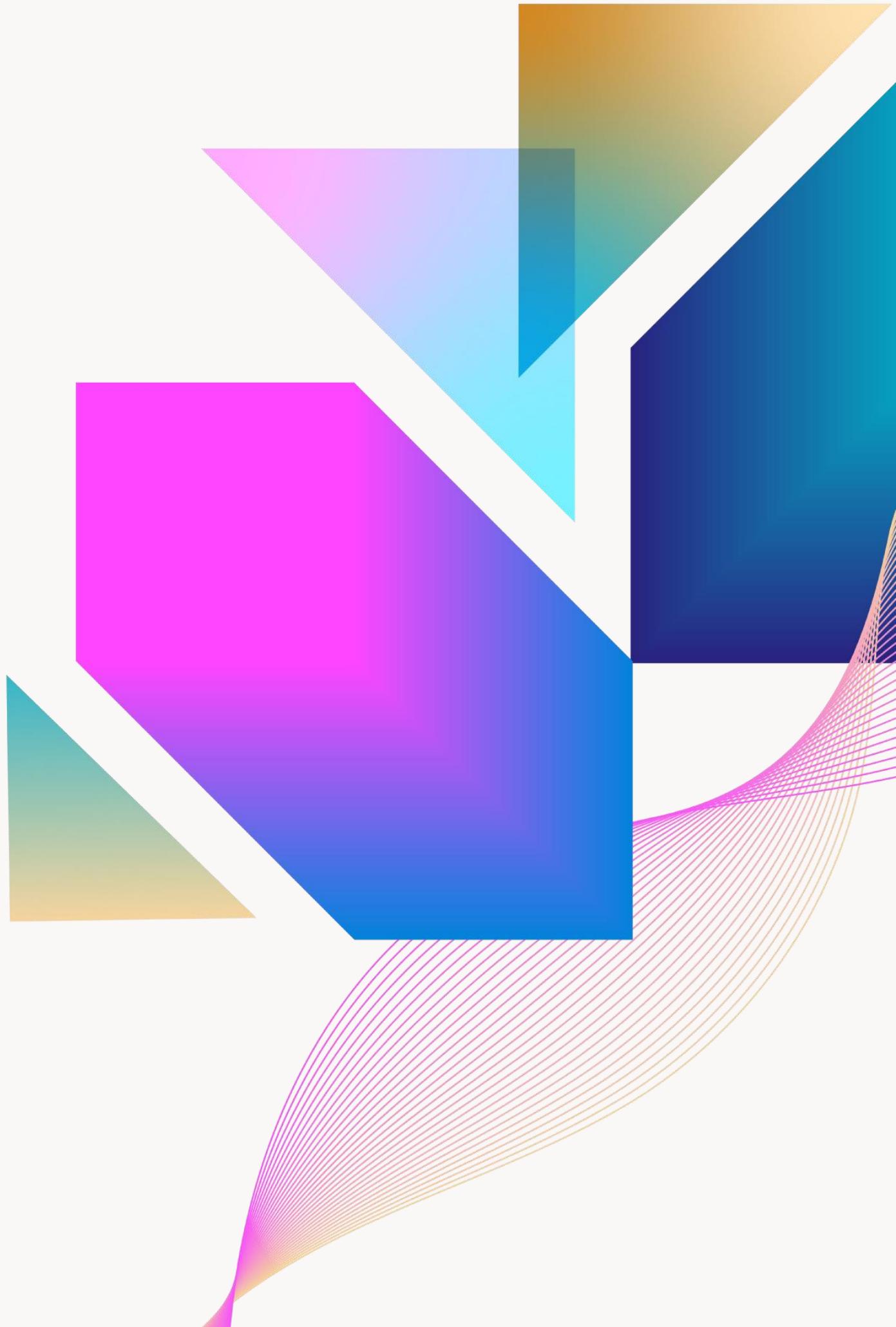




# Innovating at Scale

Arcadis' Journey with Bluebeam

Maria Angeline Kisses H. Montes



# Agenda

- 01 Welcome & Introduction
- 02 The Need for Innovation
- 03 Integration Journey
- 04 Driving Quality Through Collaboration Data
- 05 Persona-Based Tool Sets and Customization
- 06 Regional Success Stories
- 07 Outcomes & Outlook

# Introducing Arcadis' Innovation Journey

How a global infrastructure leader embraced digital transformation to enhance collaboration



