

HSR Dunsmuir, CA, to Hornbrook



Moving People With Innovative
TRANSPORT SOLUTIONS

Designing Corridors for High-Speed Rails

[Find Out More](#)

The
High-Speed
Rail Corridor
between
Dunsmuir
and
Hornbrook

HSR Dunsmuir Section_002

- Miles from Dunsmuir to Hornbrook, on ground 13.24 miles, on flyovers 9.66 miles, in tunnels 30.2 miles. Total 52.92 HSR miles
- This section is mostly in tunnels. The topography does not allow any different version. The rail grades are 1.2% or less, and the curve radiuses are above 30,000 ft, except at Dunsmuir.
- Much consideration has been given to avoiding built-up and productive farmland to build this HSR corridor.

• HSR Dunsmuir Section_002 Des by RN

Legend



CHSR Station in Tunnel




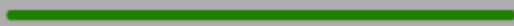
CHSR Station on Flyovers



CHSR Station in on Ground

 On ground

 Cuts

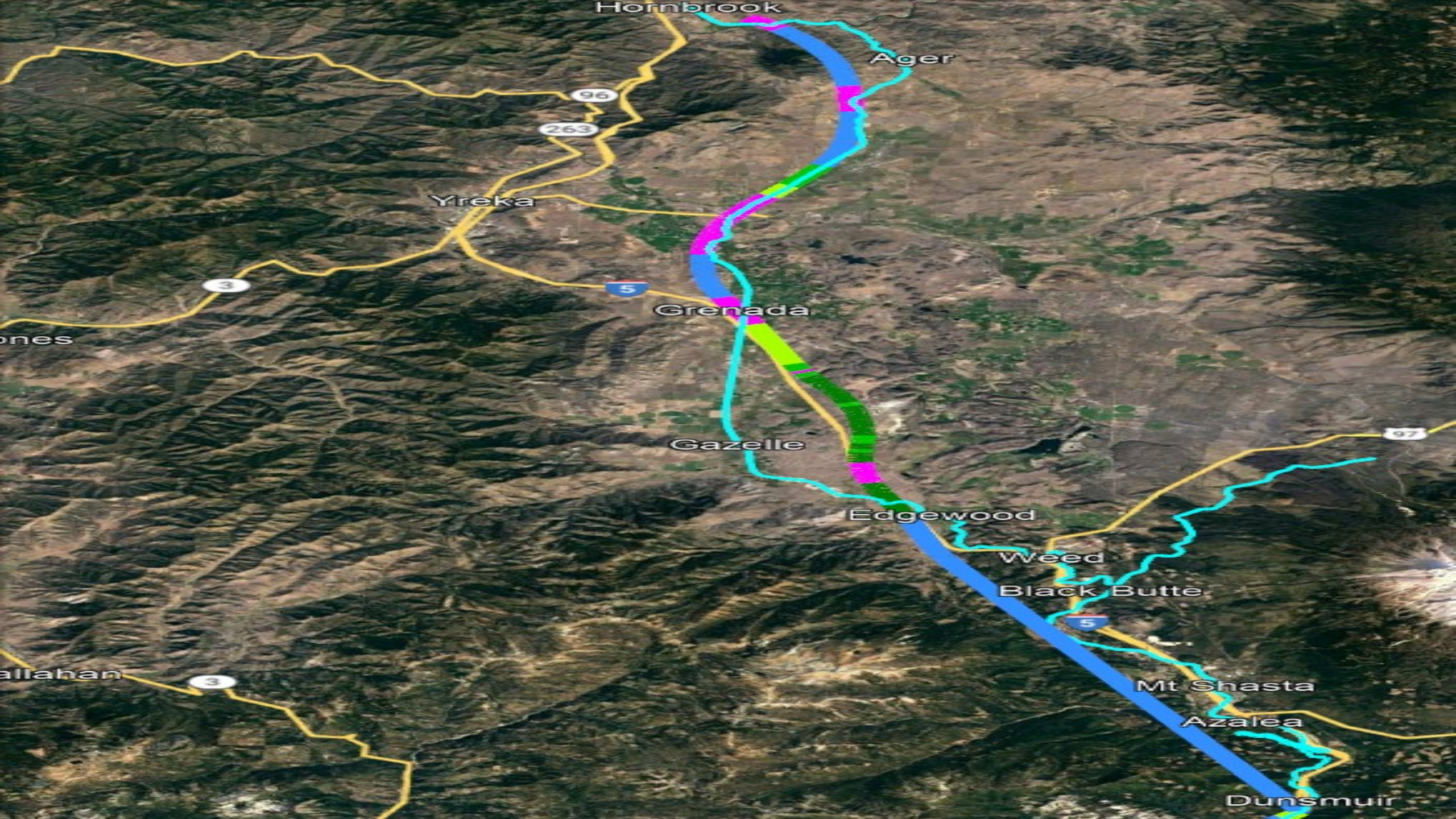
 Fills

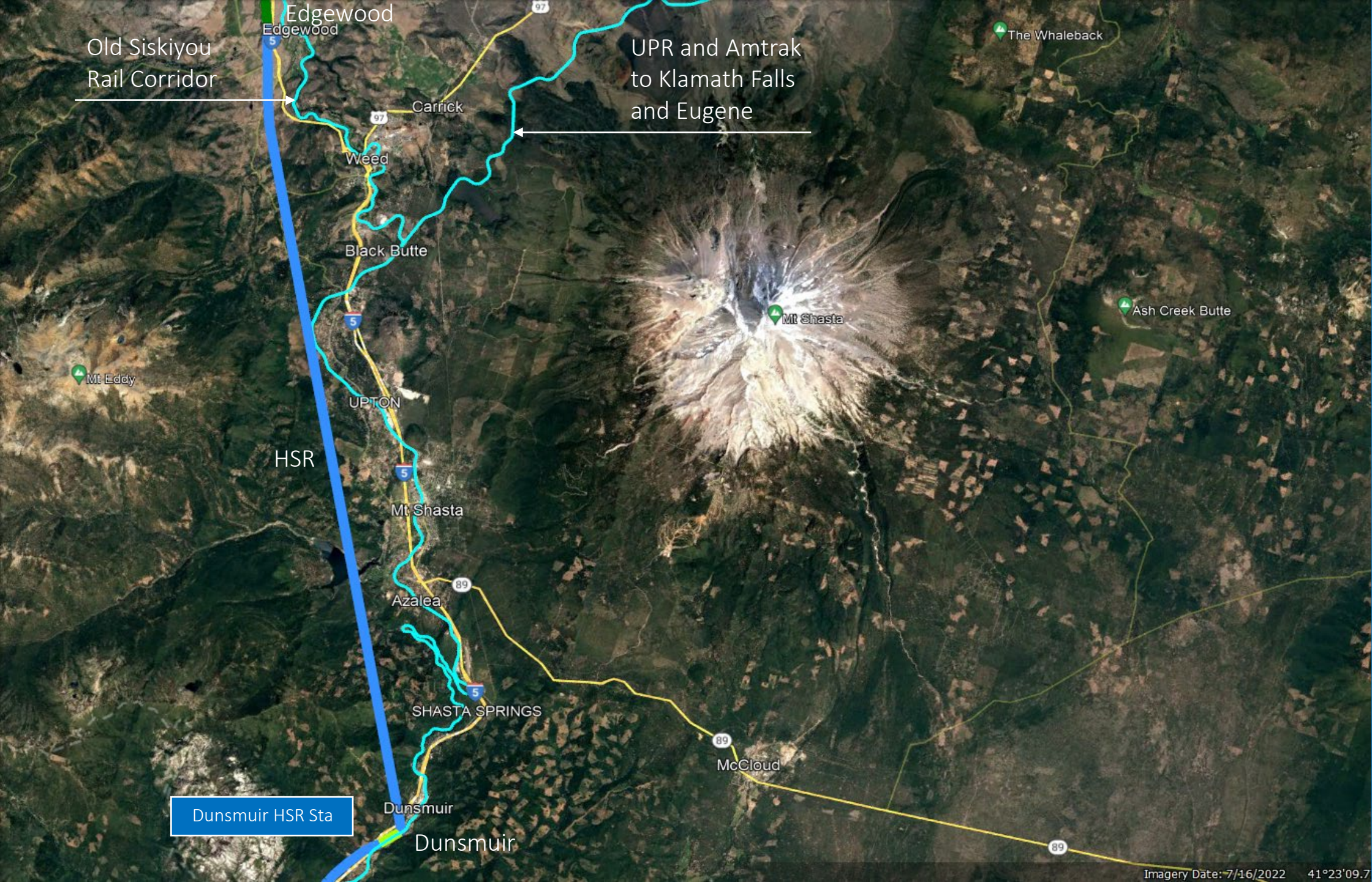
 Flyovers

 Tunnels

 Existing Freight Railroads, other than BNSF and UP RR

 Existing Freight Railroads, and Amtrak





Old Siskiyou
Rail Corridor

UPR and Amtrak
to Klamath Falls
and Eugene

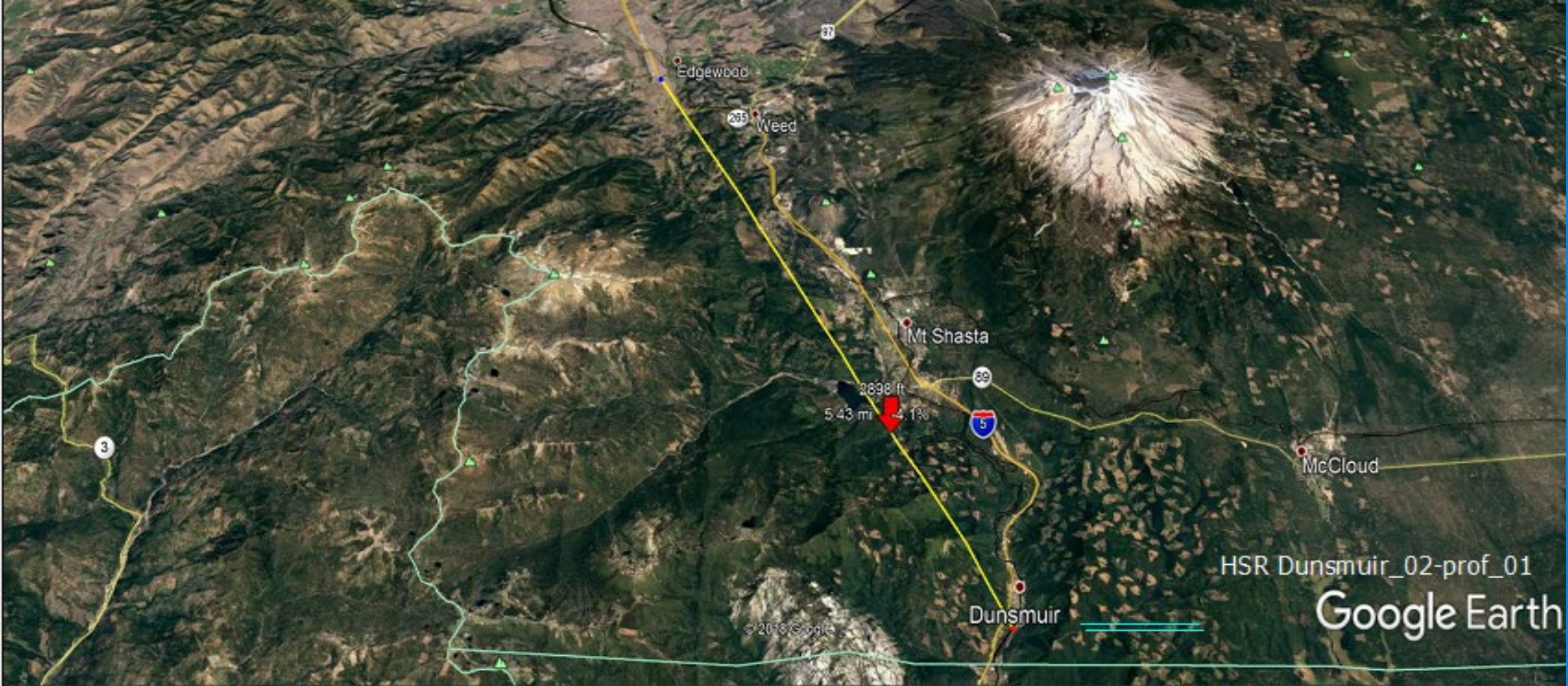
HSR

Dunsmuir HSR Sta

HSR
between
Dunsmuir
and
Edgewood

The existing
UPRR corridor
has many very
tight curves
which can
never
accommodate
HSR trains.

