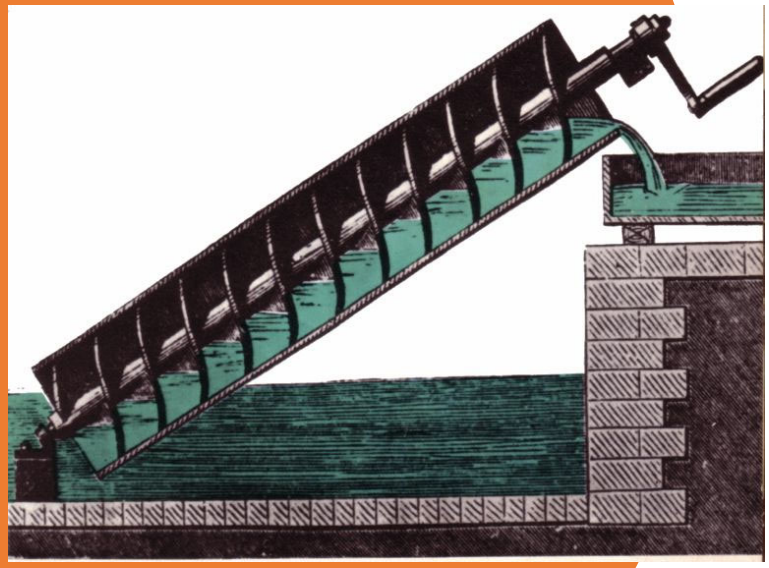
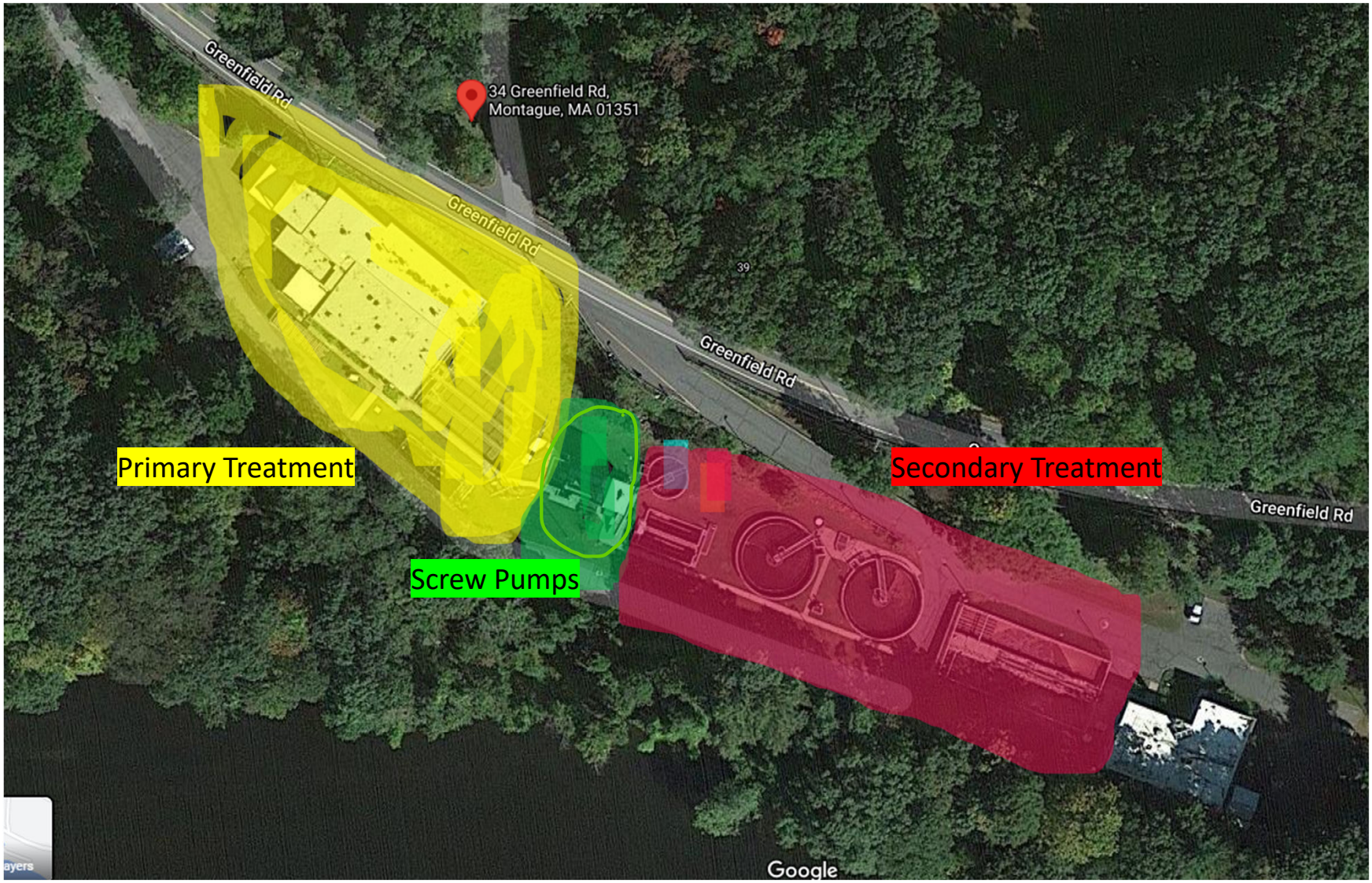
CWF Screw Pump Replacement Project

STM 3/2/2023 Article 14

Background



- Archimedes Screws
- Pump daily average of 1.0 million gallons per day (MGD)
  - Max flows can see 4-5MGD
- Life span 20 years (+/-)
- Last replaced in 2000
- Bare minimum-staff installed pumps only


Greenfield Rd
34 Greenfield Rd,
Montague, MA 01351
Greenfield Rd
39
Greenfield Rd
Greenfield Rd
Primary Treatment
Secondary Treatment
Screw Pumps
Google

Project Evolution

- Initially-bare minimum again-costs
- Structural engineer to review building
- Some deficiencies that need to be addressed
- Doesn’t make sense to have new pumps on crumbling infrastructure

Project Evolution Cont.

- Repairs to building, wet well, HVAC, controls
- Will prolong the life of the building and concrete structures
- Need to house controls in HVAC building again instead of outdoors

Funding/Cost Estimates

Engineers utilized for the most accurate opinion of probable cost (OOPC)

$2.5 Million

- Pumps-quoted at approx. $700,000
- General Contractor
- Engineering
- Bypass Pumping
- Concrete Rehab
- Wet Well Rehab
- HVAC
- Controls upgrade/replacement
- Labor
- Contingency

Funding Cont.

~~$800K FROM ARPA~~

(UPDATE FROM TOWN TO FOLLOW)

LEVERAGE USDA RD GRANT/LOAN PROGRAM

PROGRAM REQUIRES FULL COMMITMENT OF FUNDS BEFORE APPLYING

WON'T KNOW WHAT GRANT/LOAN PERCENT UNTIL AFTER APPLICATION UNDERWRITING

Potential Scenarios (NOT GUARANTEED)

$2.5 Million USDA RD Application

- Available funds committed for project
- Loan portion
- **Grant portion-used last**

30% Grant/Loan: $750,000/$1,750,000

50% Grant/Loan: $1,250,000/$1,250,00

75% Grant/Loan: $1,875,000/$625,000

Conclusion

Screw Pumps are the backbone of the facility

Pumps are past end of life-experiencing critical component failures

Complexity-Staff cannot be GC