# The Need for Innovation

# Adapting to a New Reality: Remote Collaboration in a Global Design

# Pre-Pandemic



Design review were manual and email exchange

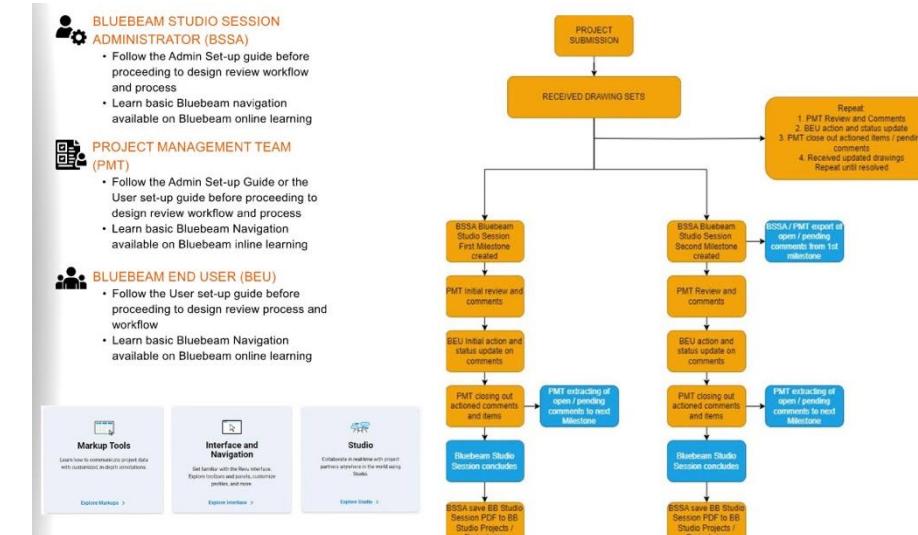
Shared between teams via inboxes  
Familiar Set-up