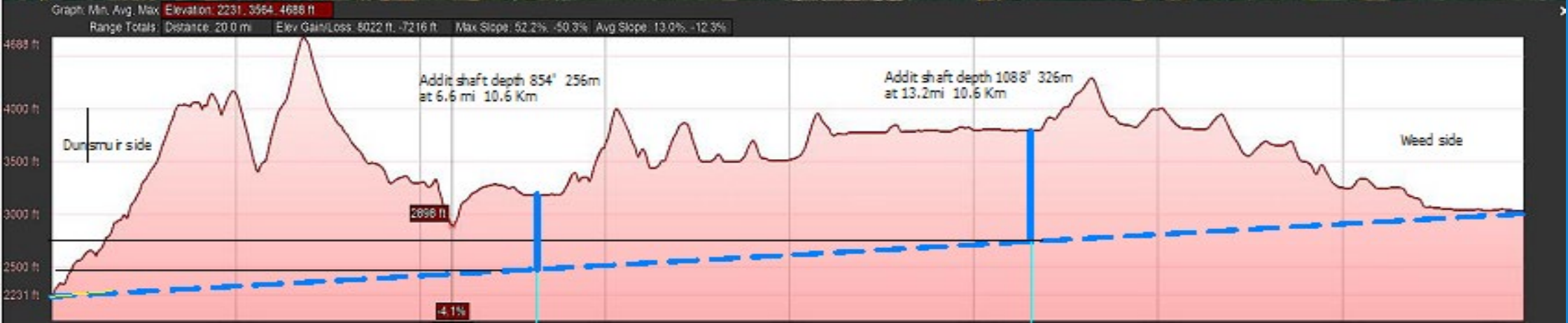
The Dunsmuir
station may
accommodate
sky-trains;
extra buses
will bring
passengers to
the slopes.



HSR Profile between Dunsmuir and West of Weed

The HSR may have two adds to speed up the tunnel boring, add ventilation, and possibly station for Shasta Sky travelers.

This file is old, the year 2016. The rail grade is 1.2%.

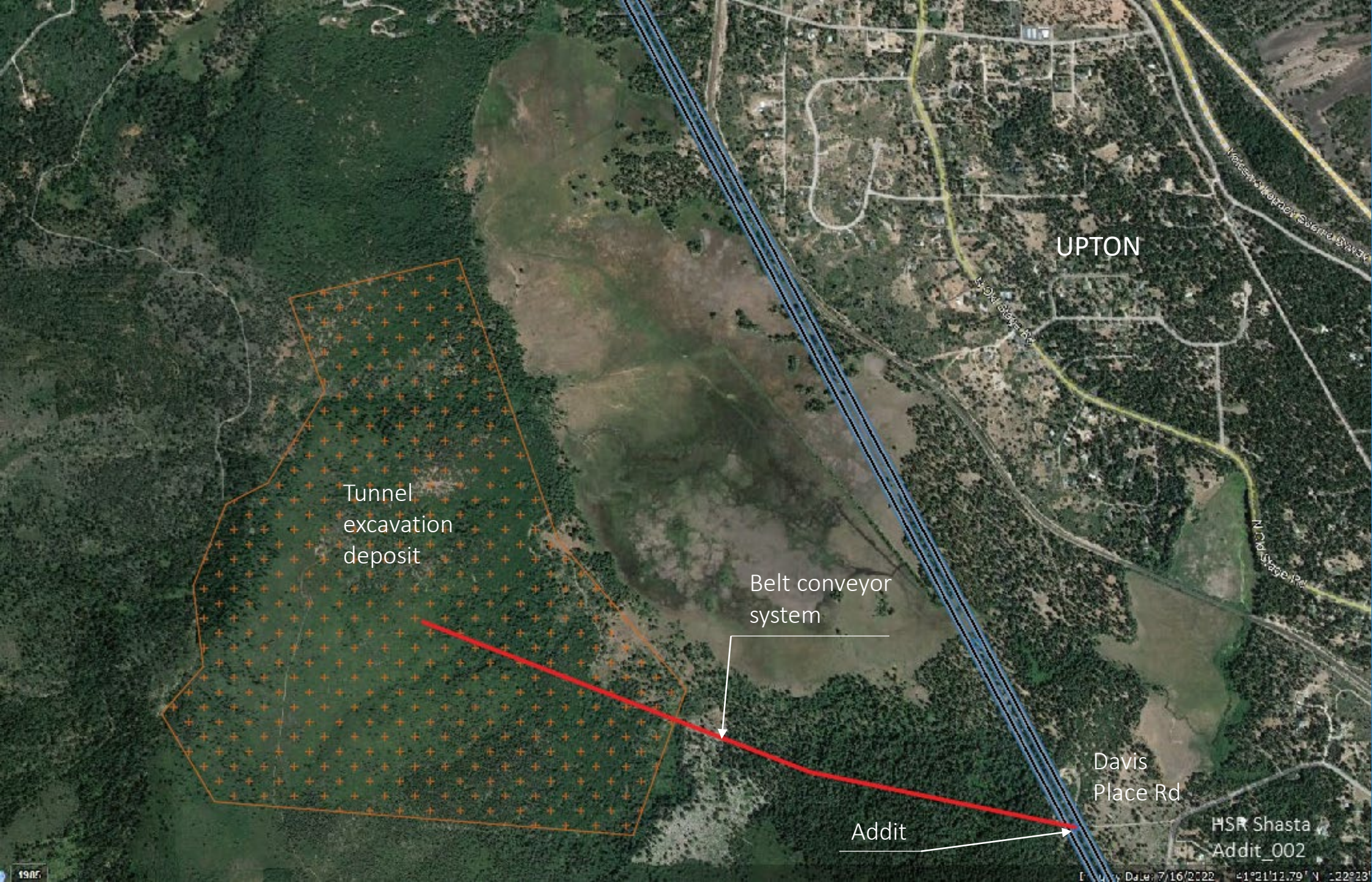




HSR in Twin-Bore Tunnel West of Mt Shasta

The addit shaft is 0.8 miles west of Old Stage Rd.

Some of the tunnel excavation material may be used for concrete aggregate and ballast.



