DEPARTMENT OF PUBLIC WORKS
SUMMARY OF OPERATIONS

For November 2021

Water Distribution System

- Master meters, PRVs, Pump Stations, Tanks inspected
- Water sampling completed: 12 locations tested for total coliform bacteria and chlorine residuals, which meet our water quality standards.
- Utility/billing work orders: 57
- New meters installed 5/8" residential: 21
- Registers: Changed out faulty registers: 3
- ERT's: Changed faulty ERT's: 8
- Meters replaced 5/8" residential: 1
- Completed meter reading, monthly vault and tank inspections, and water samples.
- Water Leaks Repaired: none

Sewer Collection System

- Sewer Lift Station: weekly maintenance completed.
- Inspected 518 manholes and tested the remaining 23 miles (55 total) of mainline with SLRAT.
- Cleaned 10,296 feet of sewer mainline and reinspected with SLRAT. See attached SLRAT report.

Street Maintenance

- Road base used for street and shoulder repairs: 3 tons
- Asphalt used for street and shoulder repairs: 2tons
- Concrete repaired sidewalk & ADA Ramps: 0 Cubic yards
- Crack Seal material used: 6,300
- Street signs repaired/replaced: 0
- Street sweeping: 26 hours logged covering 23 lane miles.
- Sweeper tailings hauled to landfill: 0 tons
- Hauled broken concrete from street repairs to recycling center & backhauled roadbase: 0 loads

Storm Drain Collection System

- Cleaned storm grates, removed sediment and debris from culvert inlets
- Performed weekly Public Works Facility Storm Water Inspection
- Conducted inspections and filled in rodent holes on all dams.

Vegetation Control in Right-of-Way

- Cleared weeds and trash in various locations throughout city
- Trimmed bushes and tree branches in various locations throughout the city
- Cleared brush and tree limbs on Taviawk Dr
- Herbicide sprayed on the right-of-ways throughout the city: 0 gallons

Utility Locating (Blue Stakes)

- Locate requests: 190 logging 44 hours

Inspection

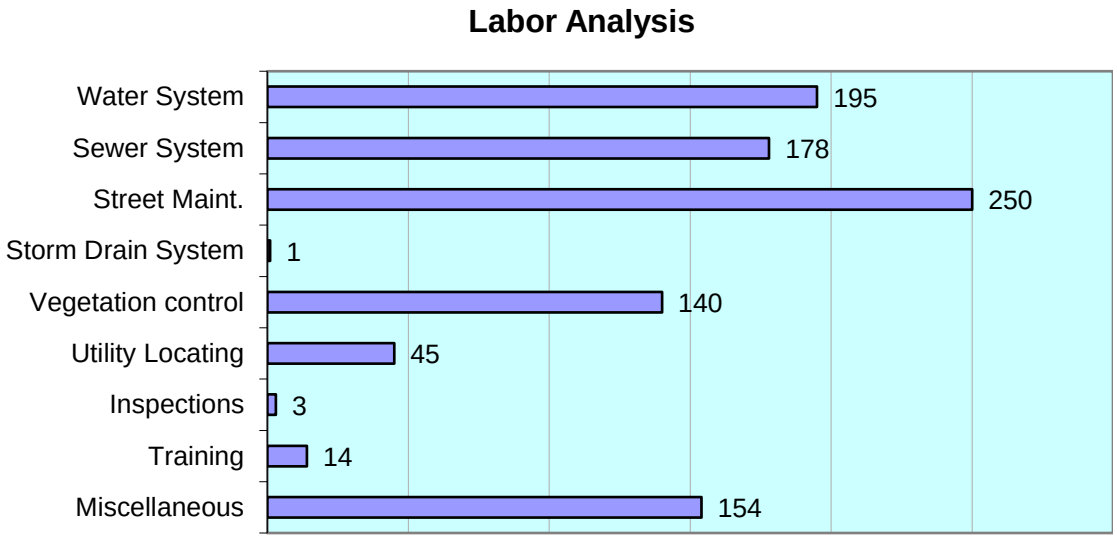
- Performed Inspections of active projects

Training

- Weekly safety training with crew

Miscellaneous

- Maintenance of equipment and public works facilities
- Saturday dumpsters
- Staff and department meetings
- Inventory management- moved and organizing equipment and parts
- Assist in obtaining GPS points to update Ivins City mapping
- Assist with Fleet Maintenance as needed



Public Works Department

Sewer Acoustical Inspection Report

December 8, 2021

Acoustical Testing Technology

Ivins City is piloted this new system of sewer inspection and cleaning in the Spring 2020. It is based on a new technology that employs soundwaves to assess the openness of a sewer pipeline. The product used is called the Sewer Line Rapid Assessment Tool (SL-RAT) made by InfoSense, Inc. The technology comes with a transmitting device and a receiving device as shown in the pictures below.