# Pandemic Onset



Remote work became common  
Need better way to collaborate  
Global need

# Bluebeam Adoption

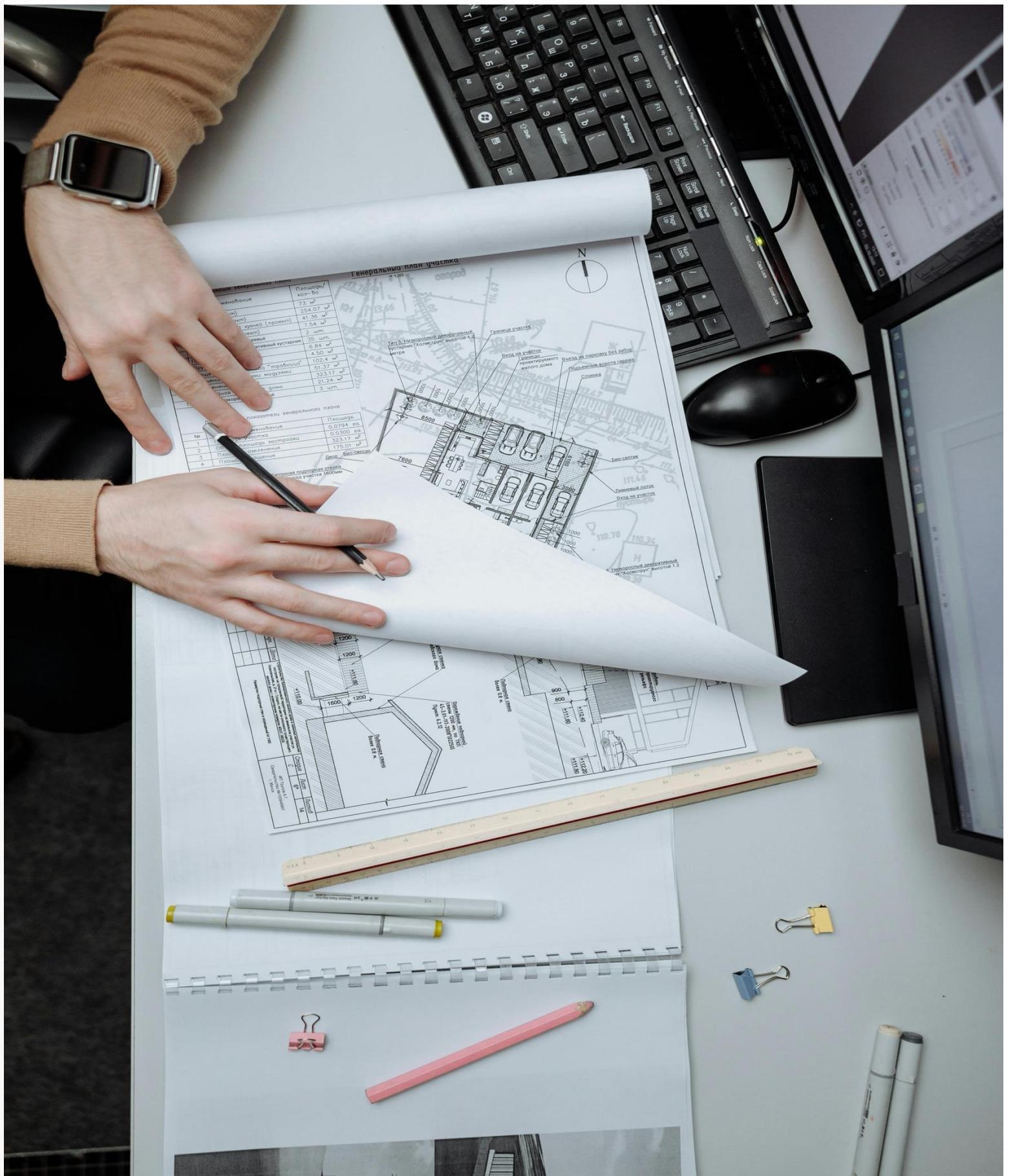


Bluebeam focus  
New platform  
Enhance team collaborate

# The Need for Innovation

## Pre-Pandemic

- Manual Review Setup
  - Email-based markups between lead office and GEC's
  - Multiple drawing version circulated
  - Challenge on aligning feedback and consistency
- Tracking Challenges
  - Progress tracked via highlights and tick boxes
  - Reviewers used different markup styles
  - No shared format for comments
  - Extra coordination needed to consolidate feedback
- Visibility & Alignment
  - Limited visibility across teams
  - Challenge to keep everyone at sync during reviews
- Need for Change
  - Need for a scalable, consistent review process



# The Need for Innovation

## Pandemic Onset

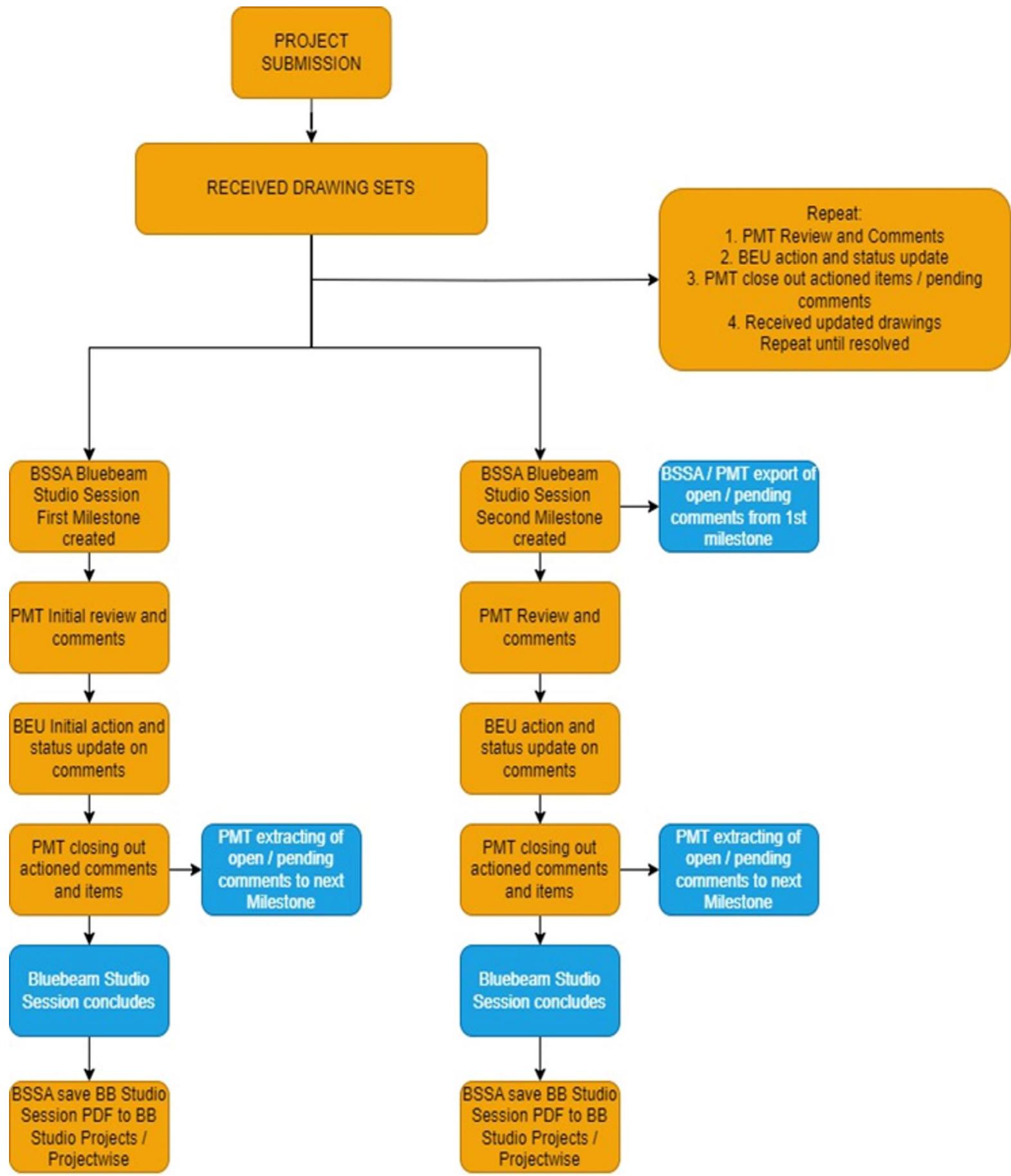
- Adapting to remote work
  - Pandemic shifted how we worked
  - Remote teams faced access issues
  - Shared drives and physical drawing is not practical
- Old Setup
  - Printed markups and local servers
  - Continued using email for markups
  - Time zone difference added challenge
- Coordination Challenges
  - Needed attention to detail
  - Tracking version became important
  - No real-time change tracking
  - Syncing updates required extra effort
- Exploring Solutions
  - Evolving needs
  - Time for a connected, collaborative platform



