



North Burdett

Stats:

- 1970s Construction
- Flow Rate 3.8 m³/s
- Poor Condition
- Preliminary Cost of Replacement: \$10–\$20 Million.

Outcomes:

- No funding source identified to renew system at this time. Buried pipe likely not feasible.
- **\$450,000 over at least 3 years for needed repairs.**

Tried "Concrete Canvas"



Remaining Concrete Canals

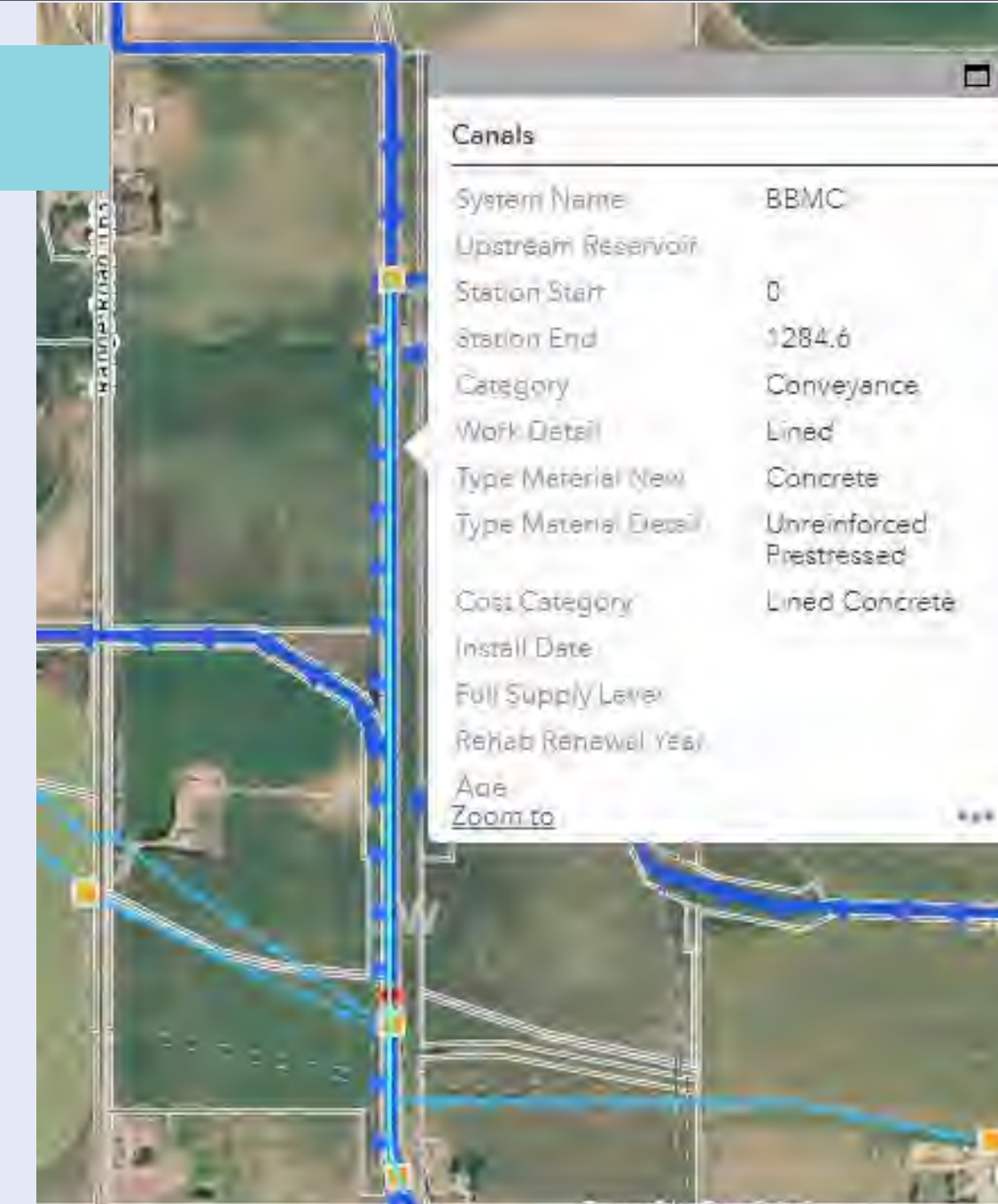


Stats:

- 1970s canal construction of which 2 km is concrete lined in poor condition, with a flow rate of 2.8 m³/s.
- Patching but a more intensive rehabilitation required.
- Anticipated Cost of Concrete Canal Replacement: **\$3M**
- Preliminary Cost of Pipeline Replacement: **\$25 Million**