Each device is set in manholes connected by the segment of pipeline that is desired to be inspected. After 1 to 2 minutes of acoustic measurements, the devices produce a score from 0 to 10 which indicates a level of blockage with 0 being totally blocked and 10 meaning totally open. The manufacturer indicates the following qualitative descriptions for a indication of the meaning of the score:

Acoustical Assessment Score	Qualitative Description
0	Blocked
1-3	Poor
4-6	Fair
7-10	Good

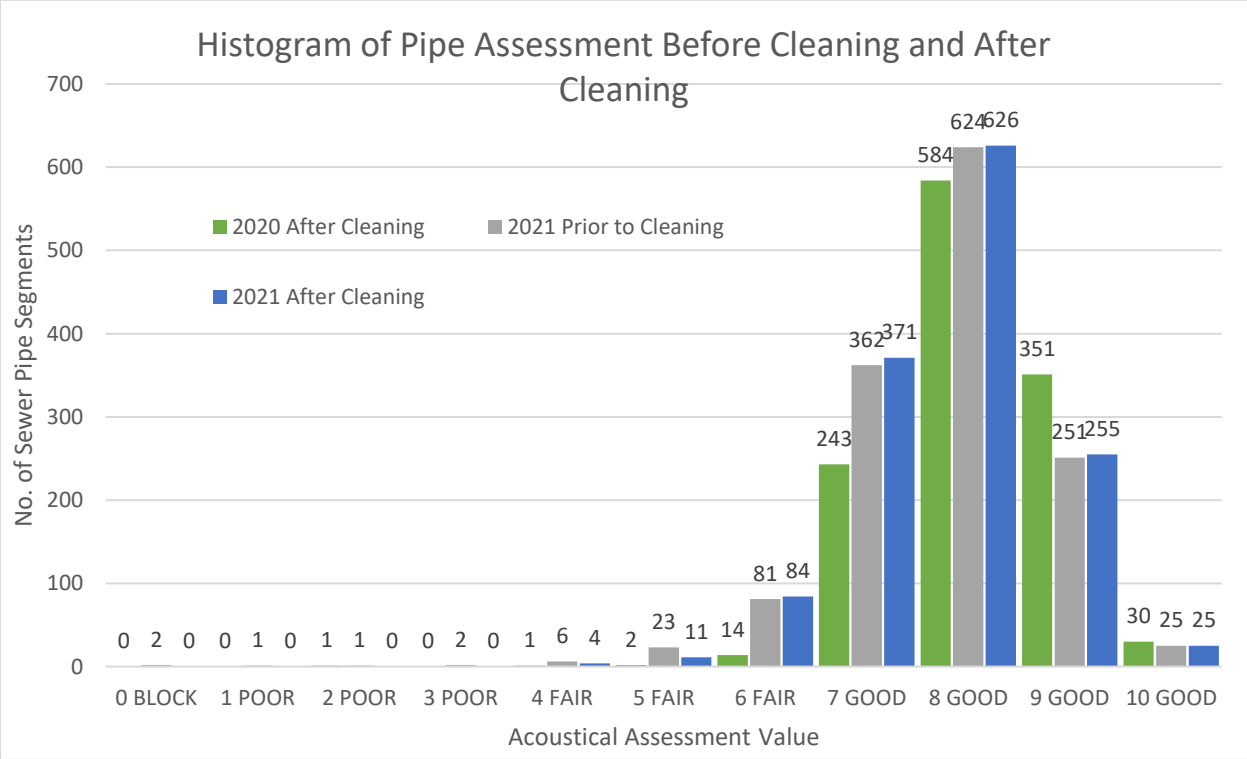
Procedures

- The testing began on 9/21/21 (training session tested 2 segments).
- The crew began testing on 10/6 and finished all testing on 11/10/21.
- Any results that scored 5 or less were cleaned and jetted by the crew with the vacuum-jet trucks.
- After the cleaning, the manholes were retested with the acoustical equipment. The system was retested on 11/22/21.