# The Need for Innovation

## Bluebeam Adoption

- Opportunity for Improvement
  - Unified, structured collaboration
  - Clarity, consistency, real-time visibility
- Exploring Bluebeam Revu
  - Real-time collaboration
  - Single source of truth
  - Scalable across region
- Strategic Rollout
  - More than software, needed strategy and planning
  - Shared commitment across organization
- Collaboration shift
  - Intuitive, consistent and efficient
  - Works across locations and project types



# Integration Journey

## Phase 1 : Laying the Groundwork

- Understand our users
  - Ran a survey
  - Assessed familiarity
  - Tailored support based on result
- Learning Path and resources
  - Created custom learning framework using official materials
- Visual Consistency
  - Customized line styles and hatches from CAD Software
  - Ensured consistent drawing presentation
- Clear Roles
  - Developed a responsibility matrix
  - Mapped task to team functions
- Clarity and structure
- Teams equipped with tools and guidance from the start.

## Learning Path (Indicative learning Path based on Discipline)

		Suggested training.		Civil Structures		Rail			Highways			Geotech			
		Optional Training		Drafter/ Modeler	Engineer	O/H	Track Design	Signalling	Civil Design	Road Design	Pavement	Drainage	Utilities	BH	
Level	Topic	Discipline													
		Basic	Intermediate	Advanced	Expert	Interface + Navigator	Markup tool	Markup List	Studio Workflows	Editing Documents	Working with Measurements	Drawing Management	Document Processing	PDF Forms	Document Security
Basic	Interface + Navigator	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Markup tool	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Intermediate	Markup List	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Studio Workflows	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Advanced	Editing Documents	●	○	○	○	○	○	○	○	○	○	○	○	○	○
	Working with Measurements	○	●	●	●	●	●	●	●	●	●	●	●	●	●
Expert	Drawing Management	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Document Processing	●	○	○	○	○	○	○	○	○	○	○	○	○	○
Expert	PDF Forms	○	●	●	●	●	●	●	●	●	●	●	●	●	●
	Document Security	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Expert	3D PDF's	●	○	○	○	○	○	○	○	○	○	○	○	○	○
	Plugins and Admin Tools	○	○	○	○	○	○	○	○	○	○	○	○	○	○

# Integration Journey

## Phase 2: Building Awareness and Community

### Centralized Access

All Bluebeam resources placed on Arcadis SharePoint

Includes learning paths, toolsets, workflow and training materials

Accessible anytime, anywhere for all teams

### MS Team Channel

Dedicated channel launched for Bluebeam updates

Real-time space for peer support, questions and feedback

Encouraged sharing of best practices across teams.