Outcomes:

- No funding source has been identified to renew this system at



Stats:

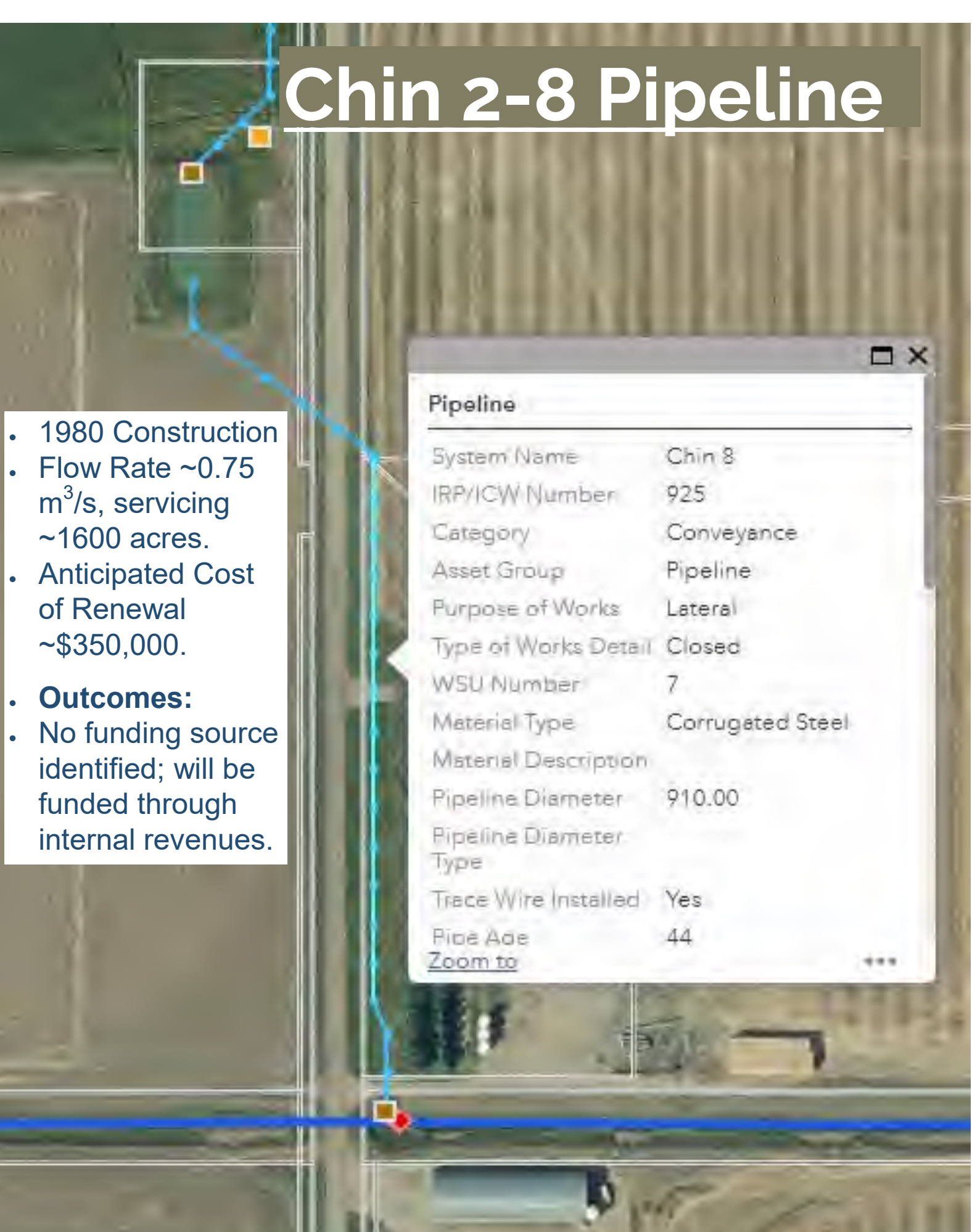
- Recognized as a failed technology, concrete lined canals have plagued Southern Alberta's Irrigation Districts since their first conception.
- Anticipated Cost of Concrete Canal Replacement: **\$5 Million**



Big Bend Main Canal

Outcomes:

- Since 2020, SMRID & TID have reduced the total length of concrete lined canals from 51 km to 16 km.
- The remaining concrete lined canals represent a liability to the SMRID and continue to compete for funding.



