

**UNBOUND** 

## Innovation in Action

Elevating City Inspections with the power of Bluebeam

City of Arvada, CO



# Agenda

- 01 About Arvada
- 02 Change was needed
- 03 Implementing Change
- 04 Training and Expectation
- 05 Where do we go now?

# Josie Suk, Deputy Director

Community and Economic Development  
Public Administrative Professional

18-year career for Arvada

Process Driven

Customer Focused

5<sup>th</sup> Generation Rancher

*I am a mission-driven public servant, a collaborative leader, and a strategic communicator who blends logic, care, and creativity in my work.*





## The Municipal Inspections Team

# Arvada, CO

Demographic	Information
Households	56,068
Residents	131,975
Square miles	39.52
Median Age	41.8
Form of Government	Council/Manager



# Why is Arvada So Great?

## 7<sup>th</sup> Largest Suburb

With a population of 124,402 as of the 2020 census, Arvada is the seventh-most populous city in Colorado, serving as a dynamic suburban community

## Agriculture

Due to its strong agricultural roots and thriving farming community, Arvada earned the nickname **"Celery Capital of the World"**

## Historic

The first documented discovery of gold in the Rocky Mountain region occurred on June 22, 1850 in Arvada, CO

# Construction Activity

Permits, inspections and projects from 2023-2024

Permits – 1,785

Inspections – 15,985

## Capital Improvement Projects (CIP) (2024)

- \$12 Million dedicated to Asphalt, concrete and Chip Seal
- 713.23 feet (0.12 miles) of Water main installed
- 7,364.86 (1.4 miles) feet of water main added through developments
- 34,383.32 feet (6 miles) of sewer main installed
- 13,366.18 feet (2.5) of sewer added through developments

## Total Network

- Water 635.5 miles
- Sewer 468.9 miles
- Storm 180.5

# Why Changes were Needed

## Technology

Hardware provided to inspectors was not sufficient to complete their jobs. This resulted in lost data.

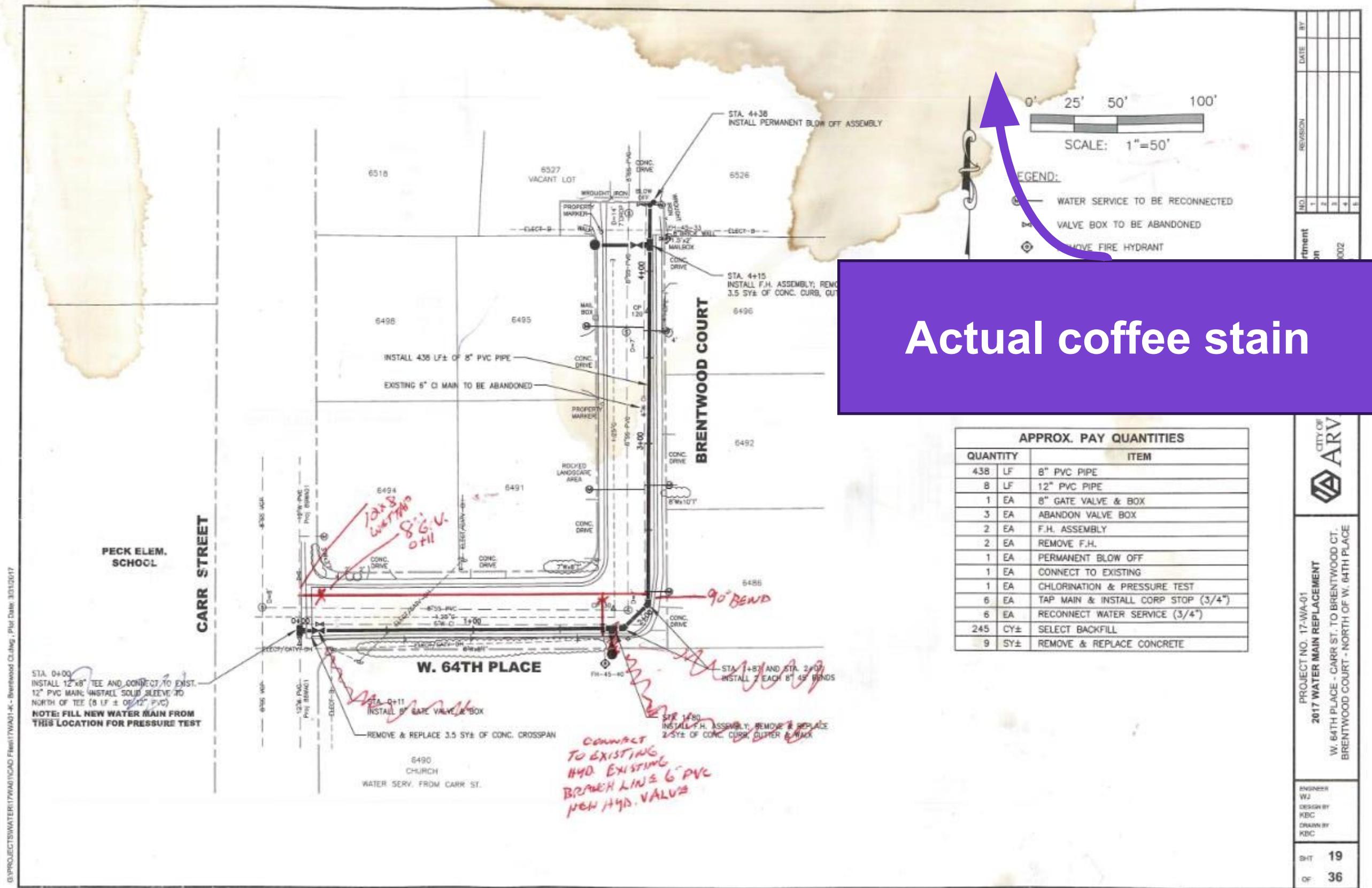
Used tough books in the field which were bulky and had continued issues with the battery.

## Destroyed Roads

Restoration was getting missed on Dry Utility Permits resulting in city roads and sidewalks not being repaired and which contractor was responsible.

## No records

Daily progress on DEV and CIP projects was limited to inconsistent notes in TRAKiT and lost notes on plan sets that were never uploaded. Additionally, As-Builts were stored in trucks and updated by hand.