### Lunch and Learn

Casual interactive sessions to introduce Bluebeam

Helped new users get comfortable with the platform

Shared early wins and practical tips

### Community Building

Focused on connection and collaboration

Created spaces for learning and sharing

Helped Bluebeam Revu become a shared experience, not just a tool.

# Integration Journey

## Phase 3: Testing and Scaling

### Pilot Testing

Started with a small internal project

Focused on markups and workflow testing

Safe space to refine configurations and tool sets

### Scaling Up

Moved to a large, complex project

Used persona-based customization

Tailored profiles and tool chests by role and discipline

Showed Bluebeam's adaptability and consistency

### Project Manager Engagement

Collaborated with PMs and key stakeholders

Demonstrated how Bluebeam supports delivery and traceability

Gathered input to fine-tune tools and workflows

### Proving

Validated Bluebeam in real-world scenarios

Built confidence for full implementation

Built confidence for full implementation

# Integration Journey

## Phase 4: Standardizing for Global use

### Global Standard

Gather best practices from different regions

Developed a standardized configuration and preferences set for Bluebeam Revu.

Balanced consistency with project flexibility

### Landing Page

Centralized hub on **Arcadis SharePoint**

Includes setup guides, workflows, training materials

Includes setup guides, workflows, training materials

### Start-up Menu

Custom menu launches with Bluebeam

Quick access to templates, tool sets, help links

Supports alignment and ease of use

### Regional / Department Champions

Identifying **Bluebeam champions** across teams

Champions act as local experts and support adoption

Part of long-term strategy for global rollout

# Driving Quality Through Collaboration Data

## Leveraging Studio Sessions and Markup Data for Smarter Reviews

### Bluebeam Studio Session

Used as central platform for real-time design reviews

- Set up using standard profiles
- All participants use standard display name
- Markups are tracked live.
- Markup List Summary Report is generated to document all actions taken.

### Power BI

Used to transform markup data into actionable insights

- Markup data is exported from Bluebeam
- Dashboards visualize review metrics such as:
  - Number of markups per discipline
  - Status distribution
  - Review turnaround times

### Power Automate

Used to streamline report distribution and tracking

- Markup summary reports are uploaded to a SharePoint folder
- Reduced manual effort.
- A Power Automate flow trigger:
  - Notification to relevant stakeholders
  - Transferring data to comment register template.

# Driving Quality Through Collaboration Data

## Studio Sessions

### User Setup Guides:

- Installing Bluebeam Revu
- Creating a Bluebeam Studio account
- Modifying and applying **standard display names**
- Updating **standard preferences**
- Applying **standard configurations** (profiles, toolchests, statuses)
- Instructions on how to **join a Studio Session**

### Admin Setup Guides:

- All user setup steps
- How to **create a Studio Session**
- How to **prepare PDFs properly** for review (flattening, naming conventions, page labels, etc.)

**ARCADIS**

- Installation
- Account Creation
- Display Name
- Preferences
- Configurations
- Joining Studio Session

**BLUEBEAM USER SET-UP GUIDE**

Process on setting up Bluebeam prior on joining Studio Session

**ARCADIS**

- Installation
- Account Creation
- Display Name
- Preferences
- Configurations
- PDF Preparation
- Creating Studio Sessions
- Adding Documents
- Exporting Methods
- Ending Studio Session