HSR in Twin-Bore Tunnel near UPTON

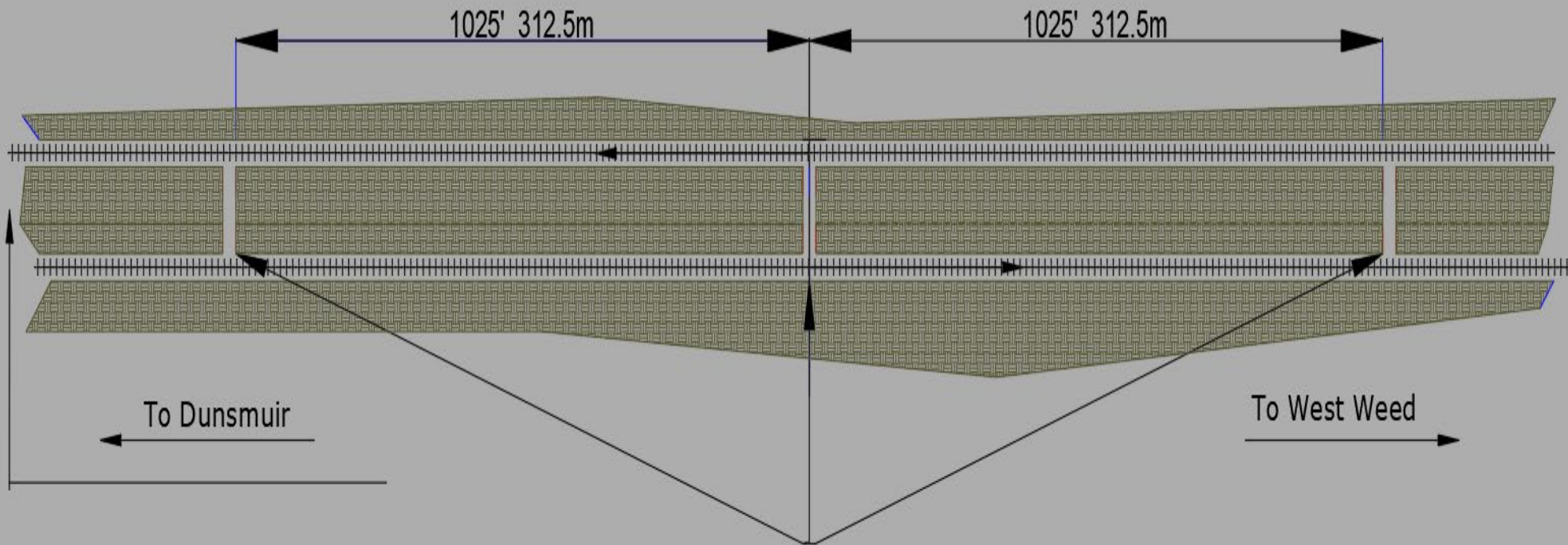
The addit shaft is at the end of Davis Place Rd.

Addit 001 and 002 are equally divided between Dunsmuir and west of Weed.

Addit applications allow multiple headings for tunnel-boring (TBM) machines, thus speeding up tunnel construction.

Tunnel section between Dunsmuir and West Weed

56.94 mi 28.6 Km

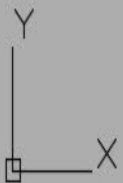


Twin bore tunnels_01

Cross cuts to provide emergency escape
84 cross cuts will be needed.

Escape to adjacent rail line by escape doors normally closed
install sensors, cameras, light signals and two vertical vent shafts, (addits)

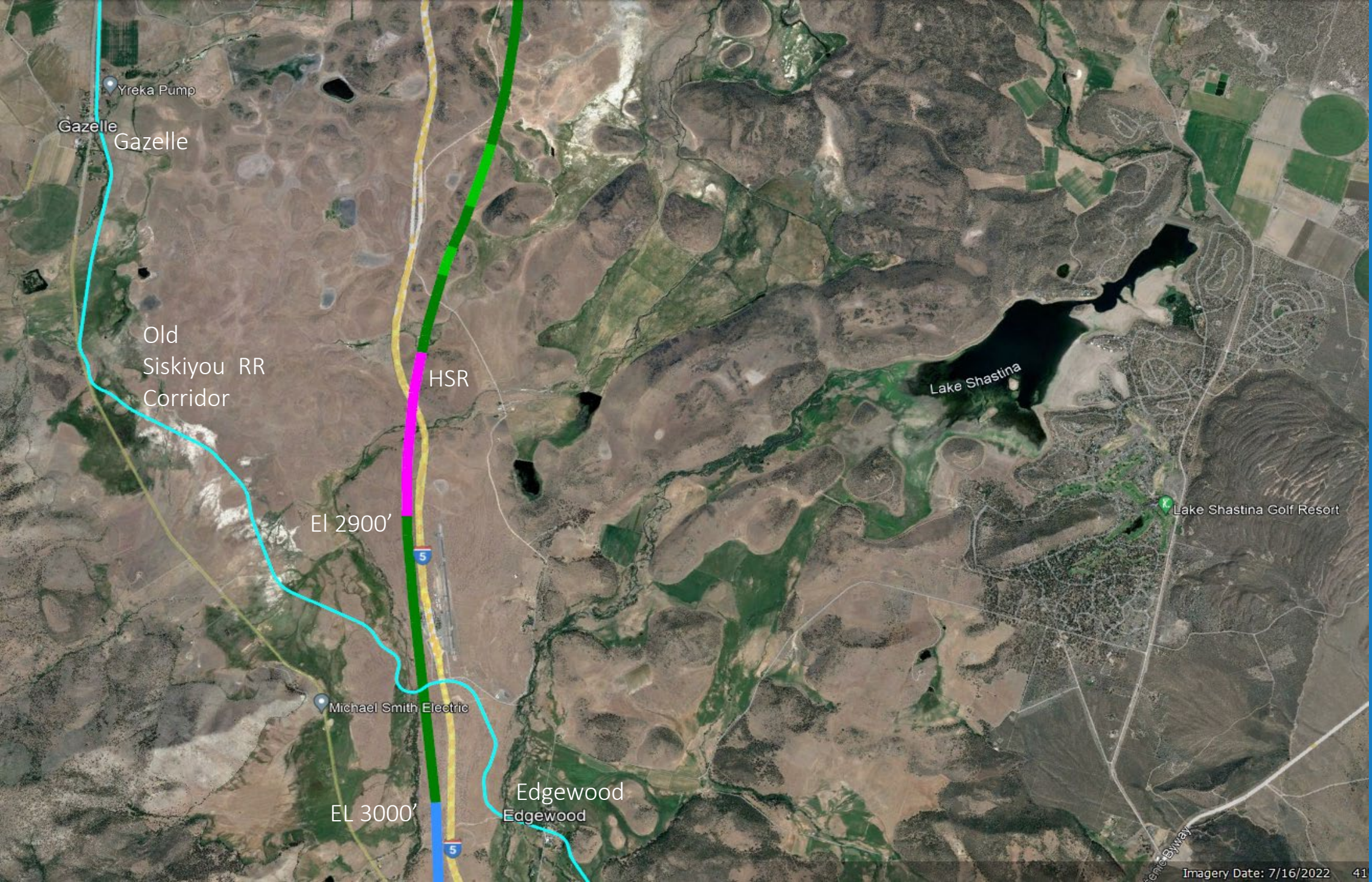
HWY 217-26_tunnel
Des by R.N.



