

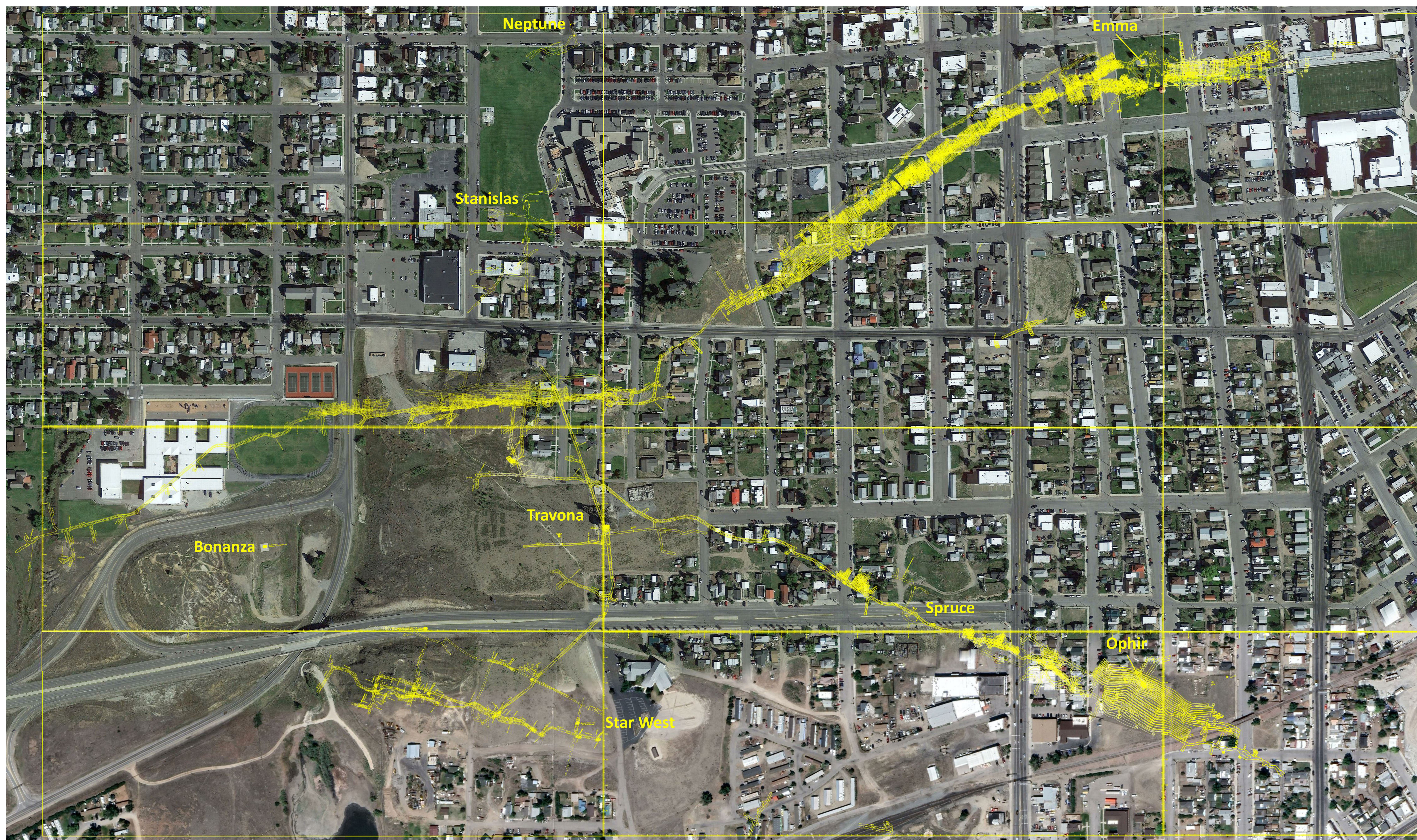
DIGITAL MAPPING TECHNIQUES 2024

The following was presented at DMT'24
May 13 - 16, 2024

The contents of this document are provisional

See Presentations and Proceedings
from the DMT Meetings (1997-2024)

<http://ngmdb.usgs.gov/info/dmt/>



Focus Areas for Subsidence from the Butte Stope Books

The Butte Stope Books are a unique part of Butte, Montana's mining heritage. The books hold all of the underground mine workings information from the Anaconda Mining Company. The workings inside of the books date from pre-1887 to 1982. Even though underground mining ceased to exist in Butte after 1975, there is mapping as late as 1987 due to exploration work conducted by the New Butte Mining Company. There are a total of 363 stope books in the collection which are currently held by Montana Resources, the Butte Silver-Bow Public Archives and the New Butte Mining Company.

Each stope book footprint represents 40.4 acres of surface area and shows the workings for all of the mines that fall within each book's footprint. Each page of the book represents an elevation change of 6.64' from the collar of the mine unless otherwise noted in the workings. The total amount of surface covered by the books is 12.14 square miles.

The books are currently being scanned by the Data Preservation Department at the Montana Bureau of Mines and Geology so that the collection can not only be saved from possible destruction, but also to become a full collection again in digital format.

Over the past four years, several entities have expressed interest in the stope books. These entities include the county of Butte Silver-Bow due to subsidence issues within 200 feet of surface (shown), Blackjack Silver Corporation who was conducting exploration drilling on the Butte Hill and Dr. Keith Russ who is currently using the books to create a three dimensional model of the Butte Mines.



Anthony Roth
Mapping Technician
DMT 2024