- 1980 Construction
- Flow Rate ~0.75 m³/s, servicing ~1600 acres.
- Anticipated Cost of Renewal ~\$350,000.
- Outcomes:
- No funding source identified; will be funded through internal revenues.

Pipeline	
System Name	Chin 8
IRP/CW Number	925
Category	Conveyance
Asset Group	Pipeline
Purpose of Works	Lateral
Type of Works Detail	Closed
WSU Number	7
Material Type	Corrugated Steel
Material Description	
Pipeline Diameter	910.00
Pipeline Diameter Type	
Tiece Wire Installed	Yes
Pics Acc	44
Zoom In	

Bow Island 19

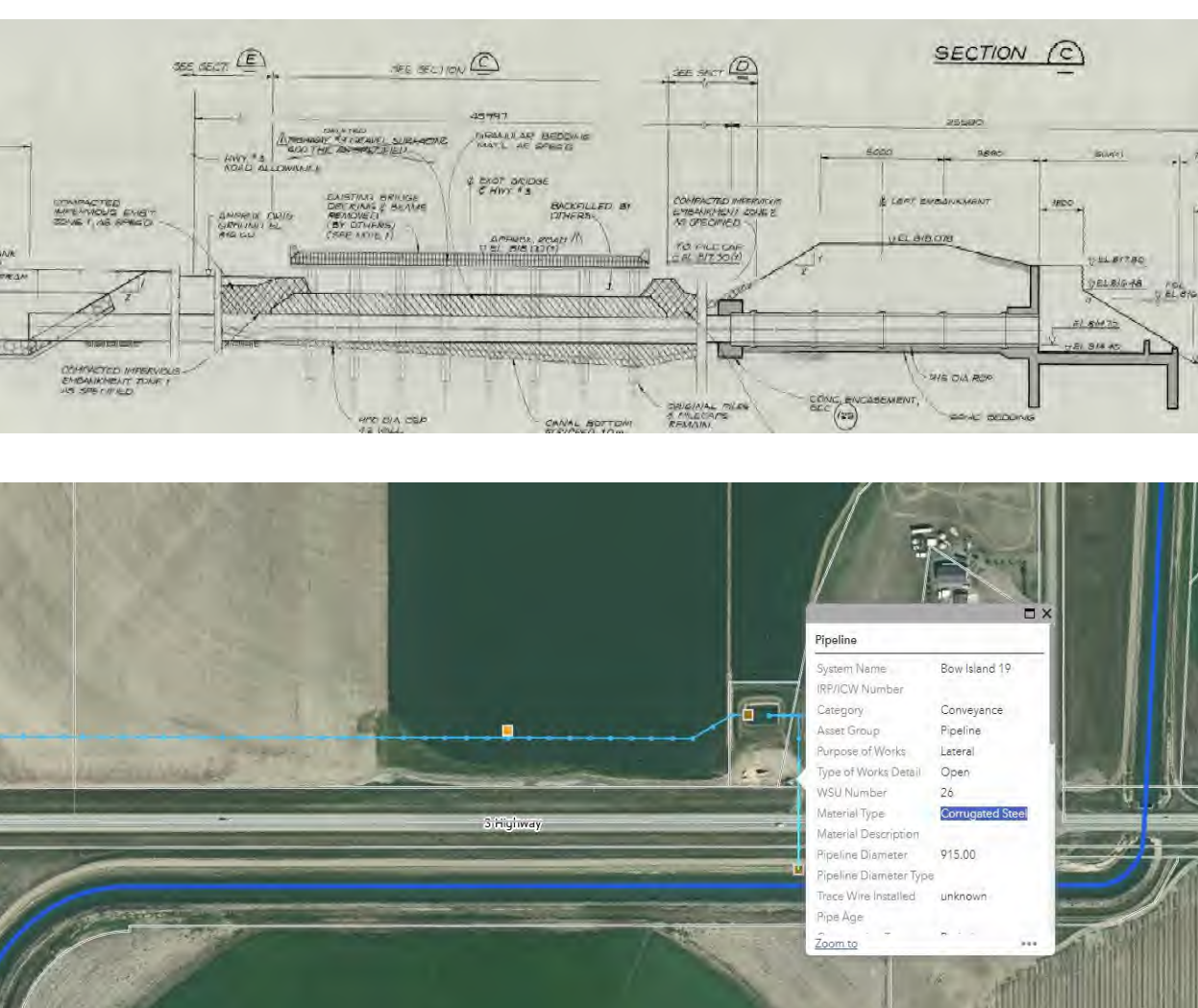
Stats:

- 1988 Construction
- 900 mm Corrugated Steel Pipe
- Flow Rate ~0.2 m³/s, servicing 420 acres.
- CSP crosses underneath HWY 3.