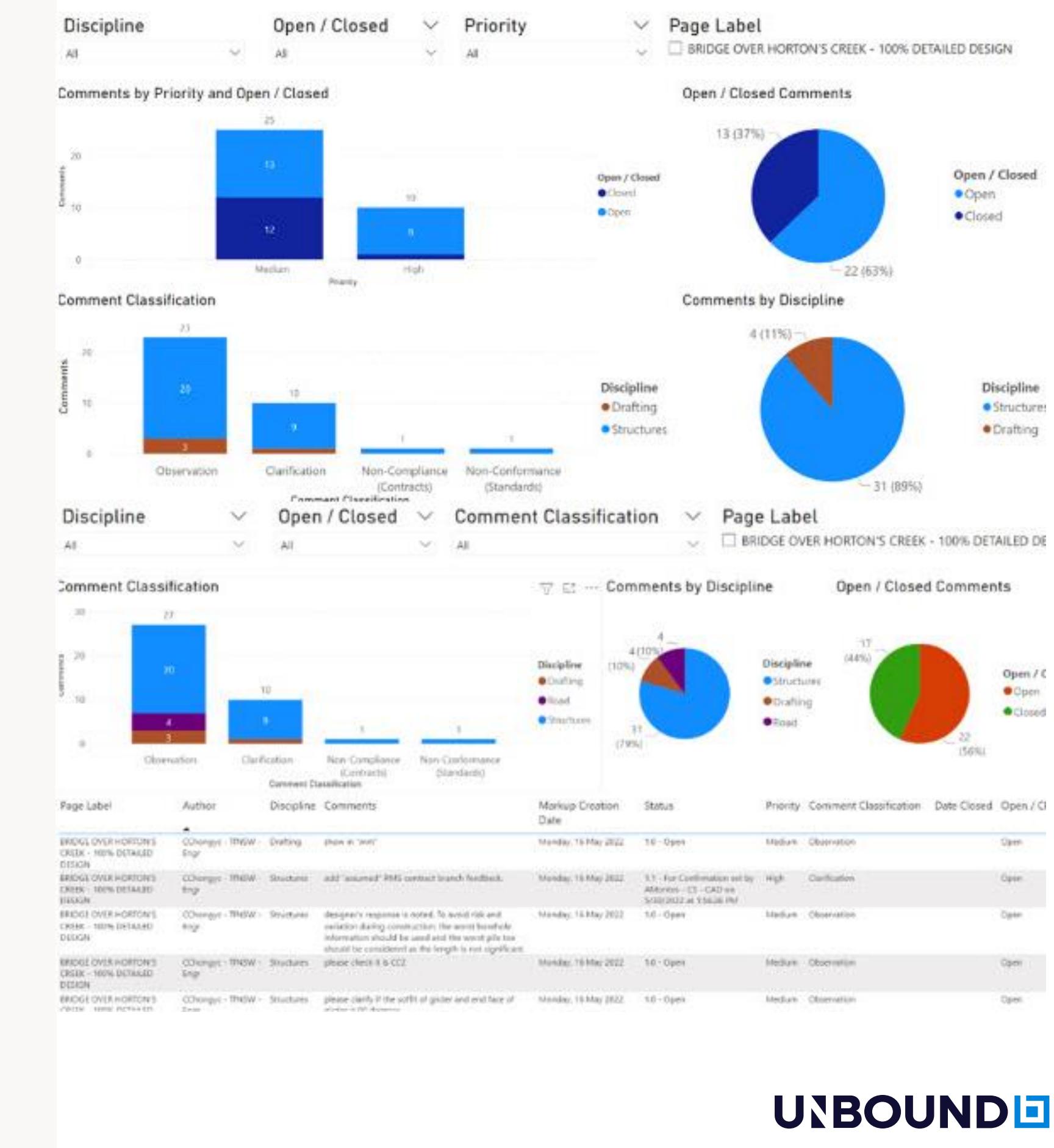
**BLUEBEAM ADMIN SET-UP GUIDE**

Process on setting up Bluebeam prior on creating Studio Session

# Driving Quality Through Collaboration Data

## Power BI

- Piloted Power BI integration on the *100% Detailed Design* project
- Exported Bluebeam markup data into Excel, then import to Power BI
- Visualized comment status (open/closed), priority, and classification
- Tracked review progress and discipline involvement
- Enabled faster issue identification and resolution
- Provided clear insights for project leads and reviewers

