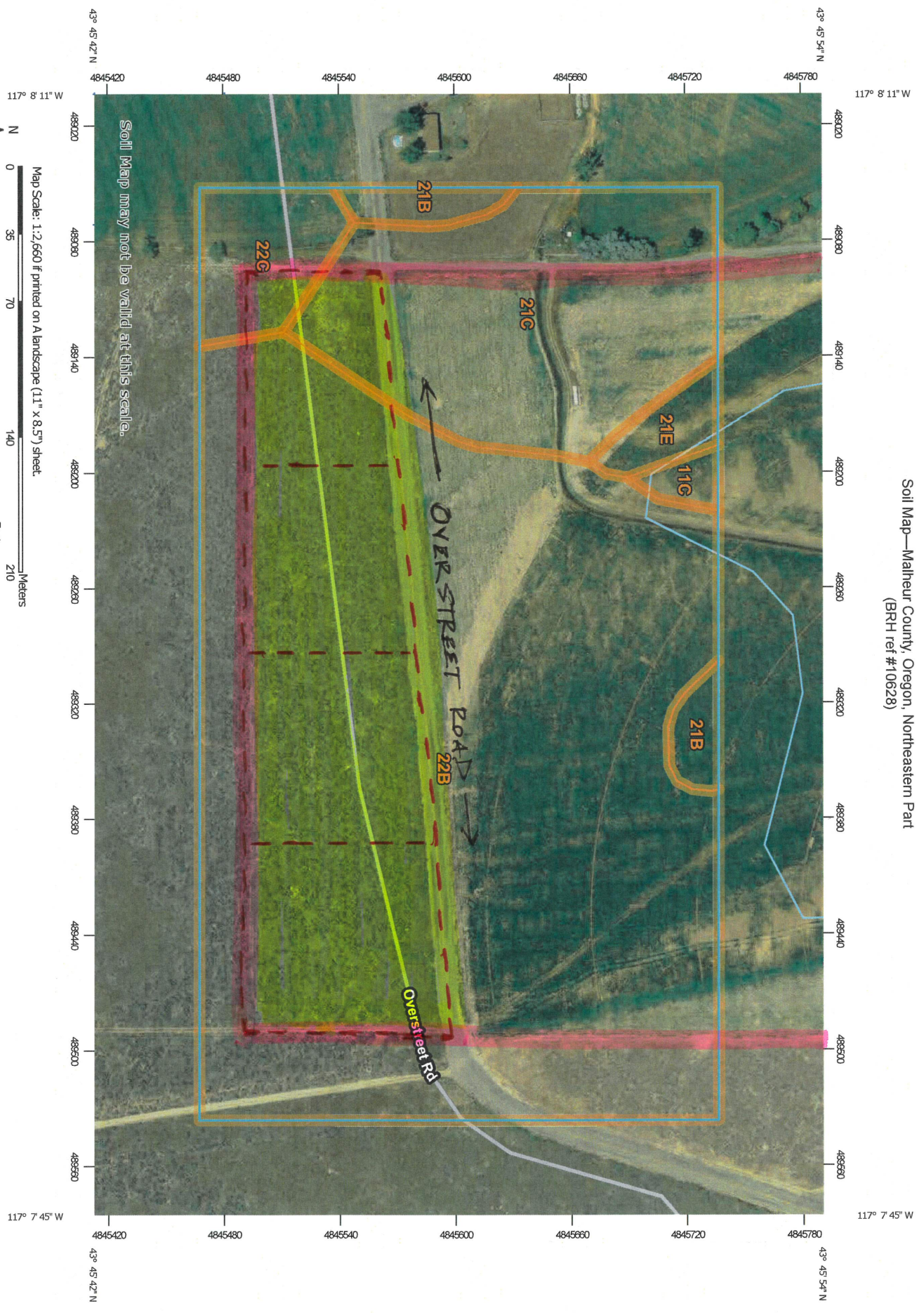
Soil Survey Area: Malheur County, Oregon, Northeastern Part  
Survey Area Data: Version 20, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 9, 2020—Jul 5, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Soil Map—Malheur County, Oregon, Northeastern Part  
(BRH ref #10628)



Soil Map may not be valid at this scale.

Map Scale: 1:2,650 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

### Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
11C	Frohman silt loam, 5 to 8 percent slopes	0.2	0.7%
21B	Nyssa silt loam, 2 to 5 percent slopes	0.7	2.2%
21C	Nyssa silt loam, 5 to 8 percent slopes	5.8	17.9%
21E	Nyssa silt loam, 12 to 20 percent slopes	0.5	1.5%
22B	Nyssa silt loam, gravel substratum, 2 to 5 percent slopes	23.9	73.8%
22C	Nyssa silt loam, gravel substratum, 5 to 8 percent slopes	1.2	3.9%
<b>Totals for Area of Interest</b>		<b>32.3</b>	<b>100.0%</b>



## Malheur County, Oregon, Northeastern Part

### 22C—Nyssa silt loam, gravel substratum, 5 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* 23c7  
*Elevation:* 2,200 to 2,600 feet  
*Mean annual precipitation:* 9 to 11 inches  
*Mean annual air temperature:* 50 to 54 degrees F  
*Frost-free period:* 150 to 170 days  
*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Nyssa, gravel substratum, and similar soils:* 85 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Nyssa, Gravel Substratum

##### Setting

*Landform:* Terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Lacustrine deposits

##### Typical profile

*H1 - 0 to 8 inches:* silt loam  
*H2 - 8 to 26 inches:* silt loam  
*H3 - 26 to 32 inches:* cemented material  
*H4 - 32 to 60 inches:* very gravelly sand

##### Properties and qualities

*Slope:* 5 to 8 percent  
*Depth to restrictive feature:* 20 to 40 inches to duripan  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 5.1 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C  
*Ecological site:* R011XY012OR - Silty 8-11 PZ

*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Malheur County, Oregon, Northeastern Part  
Survey Area Data: Version 20, Sep 3, 2024