Results:

The following results are reported below:

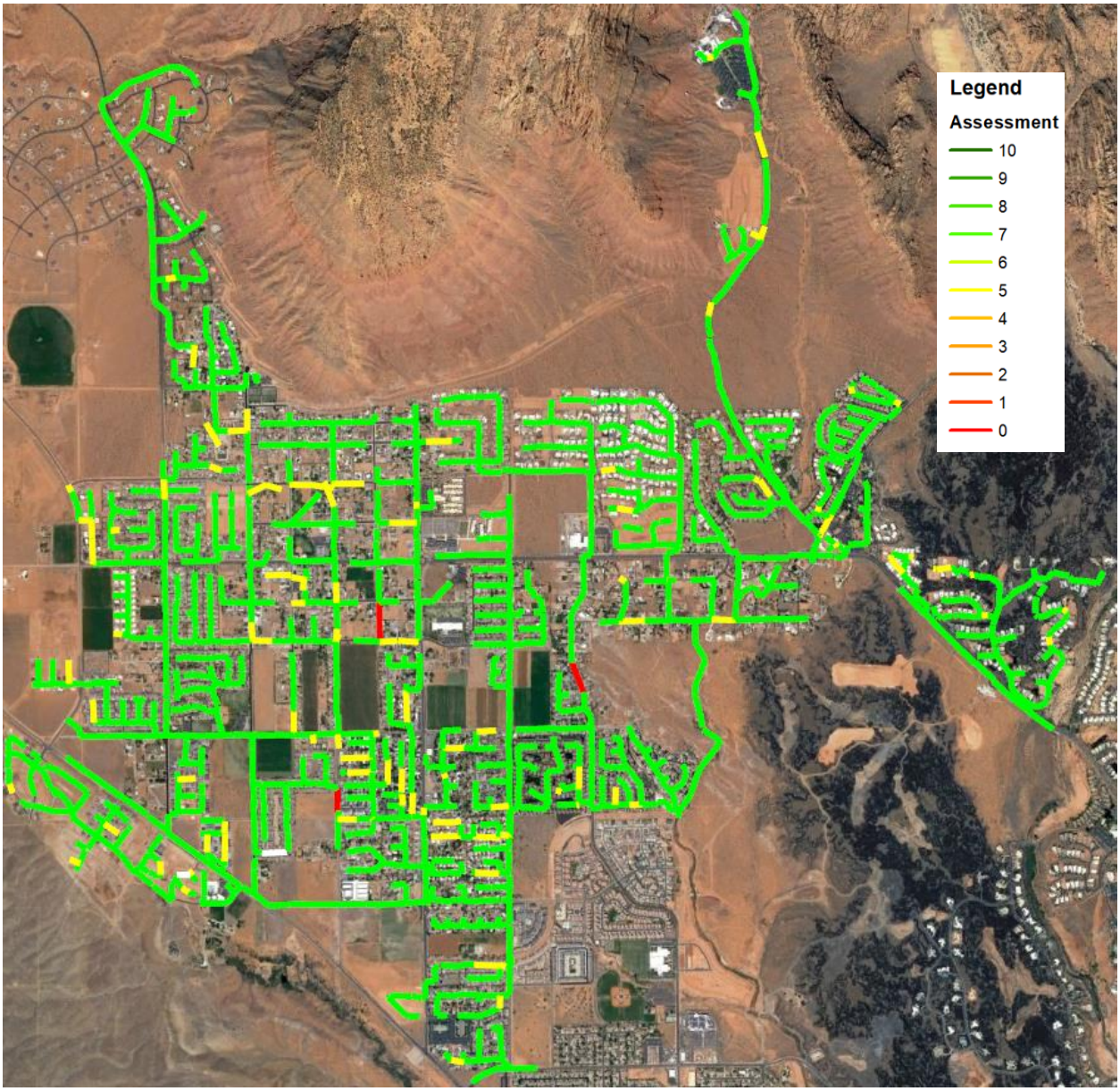
Openness Assessment Value	2020 Spring After Cleaning Pipes with Scores of 6 or less	No. of Segments Tested Prior to Cleaning	Total System After Cleaning Pipes with Scores of 5 or less
0 BLOCK	0	2	0
1 POOR	0	1	0
2 POOR	1	1	0
3 POOR	0	2	0
4 FAIR	1	6	4
5 FAIR	2	23	11
6 FAIR	14	81	84
7 GOOD	243	362	371
8 GOOD	584	624	626
9 GOOD	351	251	255
10 GOOD	30	25	25



