# ◭DSA  PR 18-09.BB18

## PROCEDURE: ELECTRONIC PLAN REVIEW FOR OVER-THE-COUNTER (OTC) PROJECTS USING BLUEBEAM 2018

**DISCIPLINES:** Design Professional of Record

**PURPOSE:** This procedure facilitates Division of the State Architect's (DSA) change from the paper design review process to a digital design review process using DSAbox, Bluebeam Studio Projects and Sessions. This document will introduce the new process for submitting OTC documents in a digital platform. The new back check and post approval document review steps are also outlined within. This procedure applies to Bluebeam 2018. For Bluebeam 2017 and earlier versions, refer to PR 18-09.BB17

**BACKGROUND:** DSA offers OTC project reviews for eligible projects (see DSA policy PL 07-02: Over-the-Counter Review of Projects Using Pre-Check Approved Designs) to expedite the review and approval process. DSA's OTC process is primarily intended for single-story relocatable buildings, and other simple projects, utilizing designs that have been "pre-approved" in accordance with DSA procedure PR 07-01: Pre-Check Approval.

All DSA reviews will be completed in a digital format using Bluebeam Studio Projects and Sessions. All new submittals by the Design Professional of Record will be submitted in PDF file format to DSAbox per PR 18-09. A Bluebeam EPR Administrator will then create a Bluebeam Studio Project for document control and Bluebeam Studio Sessions for collaborative design reviews as outlined in this procedure.

Each submitted project will have a single Bluebeam Studio Project. Within each Bluebeam Studio Project five Bluebeam Studio Sessions will be generated as required for plan review, addendums, revisions, deferred submittals and construction change documents. This gives organization to projects and allows for a well-managed project from registration through certification.

Bluebeam Studio Sessions allows for all Plan Reviewers to join a single session and comment on a single document set. Color coded markup tools will be used to distinguish each discipline's reviews. This new procedure reduces resources used and is in agreement with both the Governor's Office's and Department of General Services' sustainable policies and goals.

**SCOPE:** This procedure includes the steps to submit documents for an in-person OTC review. The Design Professional of Record will upload documents in DSAbox prior to the meeting to be validated by a DSA EPR Administrator. The DSA EPR Administrator will set up the Bluebeam Studio and transfer the files into Bluebeam Studio Project. The Plan Reviewer and Design Professional of Record will meet in person to confirm the submission is complete and the project qualifies for OTC review. The DSA Lead Plan Reviewer will upload documents to Bluebeam Studio Session. The DSA Plan Reviewers will review the plans in a Bluebeam Studio Session which will include a period for markups and comment incorporation. Once all comments are closed and the project is determined to be code compliant the documents will be approved by the EPR Administrator. All approved documents will be uploaded into DSAbox and Bluebeam Studio.

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NOTE: Prior to participating in the digital plan review see Appendix A for set up of a Bluebeam Studio Account

**PROCEDURE:**

NOTE: Refer to DSA PL 07-02: Over-the-Counter Review of Projects Using Pre-Check Approved Designs for qualifications, appointment scheduling and document submittal requirements

**1.      OTC DOCUMENT SUBMITTAL**

**1.1.    Installing Bluebeam and Setting up a Bluebeam Studio Account**

1.1.1.      Prior to preparing drawings, consult Appendix A to install Bluebeam, set up a Bluebeam Studio Account and join a demo session

**1.2.    Prepare Documents**

NOTE: This preparation is required on all submissions that will be put in DSAbox and Bluebeam.  Non-compliance with the following can be cause for the submittal to be rejected.

As described in this procedure Bluebeam eXtreme is necessary to prepare the PDF documents, if the software cannot be procured please contact DSA Regional Office for possible solutions at the following email accounts:

- Oakland – OakEPR@dgs.ca.gov
- Sacramento – SacEPR@dgs.ca.gov
- Los Angeles – LAEPR@dgs.ca.gov
- San Diego – SDEPR@dgs.ca.gov

1.2.1.      Prepare Scanned Drawings (If not applicable skip to 1.2.2)

Note: Scanned (raster) documents are not allowed, except when documents are not available in their native format, such as PC drawings and old referenced drawings, etc.  If scanned documents are used they shall be prepared as follows:

1.2.1.1.      If the file is an Image file (i.e. JEPG, TIFF, PNG, GIF, BMP) skip to 1.2.1.2.2

1.2.1.2.      If the File is a PDF file

1.2.1.3.      If the File is a PDF file

1.2.1.3.1.      Export file to JPEG – Go the File Menu (located at the top of the Bluebeam screen)

1.2.1.3.1.1.      Go to Export at bottom of menu

1.2.1.3.1.2.      Select JPEG

1.2.1.3.1.3.      Select New Folder

1.2.1.3.1.4.      Double left-click on the New Folder to open

1.2.1.3.1.5.      Select Save

1.2.1.3.1.6.      Close JPEG Viewer

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1.2.1.3.2. Convert Image file to PDF file – Go the File Menu

1.2.1.3.2.1. Select Create from Menu

1.2.1.3.2.2. Select From Multiple files

1.2.1.3.2.3. Browser window will open

1.2.1.3.2.4. Go to New Folder

1.2.1.3.2.5. Type Ctrl+A – to select all image files

1.2.1.3.2.6. Select Open

1.2.1.3.2.7. Stapler dialog will open

1.2.1.3.2.8. Select Advanced Button

1.2.1.3.2.9. Select 96 from the resolution image drop down

1.2.1.3.2.10. Select OK

1.2.1.3.2.11. Add a file name to the One Output File field

1.2.1.3.2.12. Select User source file folder

1.2.1.3.2.13. Click Okay

1.2.1.3.2.14. Select Staple

1.2.1.3.3. Combine Scanned Drawings with PDF Printed Files from CAD Program

1.2.1.3.3.1. Open all files

1.2.1.3.3.2. Go to Document menu

1.2.1.3.3.3. Select insert from menu

1.2.1.3.3.4. Select pages from document

1.2.1.3.3.5. Click Add Open Files

1.2.1.3.3.6. Highlight a file and use the up and down arrows to reorganize as needed

1.2.1.3.3.7. Click Okay

1.2.1.3.3.8. If further reorganization is needed use the thumbnail tab

1.2.1.3.3.9. Click and drag page to move, shift click for multiple files

1.2.2. Format Drawings

1.2.2.1. Provide sheet count on the sheet index and verify it matches Bluebeam sheet count

1.2.2.2. A blank area 2 ½ inches wide by 2 inches high must be

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created in the same location on all sheets for the DSA digital Identification Stamp

The only exception to this formatting requirement is PC drawings and existing relocatable building drawings

1.2.2.3. Export documents to PDF format per Appendix D – PDF Creation Guidelines

 1.2.2.3.1. Submittal needs to be combined in a single PDF that is 1 GB max

 1.2.2.3.2. If size exceeds 1 GB, the submittal shall be broken up into volumes

 1.2.2.3.3. To Check file size click document icon in upper left corner of interface window

1.2.2.4. Open PDF file in Bluebeam

1.2.2.5. Create bookmarks

 1.2.2.5.1. Review native file

  1.2.2.5.1.1. Audit Bookmarks

  1.2.2.5.1.2. Select Bookmarks

  1.2.2.5.1.3. Select Audit bookmarks form drop down menu confirm no broken bookmarks are found

  1.2.2.5.1.4. Confirm all sheet numbers and sheet labels are correct

  1.2.2.5.1.5. If everything has loaded correctly, continue to step 1.2.2.6.

  1.2.2.5.1.6. If anything has loaded incorrectly, delete previous bookmarks and continue to step 1.2.2.5.2

 1.2.2.5.2. Zoom into area on the document containing information for bookmark

 1.2.2.5.3. Go to Bookmarks Tab

 1.2.2.5.4. Create Bookmarks

 1.2.2.5.5. Page Range > Select All Pages

 1.2.2.5.6. Page Region > Click Select

 1.2.2.5.7. Select region one of bookmark – Sheet Number

  1.2.2.5.7.1. Example: G0001

  1.2.2.5.7.2. Click Add to select a second region for bookmark

 1.2.2.5.8. Select second region of bookmark – Sheet Title

  1.2.2.5.8.1. Example: COVER SHEET AND INDEX OF DRAWINGS

1.2.2.5.8.2. Example: G0001 COVER SHEET AND INDEX OF DRAWINGS

1.2.2.5.9. Click okay > Bookmarks will generate

1.2.2.5.10. Review bookmark label generation – sheet number and sheet name have been captured properly

1.2.2.5.11. If incorrect, double left click and change the title of the bookmark in question

1.2.2.5.11.1. Audit Bookmarks

1.2.2.5.11.2. Select Bookmarks

1.2.2.5.11.3. Select Audit bookmarks form drop down menu confirm no broken bookmarks are found

1.2.2.5.12. If broken bookmarks are found, repeat all steps in Section 1.2.2.5.4. and edit the page range in step 1.2.2.5.5 to include just the pages in question