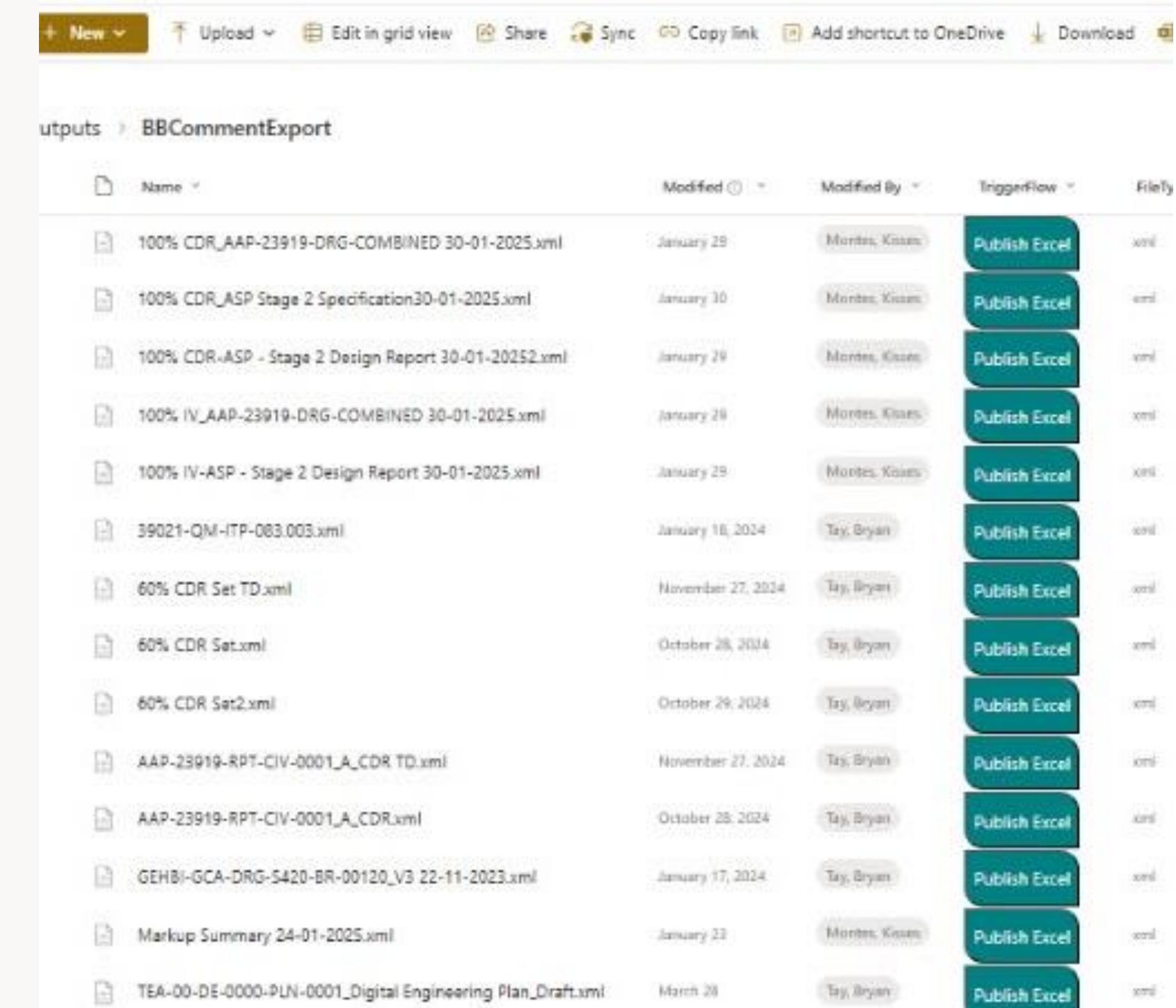


# Driving Quality Through Collaboration Data

## Power Automate

- Piloted on Perth
- Markup List exported from Bluebeam as **XML file**
- XML uploaded to a structured **SharePoint folder**
- **Power Automate workflow** reads XML and populates the project's **comment register**
- Automatically sends **email notifications** to stakeholders
- Reduces manual data entry and improves traceability
- Ensures timely and consistent review documentation

agementServices



Name	Modified	Modified By	TriggerFlow	File
100% CDR_AAP-23919-DRG-COMBINED 30-01-2025.xml	January 29	Montes, Kieran	<b>Publish Excel</b>	xml
100% CDR_ASP Stage 2 Specification30-01-2025.xml	January 30	Montes, Kieran	<b>Publish Excel</b>	xml
100% CDR-ASP - Stage 2 Design Report 30-01-2025.xml	January 29	Montes, Kieran	<b>Publish Excel</b>	xml
100% IV_AAP-23919-DRG-COMBINED 30-01-2025.xml	January 29	Montes, Kieran	<b>Publish Excel</b>	xml
100% IV-ASP - Stage 2 Design Report 30-01-2025.xml	January 29	Montes, Kieran	<b>Publish Excel</b>	xml
39021-QM-ITP-083.003.xml	January 18, 2024	Tay, Bryan	<b>Publish Excel</b>	xml
60% CDR Set TD.xml	November 27, 2024	Tay, Bryan	<b>Publish Excel</b>	xml
60% CDR Set.xml	October 26, 2024	Tay, Bryan	<b>Publish Excel</b>	xml
60% CDR Set2.xml	October 29, 2024	Tay, Bryan	<b>Publish Excel</b>	xml
AAP-23919-RPT-CIV-0001_A_CDR TD.xml	November 27, 2024	Tay, Bryan	<b>Publish Excel</b>	xml
AAP-23919-RPT-CIV-0001_A_CDR.xml	October 28, 2024	Tay, Bryan	<b>Publish Excel</b>	xml
GEHBI-GCA-DRG-5420-BR-00120_V3 22-11-2023.xml	January 17, 2024	Tay, Bryan	<b>Publish Excel</b>	xml
Markup Summary 24-01-2025.xml	January 23	Montes, Kieran	<b>Publish Excel</b>	xml
TEA-00-DE-0000-PLN-0001_Digital Engineering Plan_Draft.xml	March 20	Tay, Bryan	<b>Publish Excel</b>	xml