Typical
Tunnel
Emergency
Escape
System

The above
sketch is an
illustration
showing the
crosscuts.

The tunnels
have axle fans
to move air to
the addit shafts
and then to the
surface.



HSR between Edgewood and Northeast of Gazelle

Yreka Pump

Gazelle

Old Siskiyou RR Corridor

HSR

EL 2900'

5

Michael Smith Electric

EL 3000'

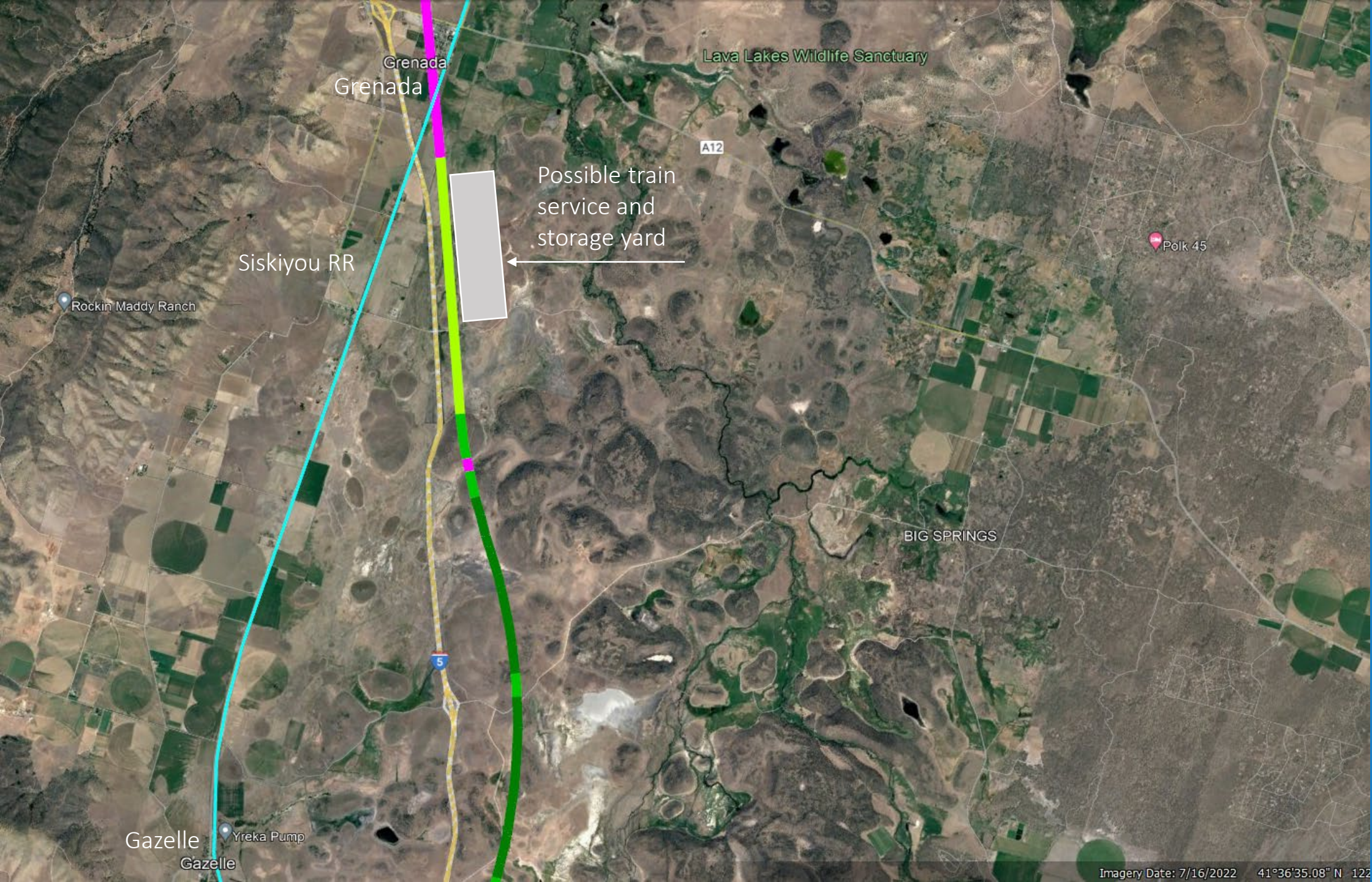
5

Edgewood

Lake Shastina

Lake Shastina Golf Resort

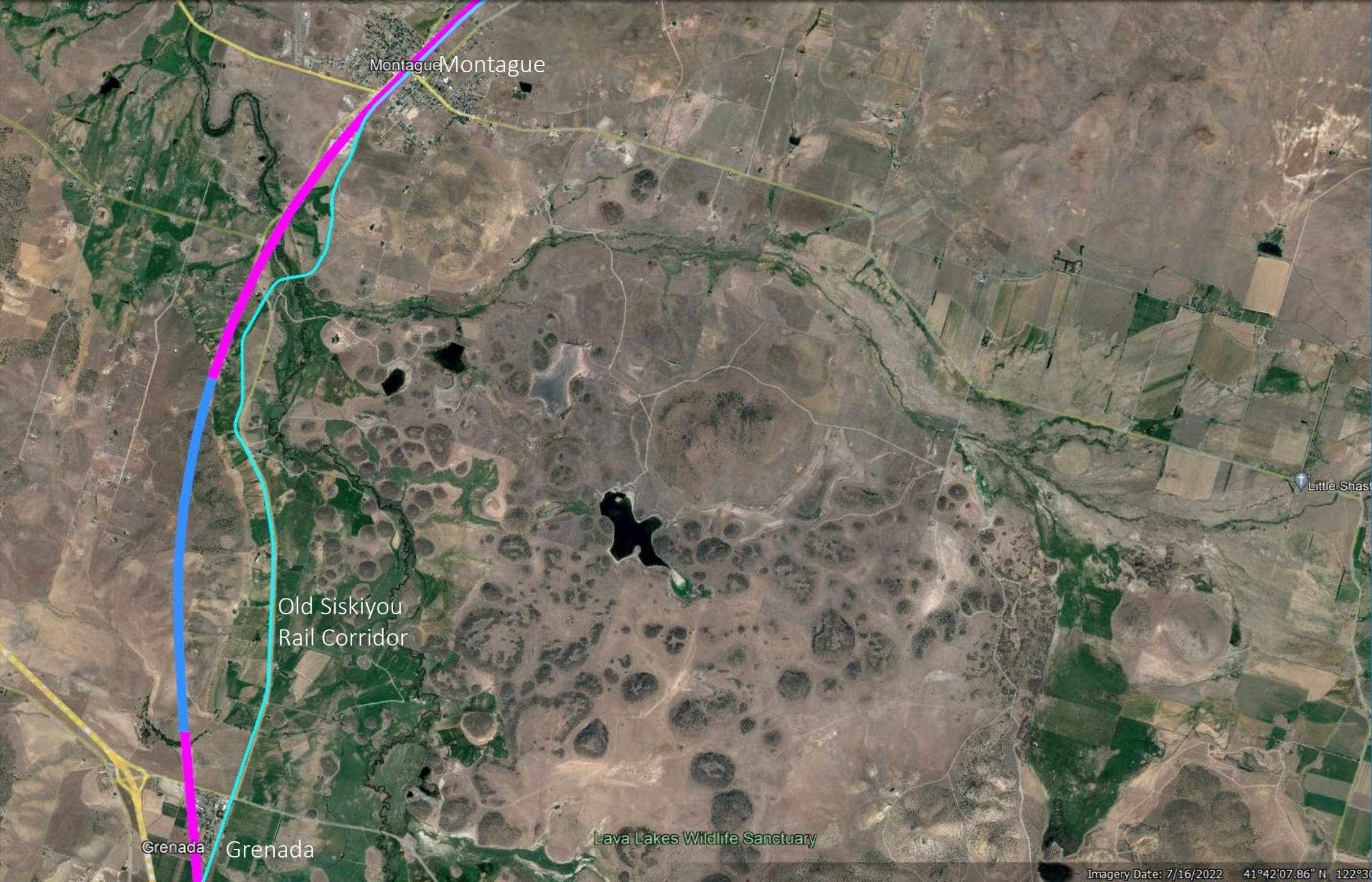
Edgewood



HSR
between
NW Gazelle
and Grenada

The HSR
corridor uses
low-grade
land, thus
lowering
Right-of-Way
acquisition
costs.

The low-cost
HSR train yard
is ± 8 miles
from
Montague.
Montague will
gain an
economic
benefit.