1.2.2.6. Thumbnail Page Labels

1.2.2.6.1. Go to Thumbnail Tab

1.2.2.6.2. Click Create Page Labels > Click Okay

1.2.2.6.3. Page Labels will appear on Thumbnails

1.2.2.7. Nesting Bookmarks

1.2.2.7.1. After generating thumbnail page labels

1.2.2.7.2. Go to Bookmarks Tab

1.2.2.7.3. Select the first sheet in each section

1.2.2.7.4. Right click on first bookmark label from nesting group > Click Add > Click Add Before

1.2.2.7.5. Name new bookmark by section

1.2.2.7.6. Example: Structural

1.2.2.7.7. Select all "S" sheets and nest by pulling the documents over to right under Structural

1.2.2.7.8. Repeat for all disciplines

1.2.2.8. Flatten Existing Markups

1.2.2.8.1. Go to Document Menu > Select Flatten

1.2.2.8.1.1. Click Check All

1.2.2.8.1.2. Verify "Allow Markup Recovery Unflatten" is unchecked

1.2.2.8.1.3. Select Flatten

1.2.2.9. Remove Layers

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               1.2.2.9.1.    Go to Layer Tab

               1.2.2.9.2.    Select layers listed

                      1.2.2.9.2.1.    To select all quickly, select the top layer of the list, hold the shift key and select the bottom layer simultaneously

               1.2.2.9.3.    Click Delete Layer

               1.2.2.9.4.    Uncheck all options

               1.2.2.9.5.    Click Delete

        1.2.2.10.    Hyperlink Documents (Bluebeam eXtreme Required)

               1.2.2.10.1.    Go to Batch menu > Link > New

               1.2.2.10.2.    Select "Add Open Files"

               1.2.2.10.3.    Uncheck all non DWG_V# files

               1.2.2.10.4.    Click Next

               1.2.2.10.5.    Select Settings

                      1.2.2.10.5.1.    Select Filter Mode: "First from start"

                      1.2.2.10.5.2.    Select Filter Character: "' 'Space"

                      1.2.2.10.5.3.    Click Okay

               1.2.2.10.6.    Select Page Label

               1.2.2.10.7.    Then click "Generate"

               1.2.2.10.8.    Click "Run" to create hyperlinks

               1.2.2.10.9.    Click Finish and Close

               1.2.2.10.10.    Save Documents

        1.2.2.11.    Reference Drawings – All reference drawings shall be submitted as separate supporting documents per section 1.2.5

    1.2.3.    Format PDF Specification files (if applicable)

    1.2.4.    Specifications shall be combined to a single PDF

        1.2.4.1.    Flatten Existing Markups

               1.2.4.1.1.    Go to Document Menu > Select Flatten

                      1.2.4.1.1.1.    Click Check All

                      1.2.4.1.1.2.    Verify "Allow Markup Recovery Unflatten" is unchecked

               1.2.4.1.2.    Select Flatten

        1.2.4.2.    Create bookmarks

        The bookmarking procedure specified below is using Bluebeam. Other methods using native software (i.e. Microsoft

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Word) are beyond the scope of this procedure.