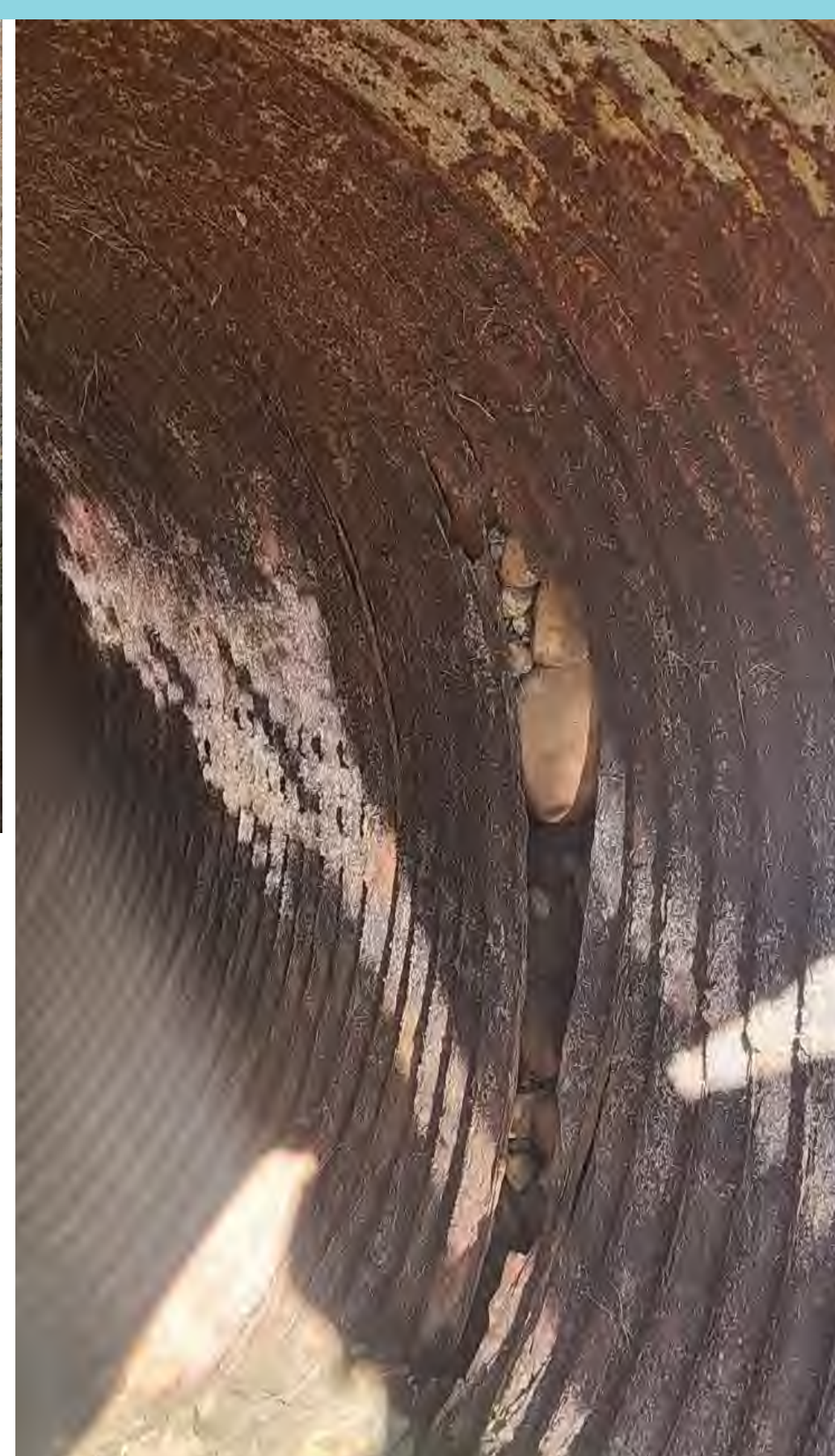
Outcomes:

- No funding source identified; To be funded through internal revenues.

Anticipated Cost of Renewal ~\$300,000



Buried Steel Components of Pipelines



Barnwell 6

Stats:

- 1981 Construction
- 1500 mm Corrugated Steel Pipe (CSP), 300 m long.
- Flow Rate 1.27 m³/s.
- Seepage; separated joints & penetrations discovered upon shutdown in 2023.
- Removed CSP and replaced with 1200 mm PVC pipe on the same alignment.