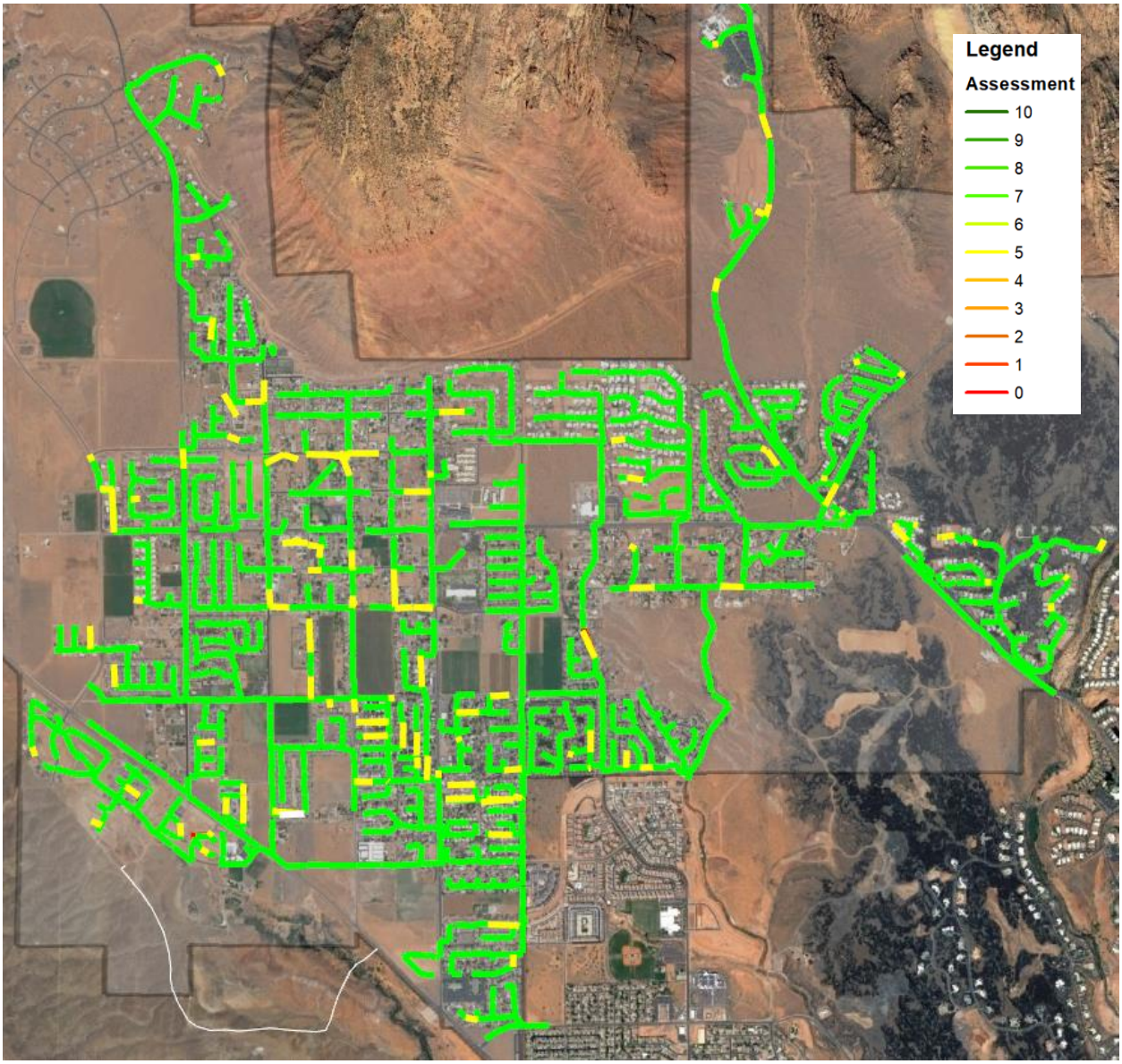
As presented above, it was determined to clean and jet 26 pipe segments that were in FAIR, POOR or BLOCK condition (received acoustical scores of 5 or less). These 26 segments represent 2.1% of the entire system.

A map of the scores for the pipe before testing and after testing is shown below:

Map 1, Initial Testing Before Cleaning



Map 2, Final Testing After Cleaning



Conclusions:

We need to video the segments that did not improve after cleaning or are still testing below at a score of 5 or lower.