1.2.4.3. Bookmarks shall be for the first page of each section and be collapsible by the first page of each section

1.2.4.3.1. Review native file

1.2.4.3.2. Audit Bookmarks

1.2.4.3.2.1. Select Bookmarks

1.2.4.3.2.2. Select Audit bookmarks form drop down menu confirm no broken bookmarks are found

1.2.4.3.2.3. If everything has loaded correctly, continue to step 1.2.4.

1.2.4.3.2.4. If anything has loaded incorrectly, delete previous bookmarks and continue to step 1.2.3.4.2.

1.2.4.3.3. Zoom into area on the document containing information for bookmark

1.2.4.3.4. Go to Bookmarks Tab

1.2.4.3.5. Create Bookmarks

1.2.4.3.6. Page Range > Select Current Page

1.2.4.3.7. Page Region > Click Select

1.2.4.3.8. Select region of bookmark on page

Example: 05 12 00 STRUCTURAL STEEL

1.2.4.3.9. Click okay > Bookmark will generate

1.2.4.3.10. Review bookmark label generation – spec section and name have been captured properly

1.2.4.3.11. If incorrect, double left click and change the title of the bookmark in question

1.2.4.3.12. Repeat steps 1.2.3.4.4 through 1.2..3.4.10 for the first page of each spec section

1.2.4.3.13. Audit Bookmarks

1.2.4.3.13.1. Select Bookmarks

1.2.4.3.13.2. Select Audit bookmarks form drop down menu confirm no broken bookmarks are found

1.2.4.3.14. If broken bookmarks are found, repeat all steps in Section 1.2.3.4.4

1.2.4.3.15. Verify bookmarks match table of contents

1.2.4.3.15.1. If bookmarks are out of order click bookmark in question drag to new location

1.2.5.  Format PDF DSA 103 (if applicable)

1.2.5.1.  Flatten Existing Markups

1.2.5.1.1.  Go to Document Menu > Select Flatten

1.2.5.1.1.1.  Click Check All

1.2.5.1.1.2.  Verify "Allow Markup Recovery Unflatten" is unchecked

1.2.5.1.1.3.  Select Flatten

1.2.6.  Format PDF Supporting Documents

NOTE: Supporting documents include the additional documents required per DSA 3 Project Submittal Checklist (i.e. DSA forms, cut sheets, structural calculations, hydraulic calculations, geotechnical reports, existing drawings etc.)

1.2.6.1.  Bookmark the items listed in the table of contents or sheet index

NOTE: For structural calculations provide bookmarks that are broken down into its design elements. (i.e. Foundation Design shall be broken into non-shear wall booting design, sheer wall footing design, column footing design, etc.)

1.2.6.2.  Create bookmarks

1.2.6.2.1.  Review native file

1.2.6.2.1.1.  Audit Bookmarks

1.2.6.2.1.2.  Select Bookmarks

1.2.6.2.1.3.  Select Audit bookmarks form drop down menu confirm no broken bookmarks are found

1.2.6.2.1.4.  Confirm all sheet numbers and sheet labels are correct

1.2.6.2.1.5.  If everything has loaded correctly, continue to Section 1.2.5.3

1.2.6.2.1.6.  If anything has loaded incorrectly, delete previous bookmarks and continue to step 1.2.5.2.2.

1.2.6.2.2.  Zoom into area on document containing information for bookmark

1.2.6.2.3.  Go to Bookmarks Tab

1.2.6.2.4.  Create Bookmarks

1.2.6.2.5.  Page Range > Select Current Page

1.2.6.2.6.  Page Region > Click Select

1.2.6.2.7.  Select region of bookmark on page

1.2.6.2.7.1.  Example: FOOTING DESIGN

    1.2.6.2.8. Click okay > Bookmarks will generate

    1.2.6.2.9. Review bookmark label generation – sheet number and sheet name have been captured properly

    1.2.6.2.10. If incorrect, double left click and change the title of the bookmark in question

    1.2.6.2.11. Audit Bookmarks

      1.2.6.2.11.1. Select Bookmarks

      1.2.6.2.11.2. Select Audit bookmarks form drop down menu confirm no broken bookmarks are found

    1.2.6.2.12. If broken bookmarks are found, repeat all steps in Section 1.2.5.2.3.

    1.2.6.2.13. For documents that do not have Bluebeam readable font (i.e. scanned documents or handwritten sheet labels)

      1.2.6.2.13.1. Go to page requiring bookmark

      1.2.6.2.13.2. Click add bookmark, ribbon icon with green plus icon

      1.2.6.2.13.3. Enter bookmark name

   1.2.6.3. Flatten Existing Markups

    1.2.6.3.1. Go to Document Menu > Select Flatten

      1.2.6.3.1.1. Click Check All

      1.2.6.3.1.2. Verify "Allow Markup Recover Unflatten" is unchecked

      1.2.6.3.1.3. Select Flatten

   1.2.6.4. Non PDF Supporting Documents – Other supporting documents shall be provided (i.e. excel files, engineering software files, etc.)