# The Vision

## Efficiency & Accuracy

Using the software that we own to create a living as-built  
Consistent information provided  
Repeatable results

## Real-time Collaboration

Updated information in a visual format  
Encourage team driven approach vs. individual  
No more relying on the inspector's knowledge

## Customer Experience

Eliminate the guessing or surprises to the contractor  
Allowing inspections to be denied. Completing it right the first time  
Clear and accurate information provided at each step of the construction process

# Process Review

Went through each step of the process and matched it to the requirements of the municipal codes

Created checklists and training documents for inspectors

Changes to the Municipal code

1. Escrow amounts

2. Municipal Contractor Responsibilities

## 4. Changes to internal policies

3. Building permit release

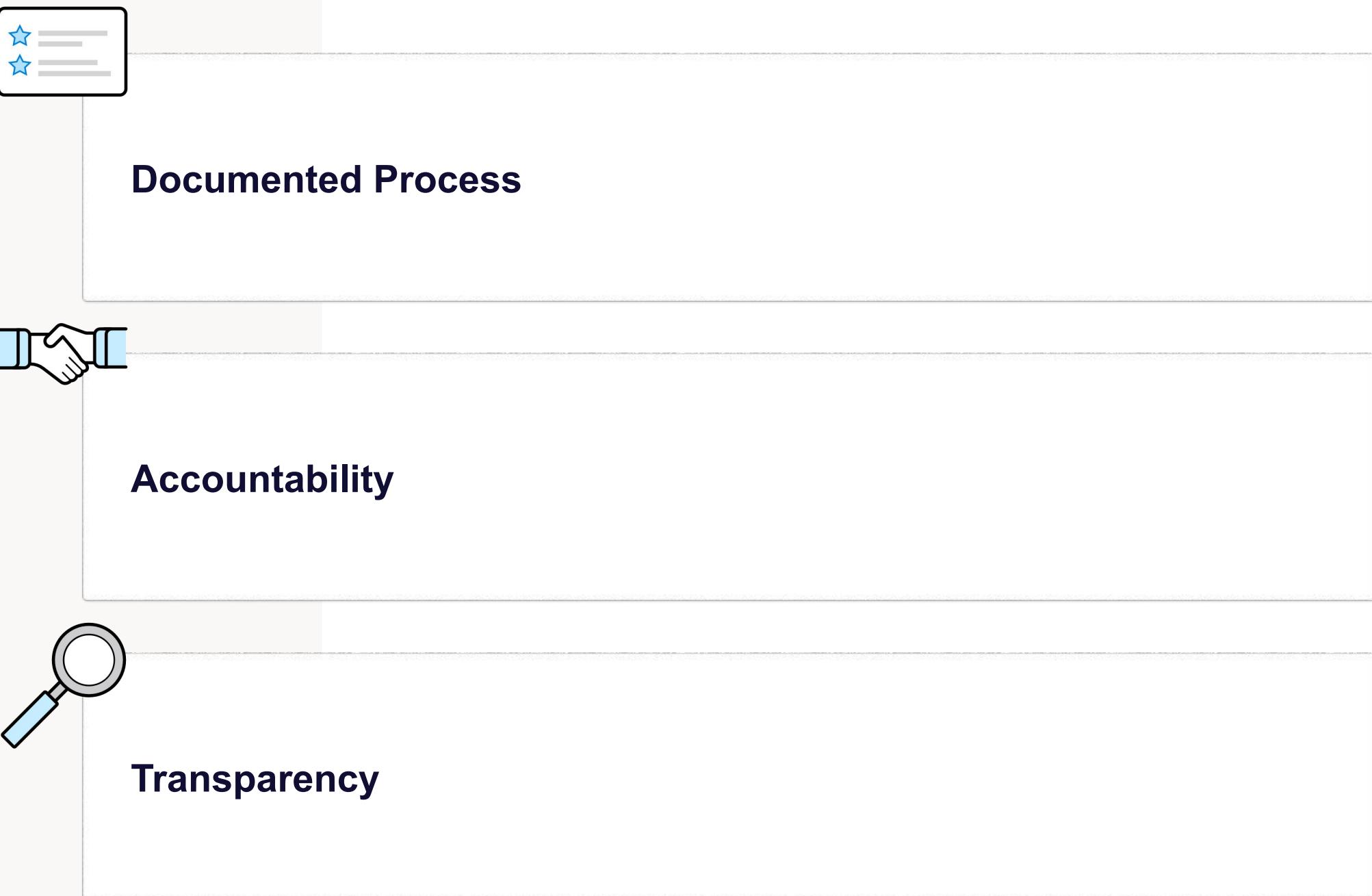
4. Warranty process renew

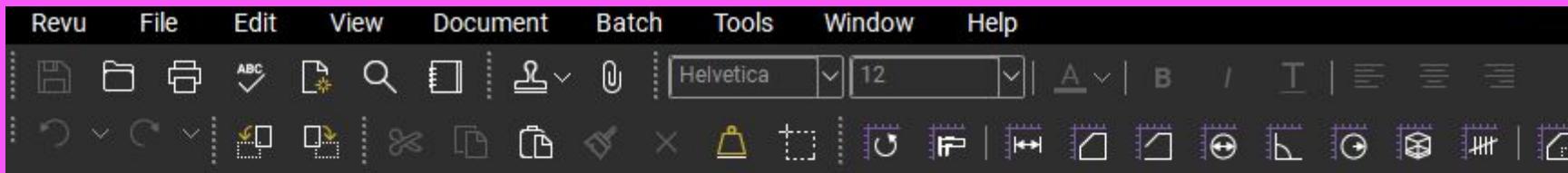
5. Inspection standards

# Change Management

Through this process change management was critical to the success of these changes.