Outcomes:

- An automation project was delayed to accommodate this project.

Emergency Repair Cost: \$300,000

Buried Steel Fittings:

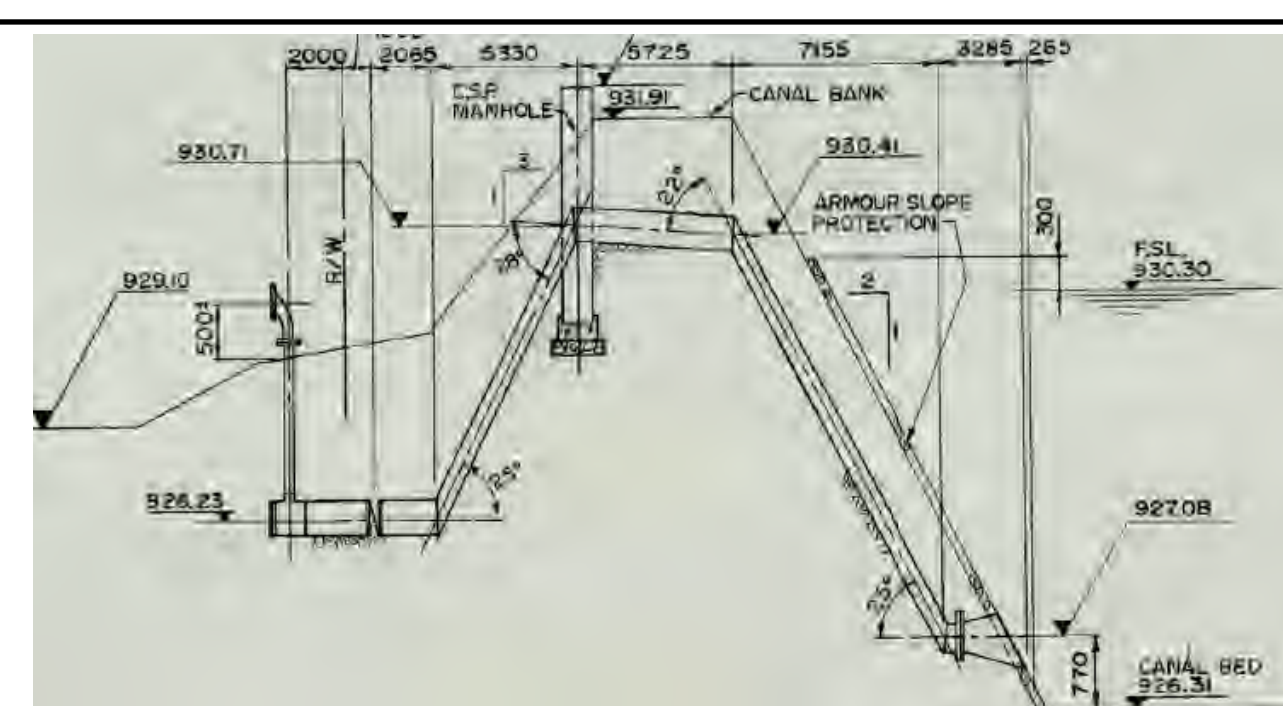
Stats:

- Numerous buried steel fittings and risers exist in the SMRID.
- Many are approaching the end of their 30-year design and will require replacement.
- Some fittings cannot be replaced by long-lived PVC/HDPE components, and are one-off fabrications with long lead times.



Outcomes:

- These projects are funded by general revenue as is required.



Main Canal Syphons

Stats:

- Numerous "syphon" turnouts were installed during the Main Canal Rehabilitation of the 1980s.
- Many no longer hold prime, and require replacement to meet service delivery targets.
- Projects are funded by general revenue as it is required.

Each replacement costs ~\$65,000.



Aquatic Weed Projects

Stats:

- To improve the district's level of service, gabion walls and mechanical screens are being fitted to existing systems.
 - Additional operational and replacement costs are incurred as the SMRID installs more Aquatic Weed Structures.
- Depending on size, systems range from **\$30,000 to \$500,000.**



Tile Drains

Stats:

- It is estimated several hundred km's of buried tile drains exist in the district, which are currently being inventoried.
- Networks were installed in the 1960s thru to 1990s.
- Replacement of steel components and clay pipes are representing a growing liability. **~\$750,000/year to replace**