# Persona-Based Customization

## Flexible, Focused and Global

- Standardized toolsets and configurations for consistency
- Flexible setup tailored to each project's unique requirements
- Guided rollout using user/admin setup guides
- Quick training for Studio Session creators
- Used successfully in Sydney, Perth, and the US
- Toolsets with preloaded metadata for efficient markups

## STEP 4 : BLUEBEAM CONFIGURATIONS

*Double click the icon below to automatically load the custom configuration*

*Bluebeam Setup is done only once*

### PROJECT PROFILE



Custom columns,  
status and Tool  
Sets

User interface

### TOOL CHEST



Customized  
markups

May vary  
depending on  
project  
requirements

### CUSTOM COLUMNS



The data  
displayed in the  
markup list -  
columns

may vary  
depending on  
project  
requirements

# Regional Success

## Expanding Impact Across Borders

- Started with successful implementations in Australia (Sydney & Perth)
- Now supporting US projects with 6 training sessions delivered
- Project Managers proactively requesting setup support
- Bluebeam now included in new project proposals
- Demonstrates trust, scalability, and strategic value



# Outcomes & Outlook

## Driving Measurable Impact and Shaping What's Next

- Started with successful implementations in Australia (Sydney & Perth)
- Now supporting US projects with 6 training sessions delivered
- Project Managers proactively requesting setup support
- Bluebeam now included in new project proposals
- Demonstrates trust, scalability, and strategic value

The screenshot shows the Bluebeam Start Up Menu with options like 'Bluebeam Starter Kit', 'Bluebeam Cloud', and 'Bluebeam University'. Below it is a 'How to Get Started' guide with sections for 'Bluebeam Start Up Menu', 'Related Content' (with a 'Technical QA' link), 'Points of Contact' (listing three team members: Morris, Steve, Coyle, Steven, and King, Jonathan), and 'Version Information' (with tabs for 'Not yet using Revu Standard or Revu CAD', 'Currently using Revu Standard or Revu CAD', and 'Currently using Revu Advanced').

**Quick Links**

Request Profiles	Request Bluebeam	Admin Set-Up Guide
User Set-Up Guide	FAQ	Academy & Solutions
Profiles	Tool Cheat	Technical Support
Technical QA	Australia-Quality	Vendor Tips and Tricks

Download the Admin Set-up guide and the User Set-up guide. Open them with Bluebeam software to efficiently utilize the guidelines. Note that the Tool cheat and profiles provided are general and may vary depending on the specific project requirements.

**Related Content**

[Technical QA](#)

**Points of Contact**

Morris, Steve  
Project CAD Specialist

Coyle, Steven  
Digital Tools - Strategy

King, Jonathan  
Country Manager - APAC

**Version Information**

Not yet using Revu Standard or Revu CAD

Currently using Revu Standard or Revu CAD

Currently using Revu Advanced

**Basics**

Basics is designed for those who need to view and manage the same files and only need simple markings and measurements.

Please note that Basics does not have all the features that are in our legacy Revu Standard editions.

**Core**

Core is our most popular plan. It's like legacy Revu Standard or Revu CAD editions, but with some key differences. We recommend Core if you rely on parametric measurements for takeoffs and other core measurement and marking capabilities.

**Complete**

Complete is for organizations looking to synchronize workflows with the power of automation. Complete offers advanced markup capabilities, Quantity Link, and Batch Link automation. It's most like legacy Revu Advanced editions.

“

**Innovation is not about having  
the best ideas. It's about making  
ideas work consistently,  
collaboratively and at scale**

**Kisses Montes**

Principal CAD Tech, ARCADIS

Kisses Montes

Principal CAD Technician | Bluebeam Subject Matter Expert

ARCADIS

[angeline.montes@arcadis.com](mailto:angeline.montes@arcadis.com)