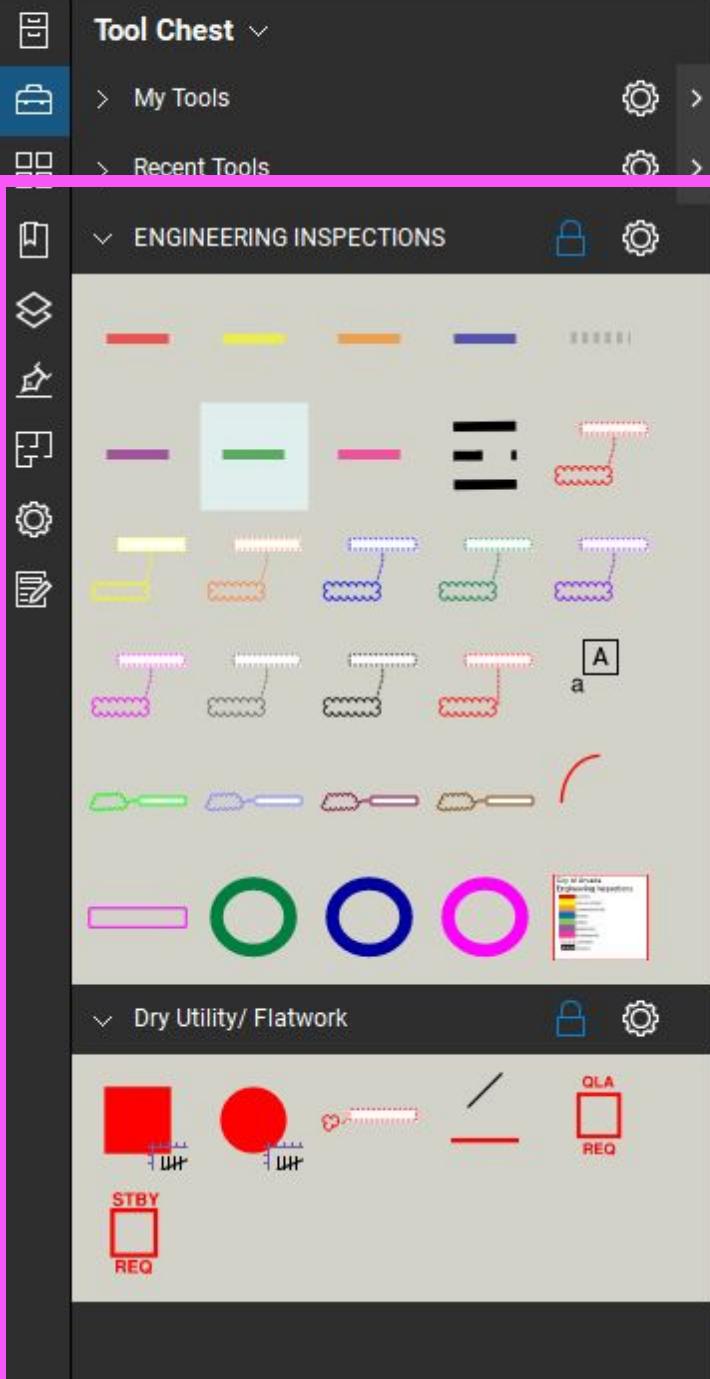
The whole team changed through retirements, promotions and resignation. This was an opportunity to make improvements.





jsuk@arvada.org

Name: Inspection Status Report - Ralston Commons Pages: 51



Community Development WUM 19.3 HF09 - premise\*

Inspection Status Report - Ralston Commons

Inspection Status Report - Ralston Commons

## THE RESIDENCE AT RALSTON CONSTRUCTION DRAWING

RALSTON COMMONS MINOR SUBDIVISION, LOTS 1, 2, A  
LOCATED IN THE SOUTHWEST 1/4 OF SECTION 10, TOWNSHIP 3 SOUTH, RANGE  
CITY OF ARVADA AND COUNTY OF JEFFERSON, STATE OF COLORADO  
9215 RALSTON ROAD • ARVADA, CO 80002



Sheet No.	Drawing No.	Drawing Name	Sheet No.	Drawing No.	Drawing Name	Sheet No.
01 OF 51	C09.0	INITIAL EROSION CONTROL PLAN	18 OF 51	C0117	STORM PLAN & PROFILE	30 OF 51
02 OF 51	C09.1	INTERIM EROSION CONTROL PLAN	19 OF 51	C0140	PRIVATE ROADWAY PLAN & PROFILE	30 OF 51
03 OF 51	C09.2	FINAL EROSION CONTROL PLAN	20 OF 51	C0111	PUBLIC ROADWAY PLAN & PROFILE	31 OF 51
04 OF 51	C011.0	OVERALL UTILITY PLAN	21 OF 51	C0150	PRIVATE SIGN & STRIPING PLAN	30 OF 51
05 OF 51	C011.1	OVERALL UTILITY PLAN	22 OF 51	C0151	PUBLIC SIGN & STRIPING PLAN	30 OF 51
06 OF 51	C011.9	WATER PLAN & PROFILE	23 OF 51	C0110	DETAILS	40 OF 51
07 OF 51	C011.5	WATER PLAN & PROFILE	24 OF 51	C0111	DETAILS	41 OF 51
08 OF 51	C011.2	WATER PLAN & PROFILE	25 OF 51	C0112	DETAILS	42 OF 51
09 OF 51	C011.9	SANITARY PLAN & PROFILE	26 OF 51	C0115	DETAILS	43 OF 51
10 OF 51	C012.1	SANITARY PLAN & PROFILE	27 OF 51	C0114	DETAILS	44 OF 51
11 OF 51	C013.0	STORM PLAN & PROFILE	28 OF 51	C0115	DETAILS	45 OF 51
12 OF 51	C013.1	STORM PLAN & PROFILE	29 OF 51	C0116	DETAILS	46 OF 51
13 OF 51	C012.2	STORM PLAN & PROFILE	30 OF 51	C0117	DETAILS	47 OF 51
14 OF 51	C013.3	STORM PLAN & PROFILE	31 OF 51	C0115	DETAILS	48 OF 51
15 OF 51	C013.4	STORM PLAN & PROFILE	32 OF 51	C0119	DETAILS	49 OF 51
16 OF 51	C013.5	STORM PLAN & PROFILE	33 OF 51	C0119	DETAILS	50 OF 51
17 OF 51	C013.8	STORM PLAN & PROFILE	34 OF 51	C0111	DETAILS	51 OF 51

Utilized profiles for all inspectors.  
Made their screens all the same for  
ease in training.

Color coded tool sets that are  
saved to the profile

OWNER: FROST ON CREEK, NORWELL LLC  
OWNER REPRESENTATIVE: CMC GROUP  
ARCHITECTURAL CONSULTANT: SA+ARCHITECTS  
CIVIL ENGINEER CONSULTANT: ALTITUDE CONSULTING, INC.

ATTN: JIM LOFTUS  
ADD: 2008 CANYON BLOSSOMS DR, STE 200  
CITY: AURORA  
STATE: CO  
ZIP: 80013-2424  
PHONE: (303) 322-1242

ATTN: MAX MARTIN  
ADD: 2000 E. RANIERWOOD DR, BOX 100  
CITY: FORT COLLINS  
STATE: CO  
ZIP: 80503-1000  
PHONE: (970) 221-1234



ALTITUDE  
CONSULTING, INC.

APPROVED: *John Doe* DATE: 01/01/2023  
Comments: The general design complies with the City of Arvada's requirements for the proposed construction of The Residence at Ralston Commons. The Design and Construction of Public Impoundments\* meet all codes. The responsibility for correctness and accuracy of these plans rests with the designer. The City does not warrant the plans or the design of these plans. The City does not warrant the plans or the design of these plans. The City does not warrant the plans or the design of these plans.

THE RESIDENCE AT RALSTON COMMONS  
CONSTRUCTION DRAWINGS  
9215 RALSTON ROAD • ARVADA, CO 80002  
ARVADA SQUARE • REC. NO.: F06932323  
20-147

COPIES MADE FOR: PRELIMINARY PLANS FOR THE CONSTRUCTION OF THE RESIDENCE AT RALSTON COMMONS, A SUBDIVISION OF THE RALSTON COMMONS SUBDIVISION, SECTION 10, TOWNSHIP 3, RANGE 1, CITY OF ARVADA, COLORADO.

