
Introductions
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Municipal Lift Stations

SCADA (Supervisory Control and Data Acquisition) Utilized in lift station remote monitoring and troubleshooting.

March 26th, 2024

Building beyond.

Lift Station Survey

- Look familiar? How many?
- Top 3 Issues?
- When do you find out?
  - Routine Inspection?
  - Beacon?
  - Phone call?
  - Text message?
- Troubleshooting?
  - Screen?
  - Trends?
  - Reports?
  - Remote connectivity?

Lift Station Overview

2 (or 3) variations of lift stations deployed in NL:

1. Basic Panel –
No Remote Monitoring

2. RTU (SCADA Ready) – Equipment exists to facilitate SCADA (Not connected)

2+. SCADA – Remote monitoring installed and integrated.

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SCADA

Supervisory

Control

And

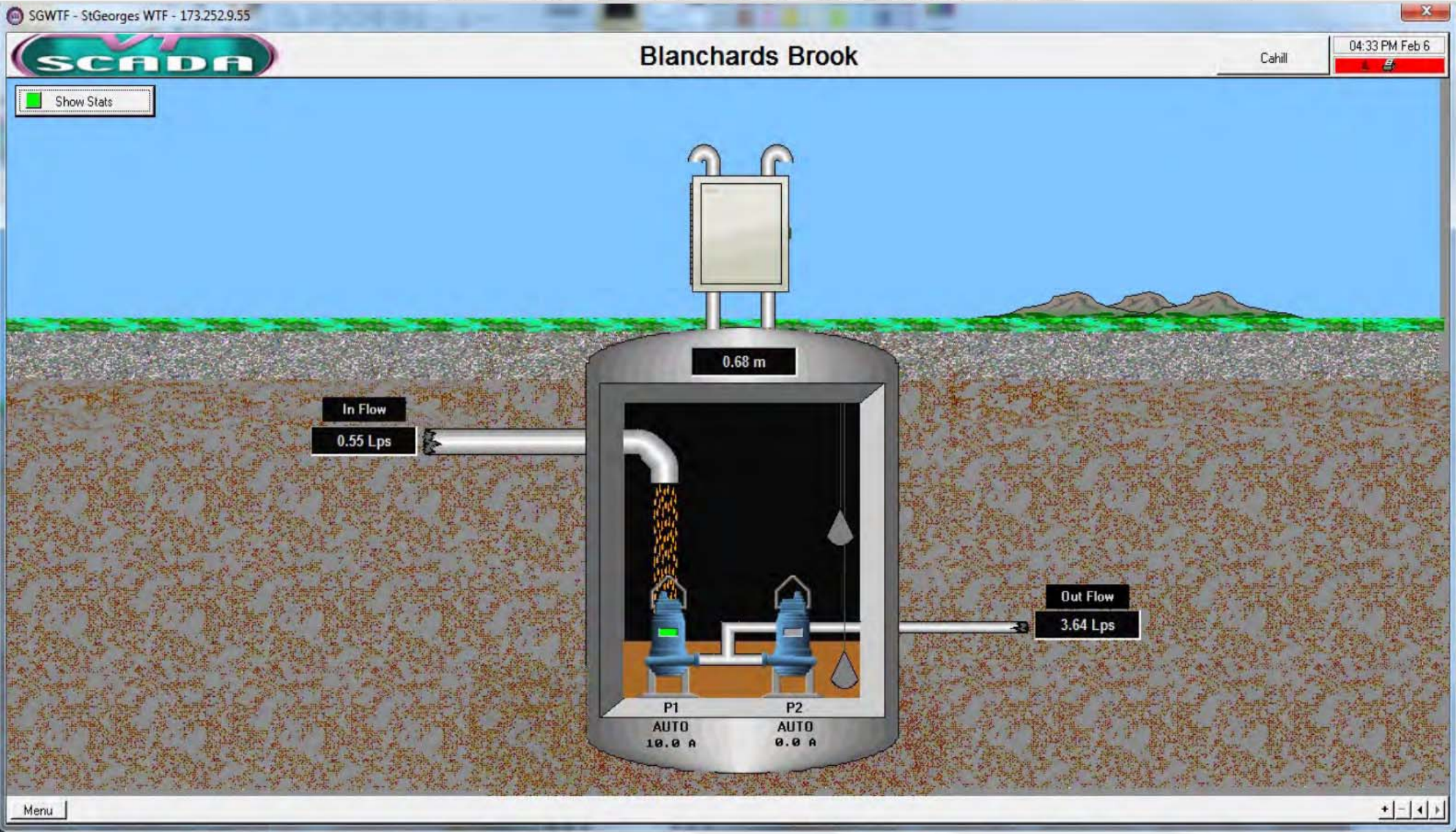
Data

Acquisition

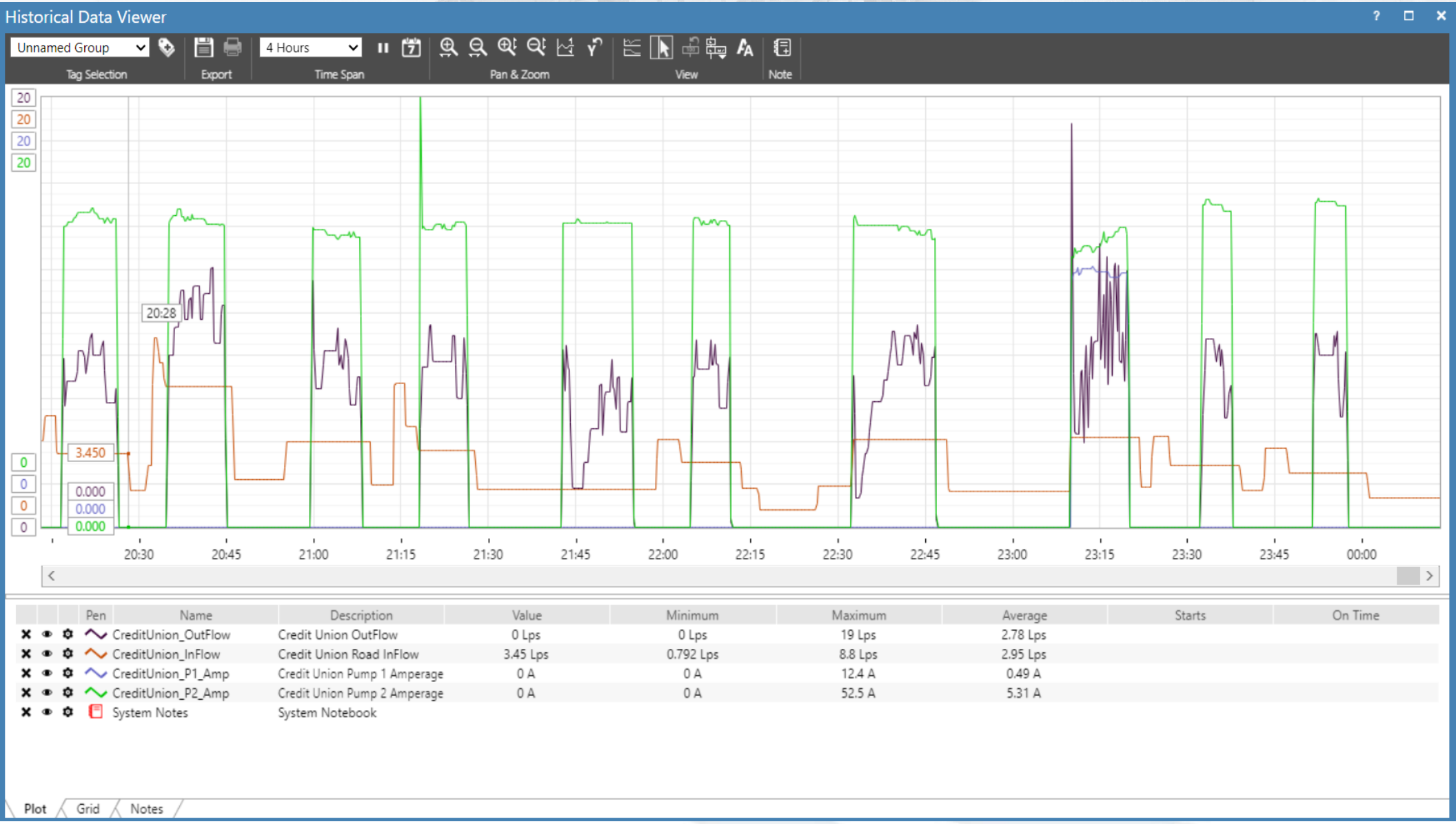
SCADA – Map


SGWTF - StGeorges WTF - 173.252.9.55
SCADA
Overview
Cahill
04:31 PM Feb 6
Brakes Road
Blanchards Brook
Tank
Muise's Lane
Man O War
Town Hall
Credit Union
Pyes
Well Field &
Disinfection
Barachois Drive
Menu