Montague Montague

Old Siskiyou
Rail Corridor

Grenada Grenada

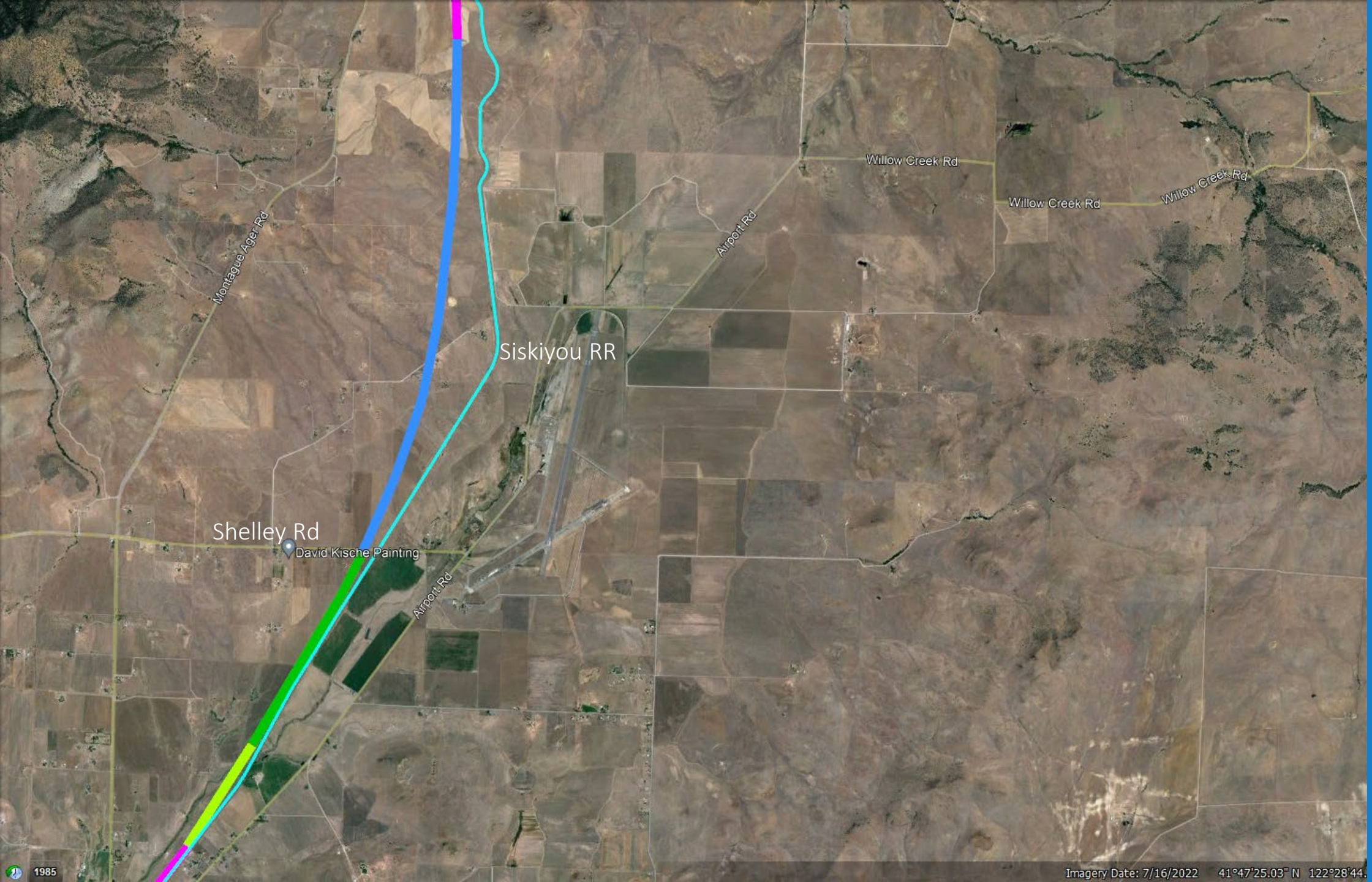
Lava Lakes Wildlife Sanctuary

Little Shast

HSR
between
Grenada and
Montague

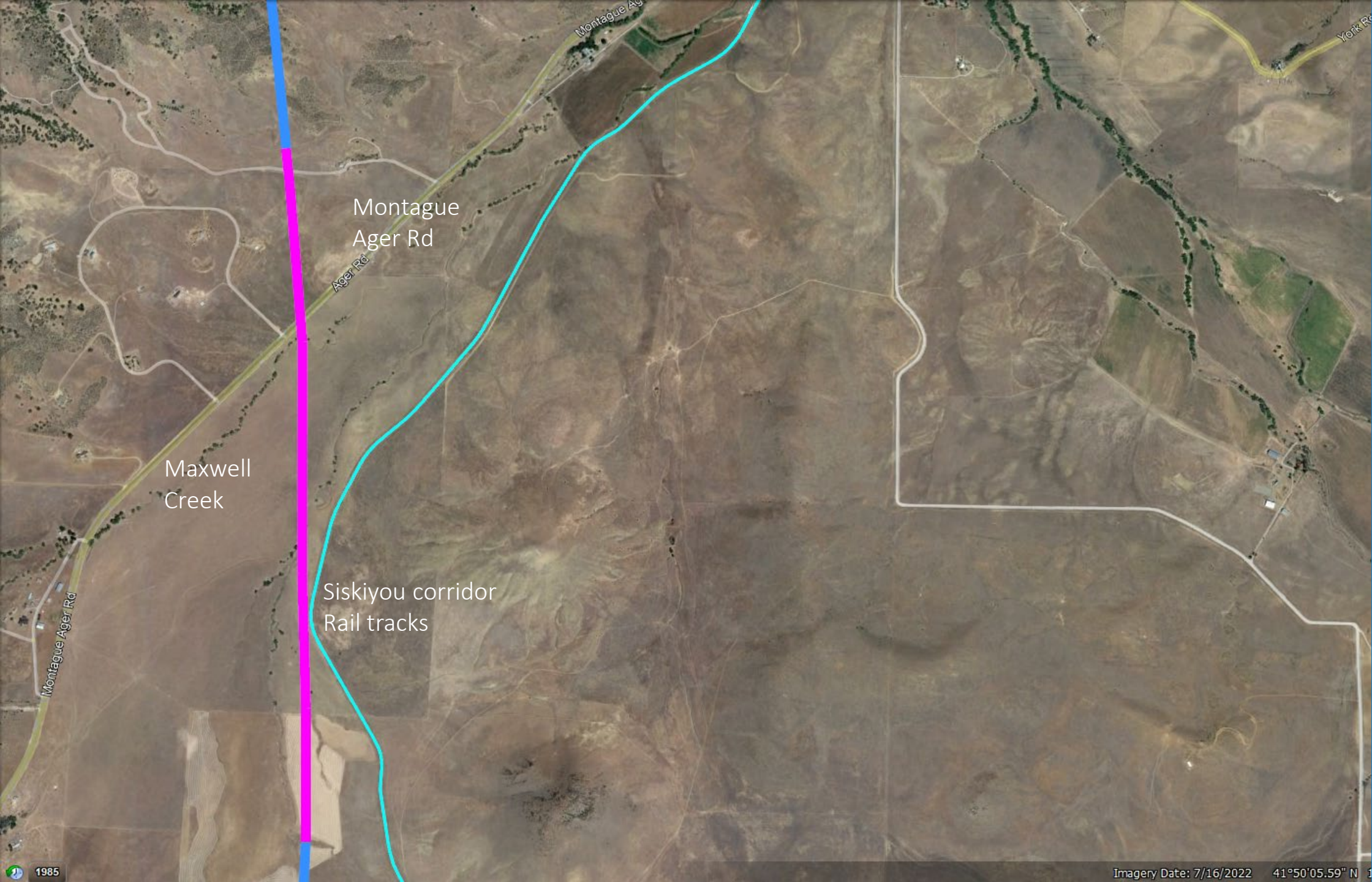
The HSR is in a
0.191-degree
curve.

The HSR also
does evade
intrusion into
existing
productive
farmland.