NO. DATE: 01/01/2023

REVISION: 5F

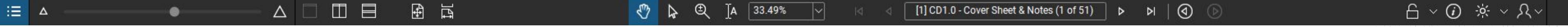
DATE: 01/01/2023

CHECKED BY: *John Doe*

COVER SHEET

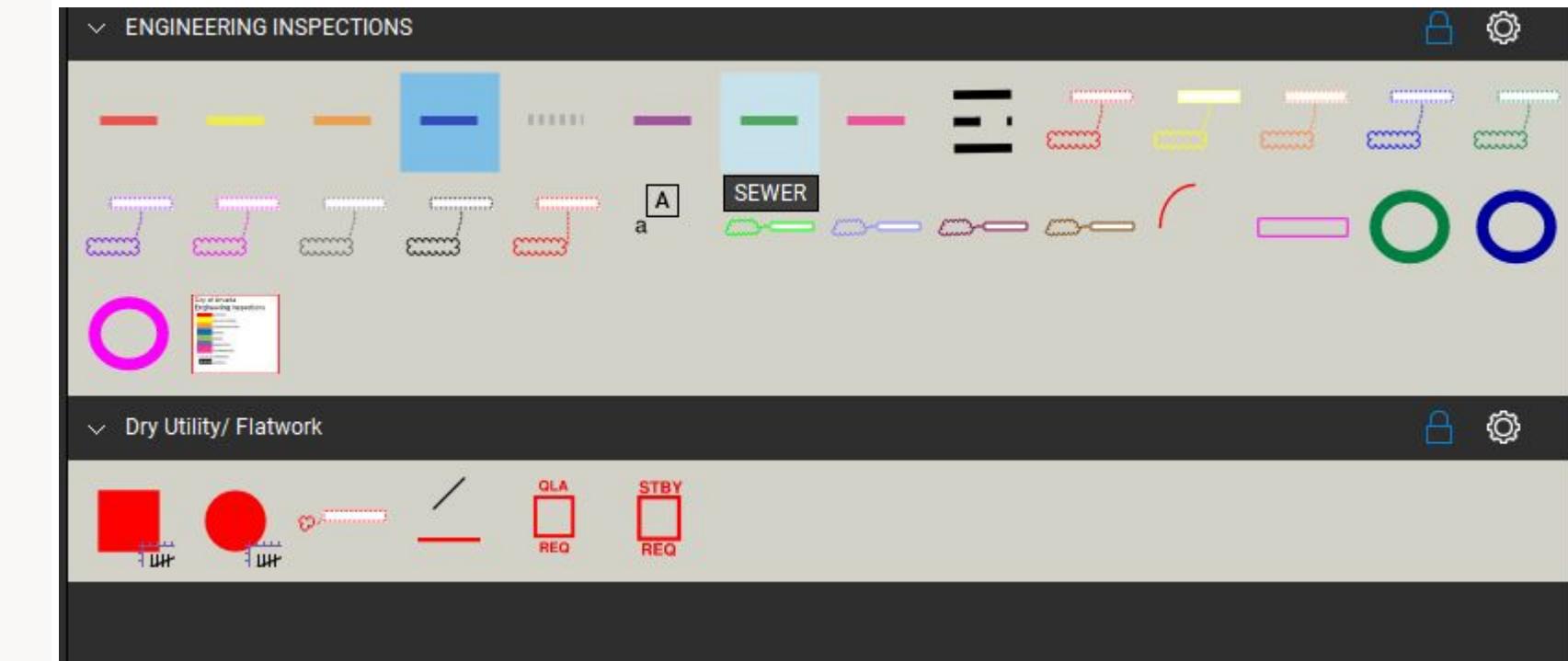
CD1.0  
SHEET 1 OF 51

[1] CD1.0 - Cover Sheet & Notes (1 of 51)



# Custom Toolboxes

Created a toolbox for the inspectors to use. The key features of this are the naming of each tool and color coding to match the adopted utility standard colors. This provides consistency and ease in navigation.