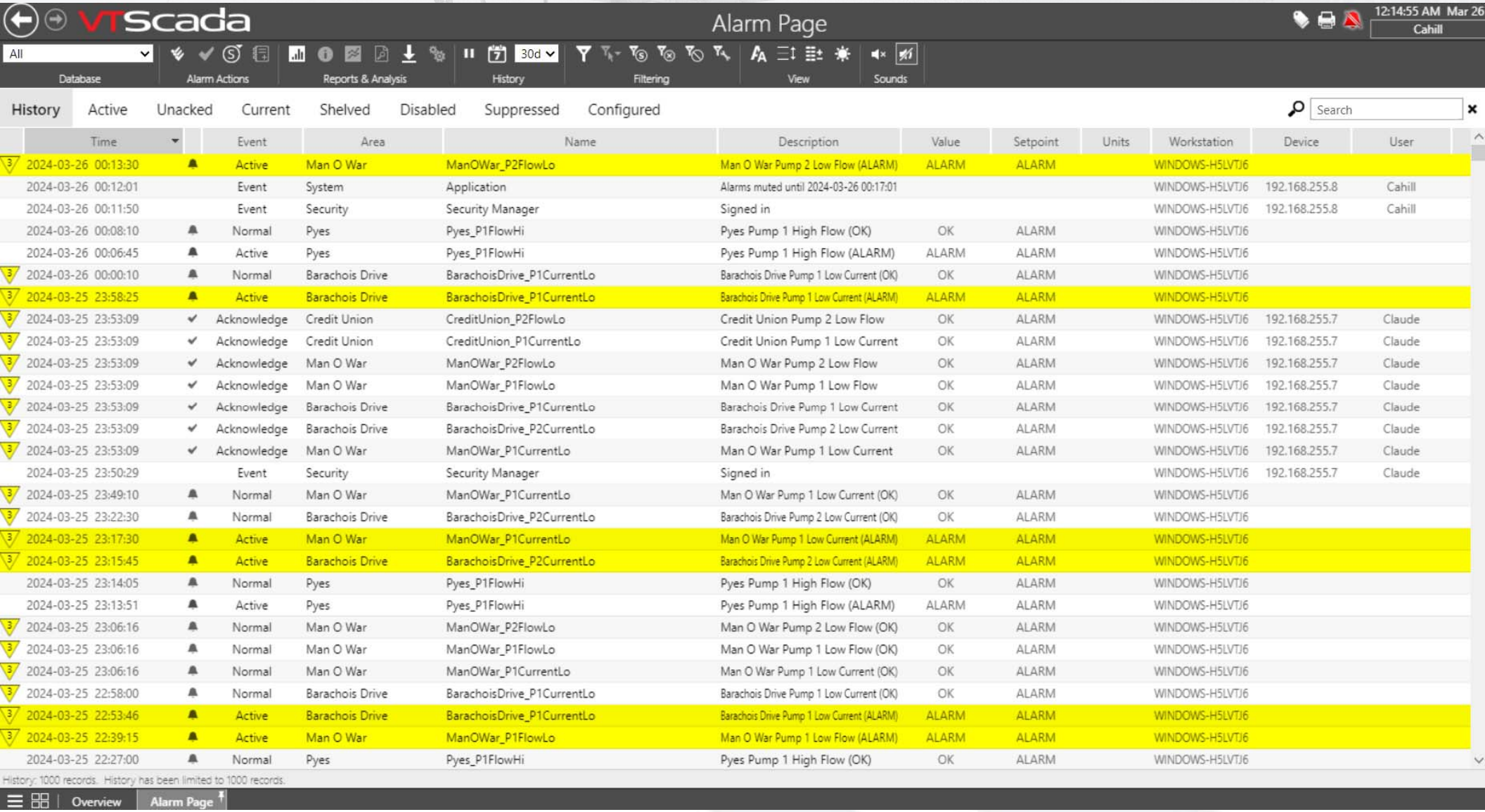
SCADA – Operator Interface



SCADA – Trends



SCADA – Alarms



SCADA – Connectivity

1. Alarm Dialer (Notification only)

2. Leased Line

3. Dial-Up Modem

4. Radios
- Licensed/Unlicensed
- Serial (UHF, VHF)
- Ethernet (900Mhz, 2.4GHz, 5Ghz)

5. Internet
- DSL
- Wifi/LAN
- Cellular
- Satellite

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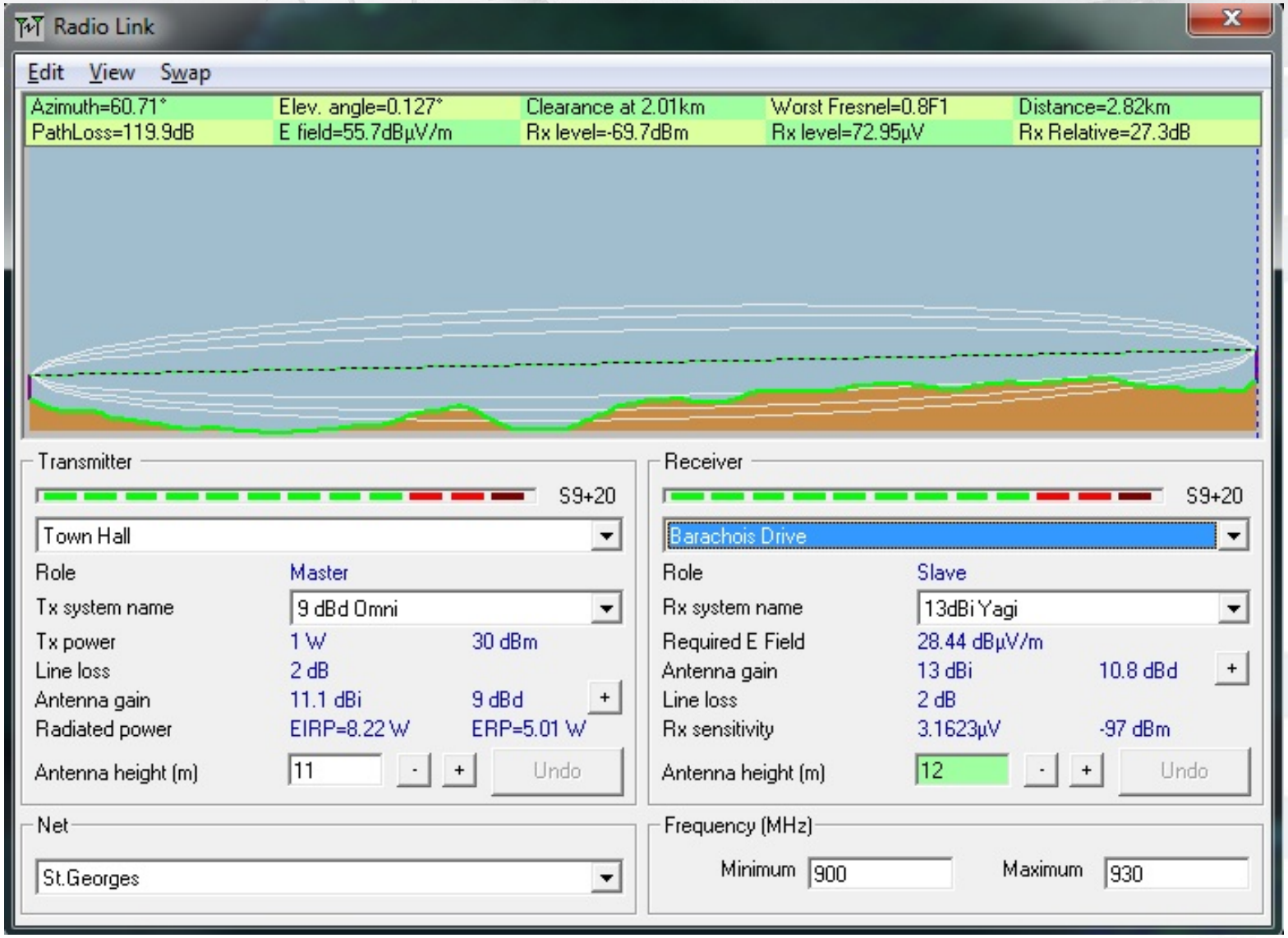
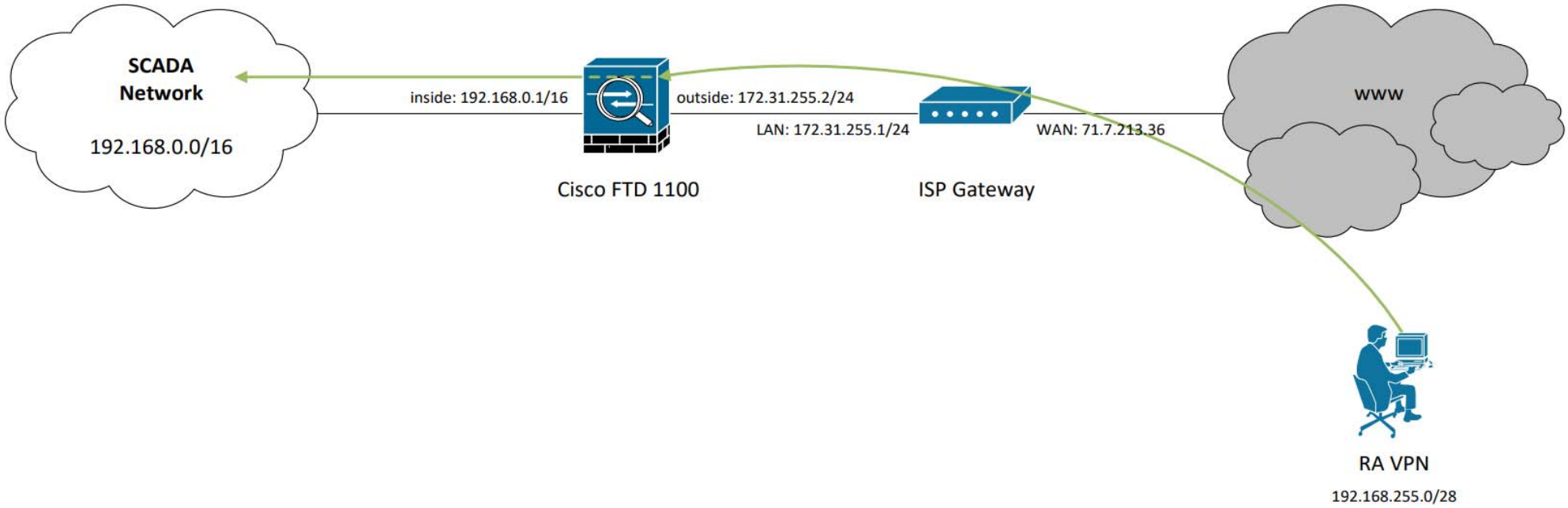
SCADA – Radio Modelling



Cyber Security

- Username/Password
- http:// vs https://
- Firewalls
- VPNs (Virtual Private Networks)
- APNs (Access Point Name)
- 2FA (2 Factor Authentication)

Town of St.George's VPN



SCADA – Remote Connectivity

Advantages:

- Instant (and sometimes advanced) notification in real time, anywhere in the world.
- Reports, Trending, historical data and audit trail.
- Remote support to troubleshoot issues.
- Reduce 3rd party service visits and mobilization costs.

Cahill Technical Services

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cahill CONSTRUCTION

cahill FABRICATION

cahill TECHNICAL

- Established in 1998
- CTS is the technical services entity within the Cahill Group of Companies.
- Cahill Technical Services currently has a technical staff comprising 40+ engineers and technologists.
- CSA Certified Panel Shop

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Thank you.

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