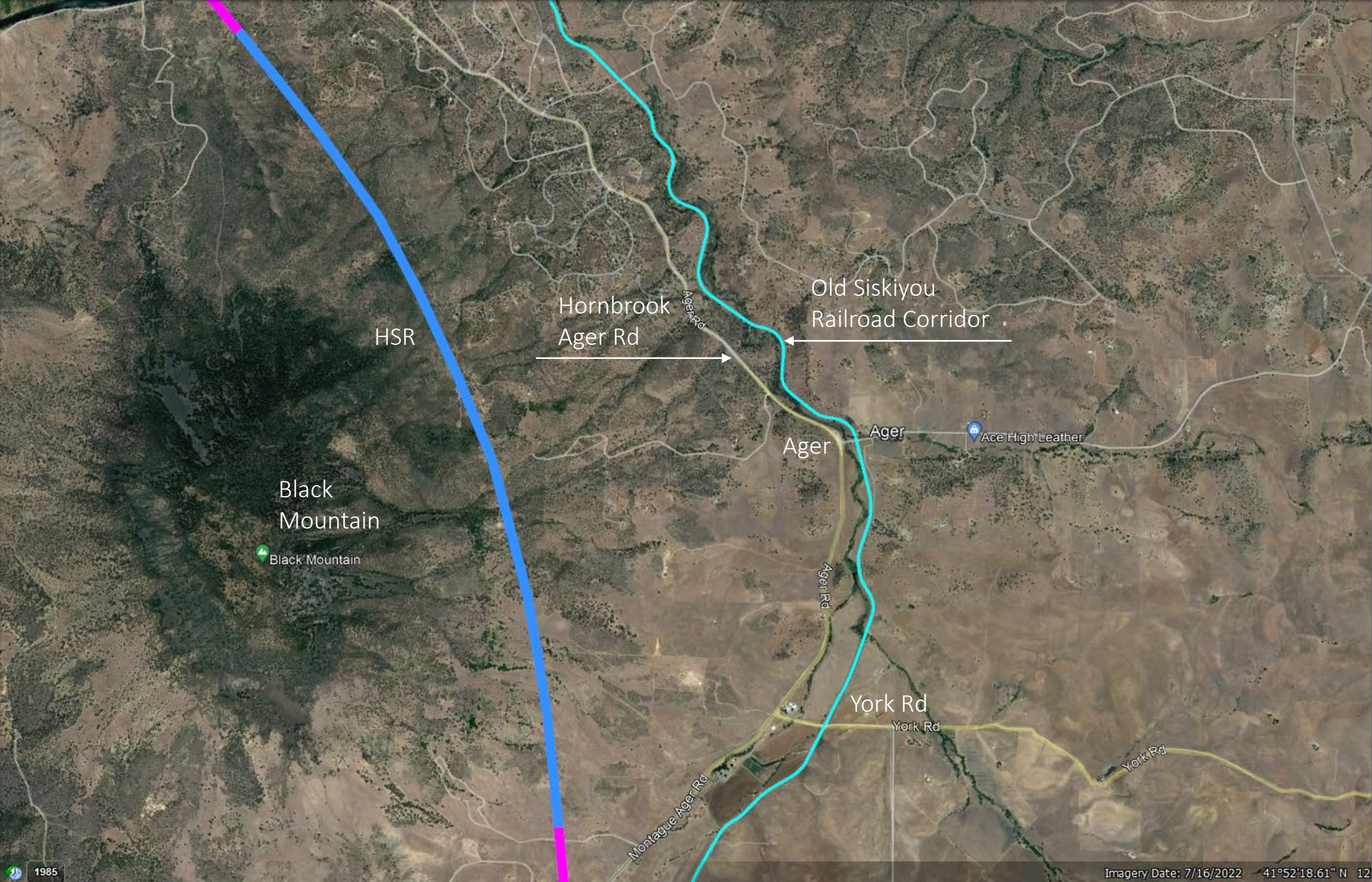
HSR North of Montague

The HSR will use a tunnel to even out the rail grades



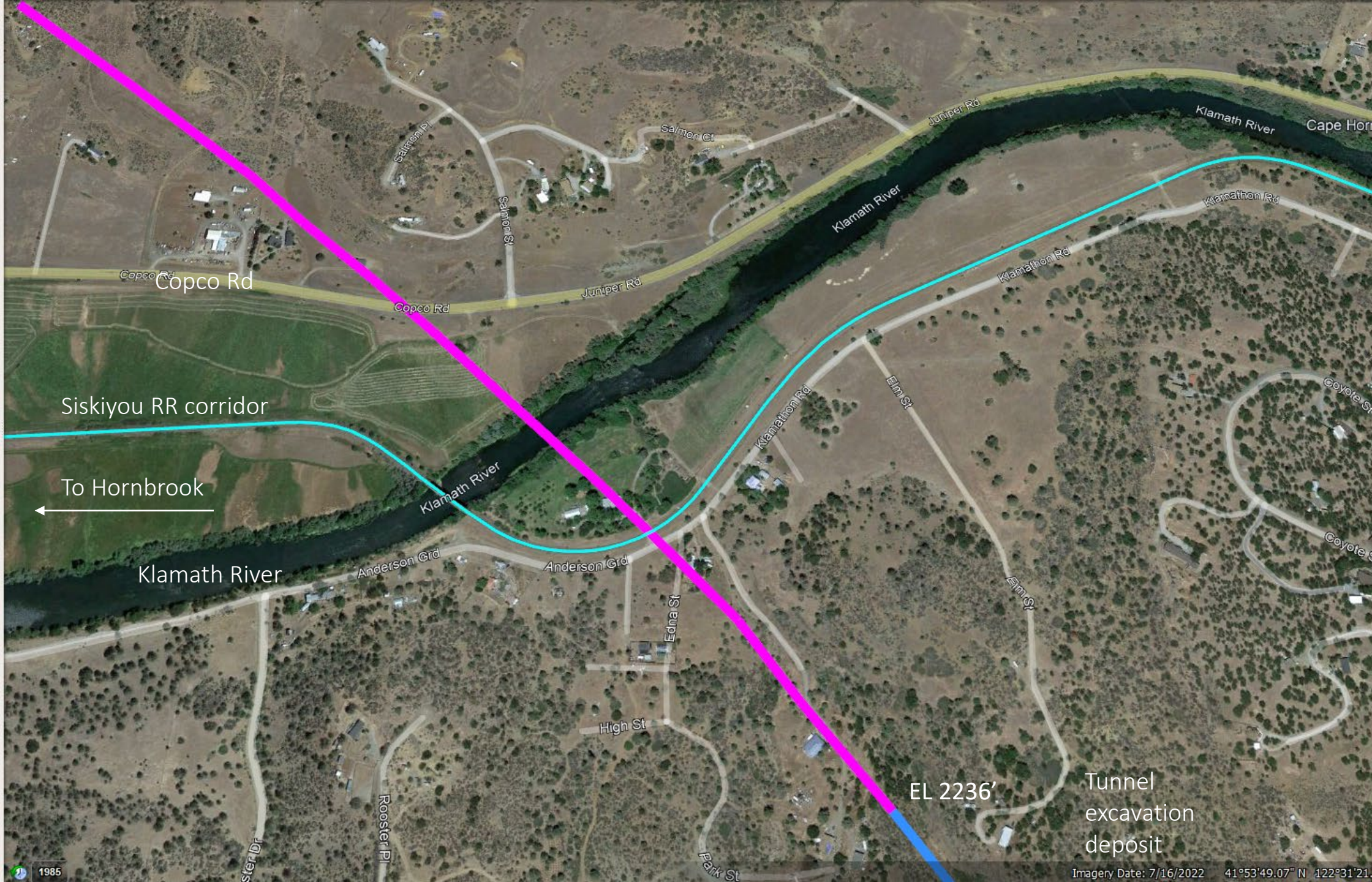
HSR Crossing
the Maxwell
Valley Creek
and
Montague
Ager Rd

The HSR is
west of the
Siskiyou
corridor rail
tracks.



HSR Black Mountain Tunnel

The HSR will traverse the Volcanic Black Mountain along the east side. This will prevent possible cave-ins at the center of the volcanic cone.



HSR Crossing the Klamath River

The HSR bridge is 145 ft above the Klamath River.

This is needed to allow grades of 1.2% or less.

Note; the HSR corridor does evade buildings and productive farmland as much as possible.

EL 2236'
Tunnel excavation deposit

Please see below the educational videos of tunnel-boring machines for different geology. (Skip advertising)

(25) TBM Variable (25) TBM Variable Density[®] EN - YouTube[®] EN - YouTube

Tunnel Boring Machine (TBM)
animation. - YouTube