Created stamps for easy document setup

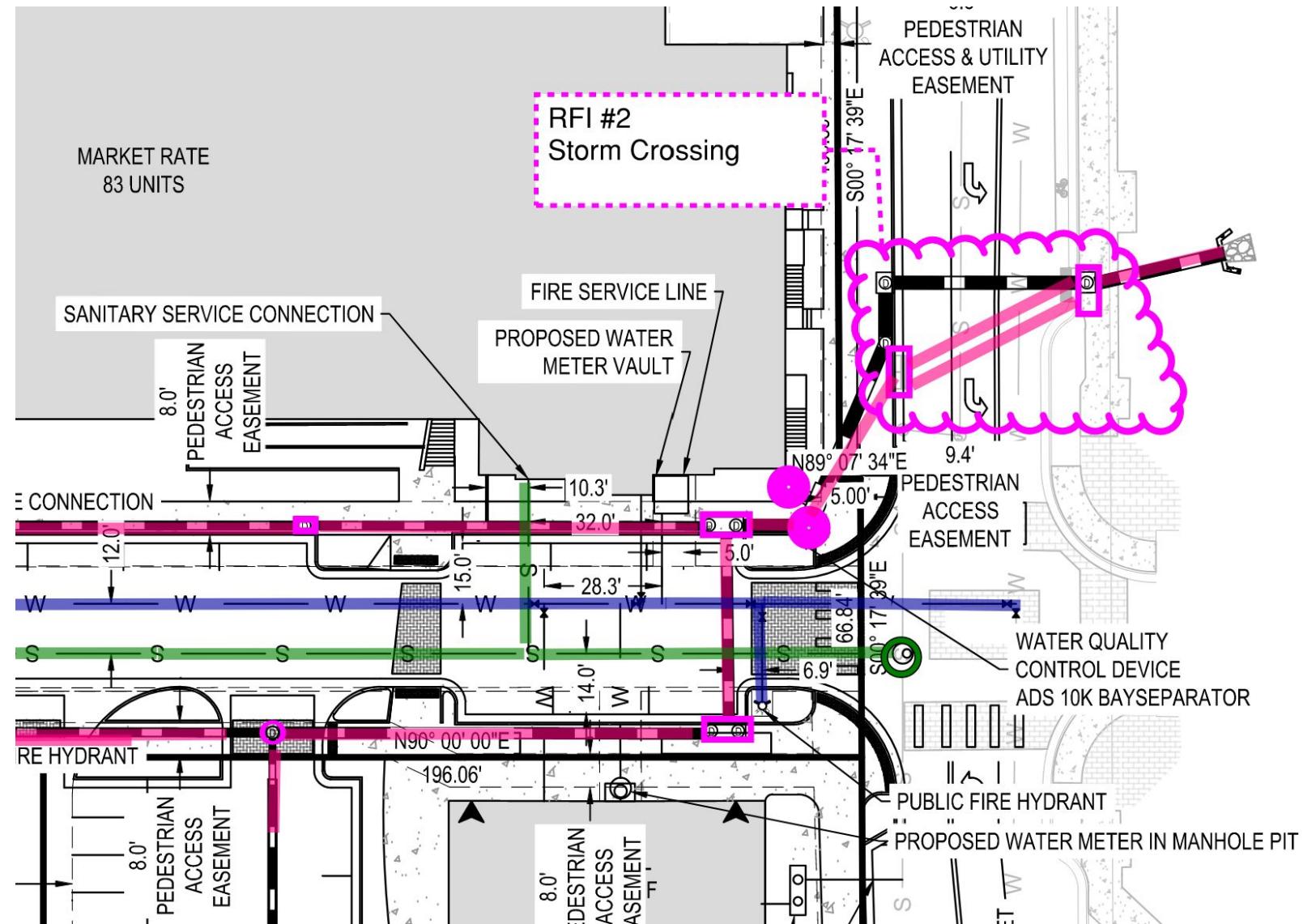


# Markups with RFIs

Tracking the installation of infrastructure as it happens has reduced misses that can happen due to the high pace of construction.

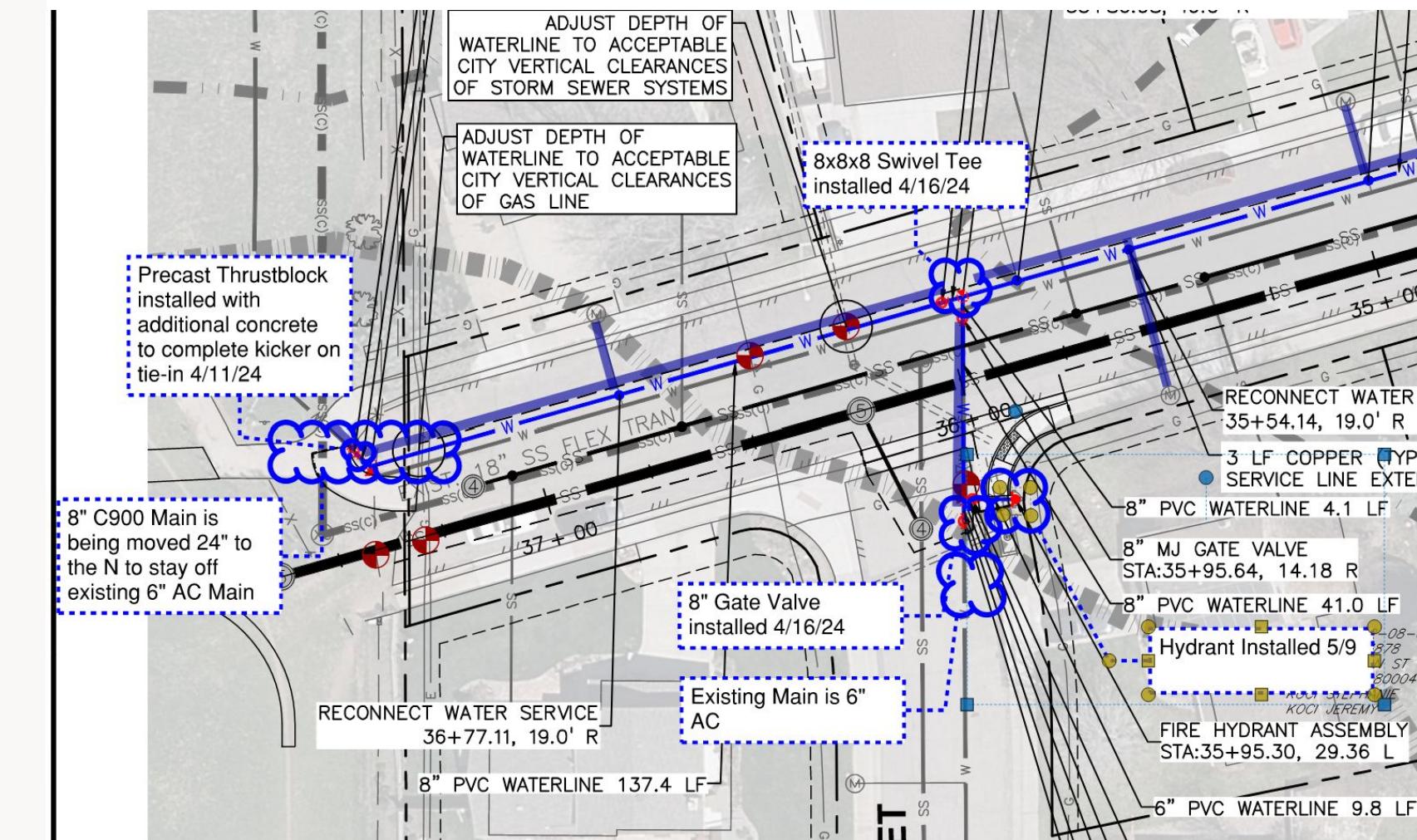
Field changes can be changed and documented as an as-built

RFI submitted are approved and then noted by the inspector.



# Detailed Information

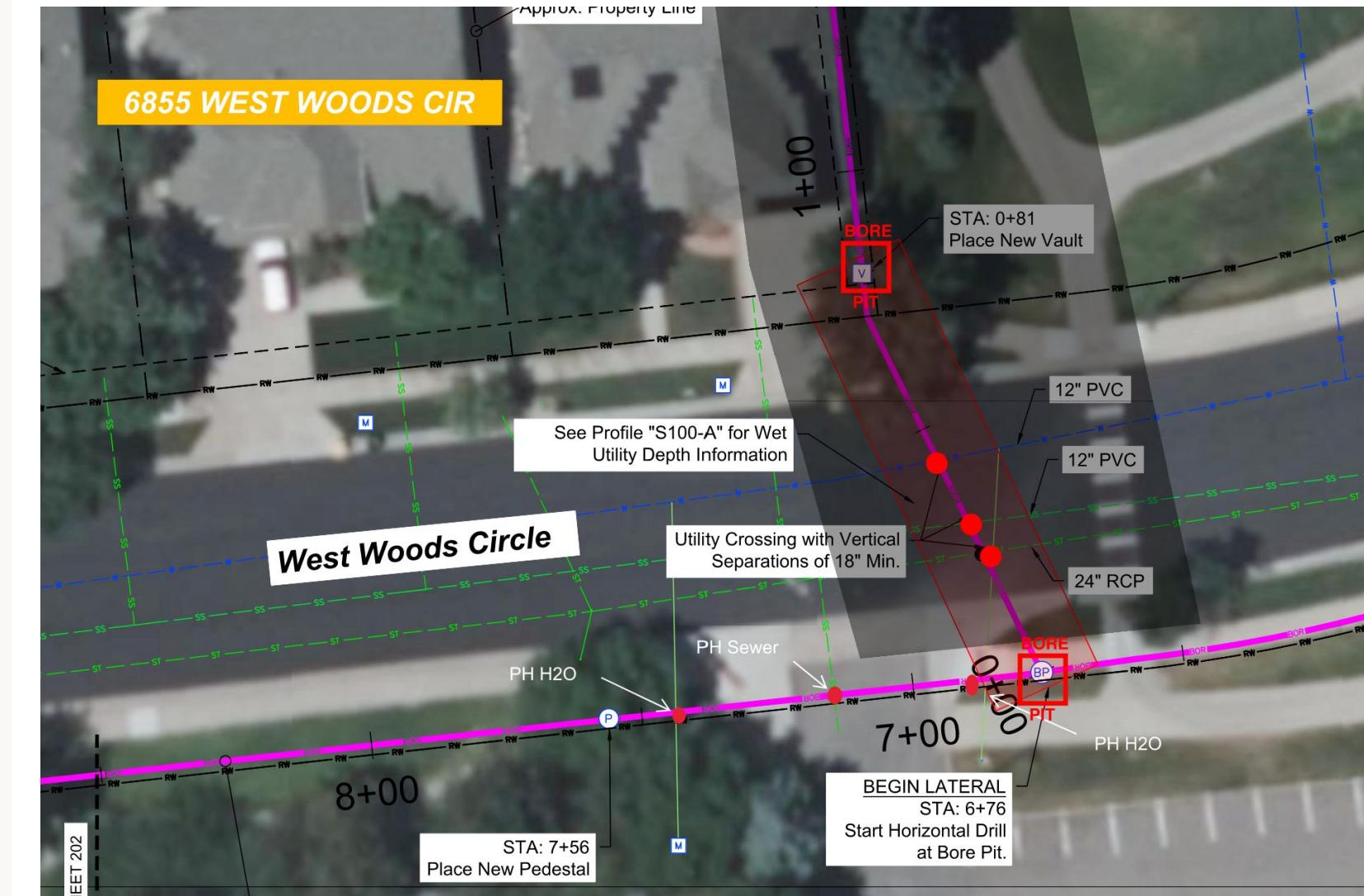
Detailed information on the infrastructure that is installed, included the total quantity, and date of installation

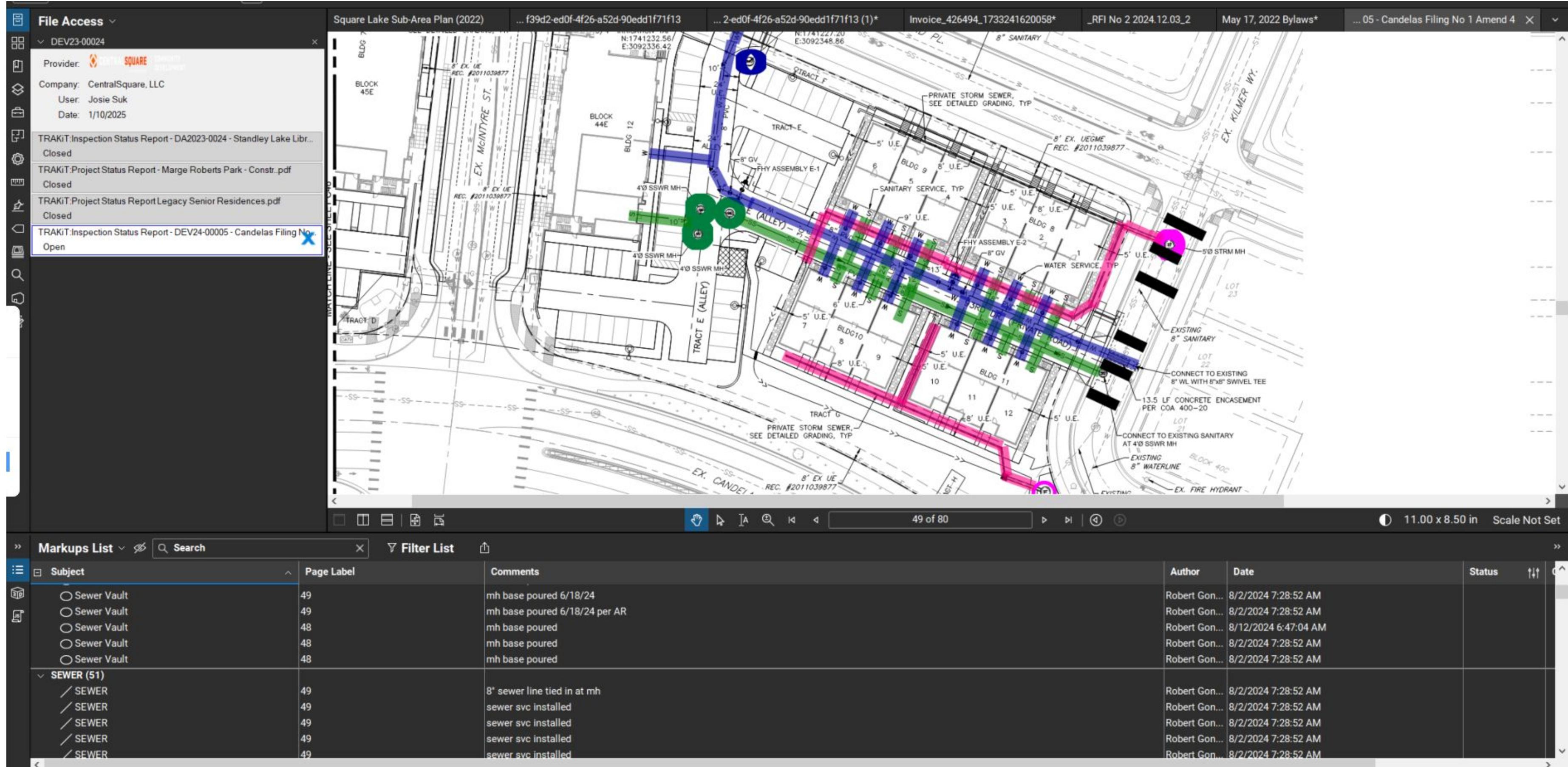


# Dry Utility Restoration

Keeping track of  
Bore lines  
Pot holes  
Bore pits

Makes for an easier warranty walk and call out for punch lists if  
needed.



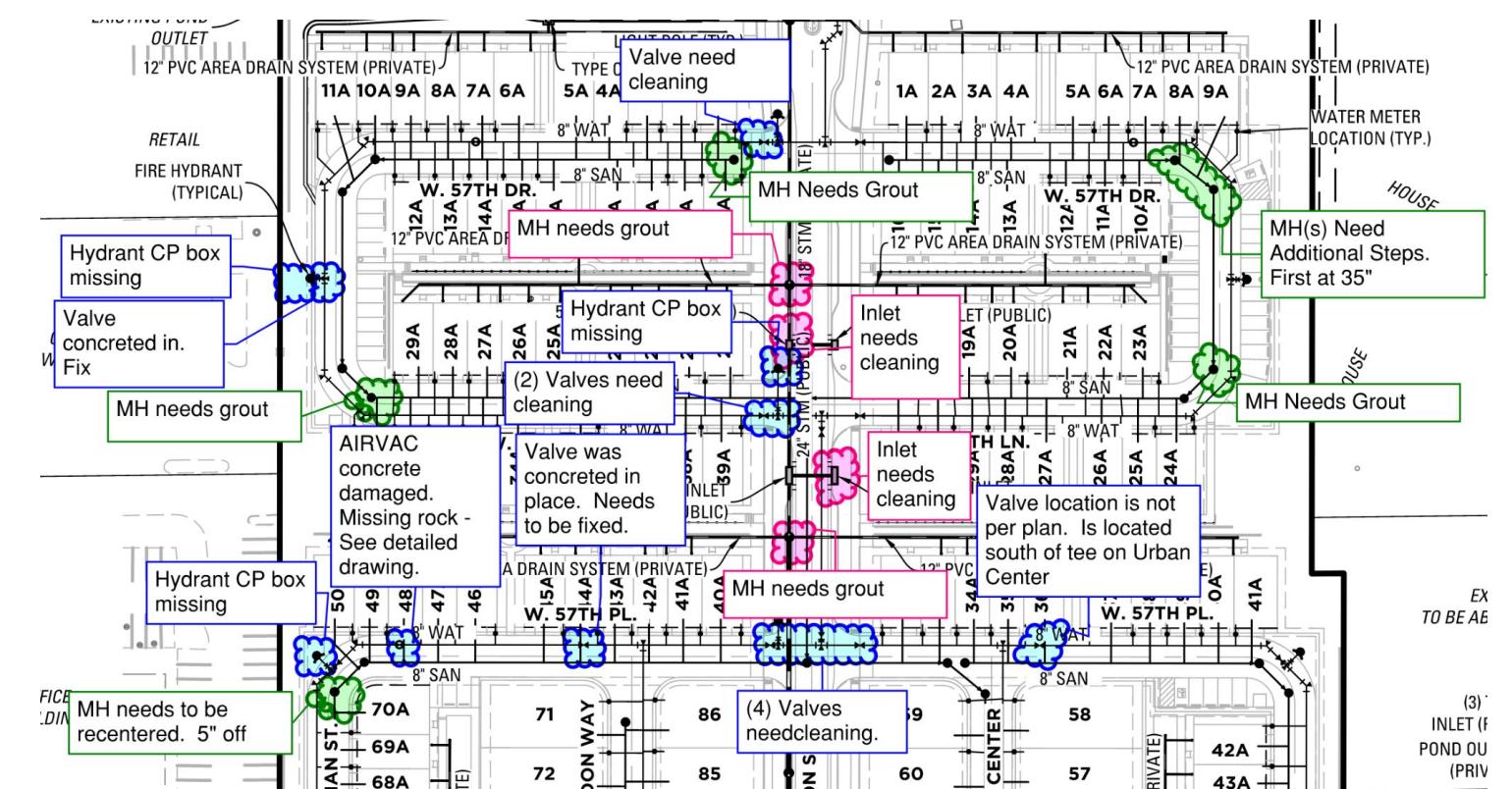


# Warranty Punch lists

## Created a custom toolbox for warranty

## Use the summary feature of Bluebeam for contractor notice

## Status column for re-walks



# Key benefits of Bluebeam



## Organization

Plans are formatted and kept the same for each development. Allows for inspectors to cover projects when needed without needing large amounts of information.



## Updated Information

Inspector is required to record their daily information on plans. This provides current status of their projects without having written updates or daily conversations with the inspector.



## Accuracy

Recording daily information prevents the inspector from forgetting what was installed. This document is shared with the contractor and the City Engineer.

“

*“Thank you so much for providing the initial warranty checklist. It takes the guesswork out of being prepared for your team and I imagine it saves your team a ton of time and grief on re-inspections. In particular, it helped me supervise my subcontractor more effectively and efficiently.*

*Clarity is the key to success in these endeavors and your checklist provides that perfectly.”*

Mike Kerschen - Morgan Group

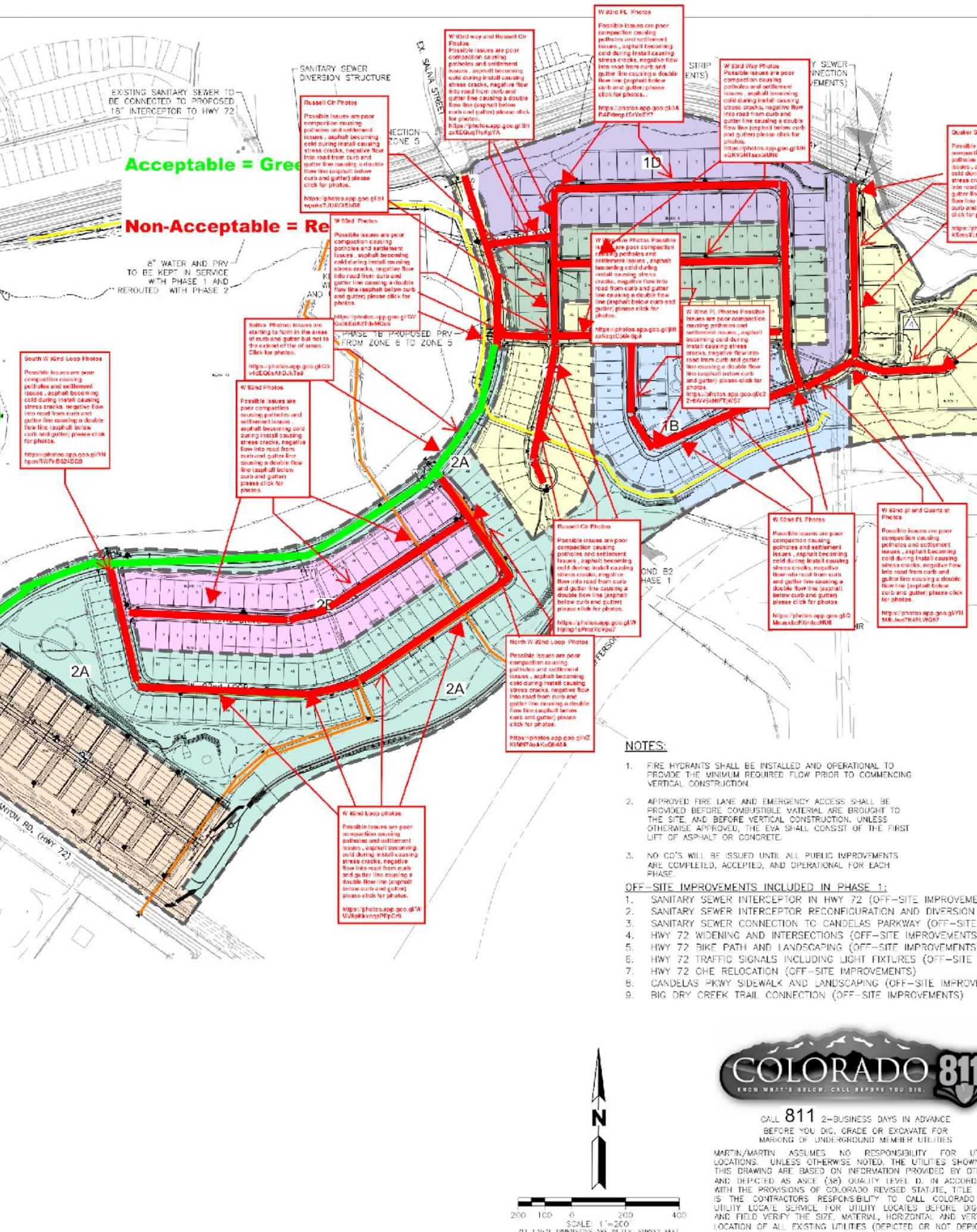
Developer

# Where do we go next?

## Updates to the warranty period

Get more training for the entire team to utilize Bluebeam to the fullest

## The wheels are already turning



# Thank you

Josie Suk

[jsuk@arvada.org](mailto:jsuk@arvada.org)

720-898-7627





# Appendix

Additional Slide Templates and Resources

This section contains guidelines and additional slide templates to support the main presentation. The appendix is designed as a resource—refer to it when additional context or tools are needed.

# How to use this template

## Guidelines and best practices

### Use the template:

Select from the pre-made layouts for quick, professional slides.

Stick to one idea per slide for clarity and conciseness.

### Keep it accessible:

Use provided fonts, colors, and layouts to ensure readability.

Maintain a minimum 18pt font size for body text.

### Add imagery thoughtfully:

Use high-quality visuals and photography.

Avoid using clipart and similar graphics.

### Stay on brand:

Follow the color palette, fonts, and styling in the deck.

Align images and text with template guidelines.

### Customizability

#### Contacts:

If you have any further questions or run into any issues, please contact Nico Abbasi at [nabbasi@bluebeam.com](mailto:nabbasi@bluebeam.com).

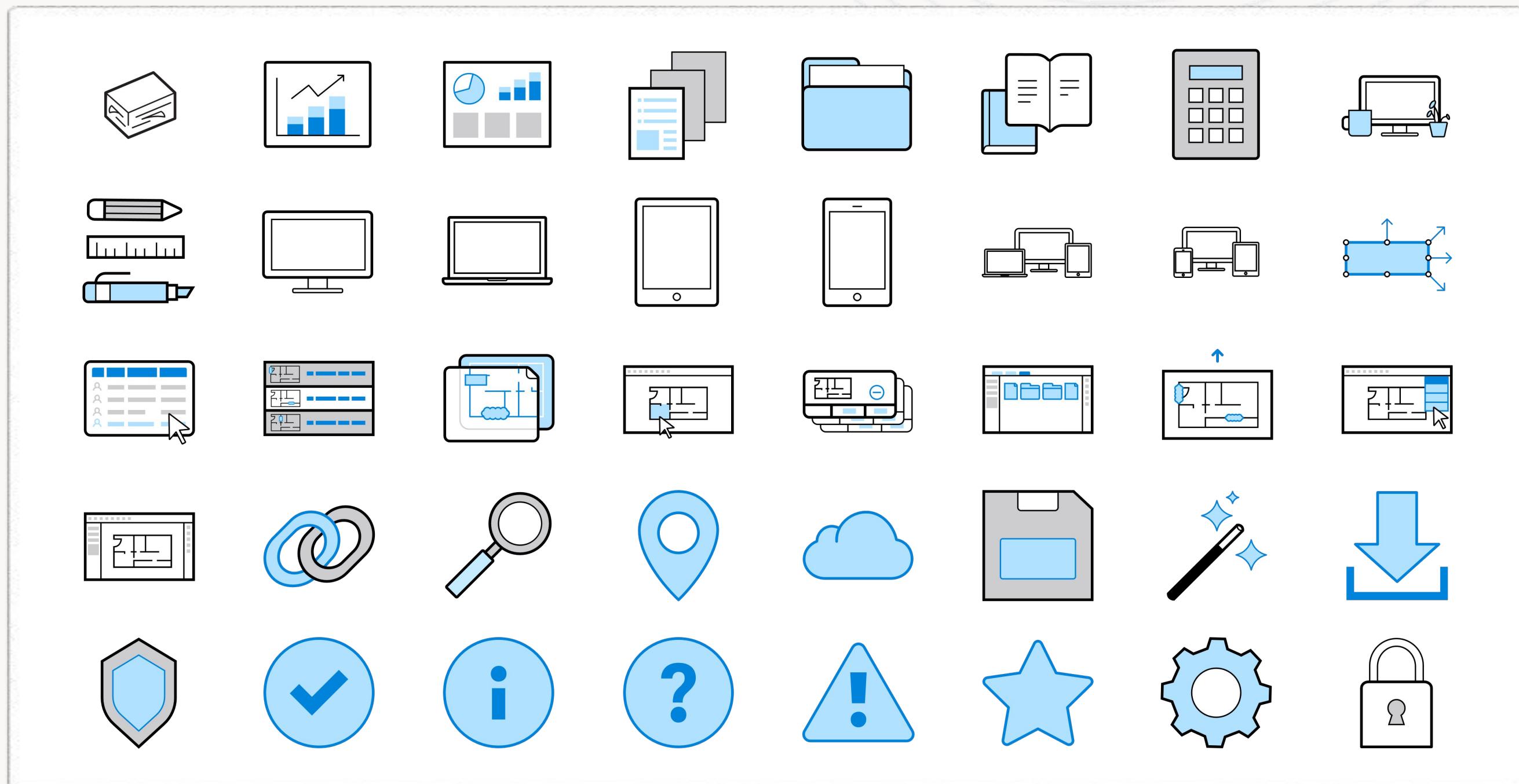
# Icons

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