**1.3. Document Submission**

  1.3.1. As required per [DSA PL 07-02: Over-the-Counter Review of Projects Using Pre-Check Approved Designs](#) upload submittal documents to DSAbox two business days prior to appointment

  1.3.2. Refer to Section 1 of this document for instructions on document preparation

  1.3.3. Name files with V1 Version label per the table below:

| Initial Plan Review Submittal Docs with Version 1 (_V1) Identifier | Document Type | Naming Convention (For no increment) | Naming Convention with Increment (Increment 1 example shown) |
|---|---|---|---|
| | Drawings | DWG_V1 | INC 01_DWG_V1 |
| | Specifications | SPC_V1 | INC 01_SPC_V1 |

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| Initial Plan Review Submittal Docs with Version 1 (_V1) Identifier | DSA 103 | 103_V1 | INC 01_103_V1 |
|---|---|---|---|
| | Supporting Document Type (examples shown) | Structural Calcs_V1 | INC 01_Structural Calcs_V1 |
| | | Hydraulic Calcs_V1 | INC 01_Hydraulic Calcs_V1 |
| | | Geotechnical Report_V1 | INC 01_Geotechnical Report_V1 |
| | | DSA1_V1 | INC 01_DSA1_V1 |
| | | DSA1-MR_V1 | INC 01_DSA1-MR_V1 |
| | | A#_____ Existing Drawings | INC 01_A#____Existing Drawings |

1.3.4. If the preparation of documents is not sufficient, the DSA EPR Administrator will send an email notification to update the formatting

    1.3.4.1. Revised documents will need to be resubmitted to DSAbox prior to appointment

    Note: All submittal documents shall be uploaded at the same time

    BOX folder: OFFICE-APPNO

        AE – AE License #

          Submissions to DSA

            Plan Review Phase

    1.3.4.2. If documents were not uploaded into DSAbox, DSA will send email notification to the Design Professional of Record and the client with instructions requiring the project to be re-registered and rescheduled for OTC

1.3.5. DSA will receive a Box notification that the project Files have been uploaded

1.3.6. If documents were not uploaded into DSAbox, DSA will send an "Incomplete Notice" notification with instructions requiring projects to be re-registered

1.3.7. If the preparation is sufficient, the DSA EPR Administrator will upload the documents into Bluebeam Studio Project and the Lead Plan Reviewer will upload the documents into the Session. Then an in person OTC will take place.

1.3.8. DSA fees are due at the time of the scheduled appointment. The fees shall be physically delivered to DSA in the form of Check or a money order. No electronic transfer, credit card or cash payments are allowed. The DSA Application # shall be included on the check or money order.

## 2. OTC DOCUMENT REVIEW

### 2.1. Phase 1 Review

2.1.1. The Design Professional shall go to the DSA Regional Office at the scheduled OTC appointment

    NOTE: Access to Bluebeam Studio by the Design Professional may be required. Refer to Appendix A for sets on setting up a Bluebeam Studio Account

2.1.2. DSA Plan Reviewer will confirm that the submission is complete

    2.1.2.1. If the submission is complete, the Plan Reviewer will review the documents to determine whether or not they are OTC qualified

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2.1.2.1.1. If the submission is not OTC qualified, a Regular Project Review submission will be required as referenced in PR 18-04

2.1.2.1.2. If the submission is OTC qualified, the DSA Plan Reviewer will proceed to review plan

2.1.2.2. If the Plan Reviewer decides the submission is not complete, the OTC appointment will have to be rescheduled

**2.2. Phase 2 Review**

2.2.1. DSA Plan Reviewer will open prepared documents from the Bluebeam Studio Project and Session

2.2.2. DSA Plan Reviewer will make comments in the Bluebeam Plan Review Session

**2.3. Incorporate Comments**

2.3.1. To incorporate DSA comments

2.3.1.1. View comments in Markups located on the bottom of the Bluebeam Studio Session

2.3.1.2. Filter comments based on individual DSA Plan Reviewer (as required)

2.3.1.2.1. Go to Bluebeam Studio tab

2.3.1.2.2. Click Session

2.3.1.2.3. Select session containing documents for review

2.3.1.2.4. Under Attendees right-click on DSA Plan Reviewer name and Select Filter Markups

2.3.1.3. Incorporate comments into documents

2.3.1.3.1. In Bluebeam Studio Session select each comment

2.3.1.3.2. Double left click on status column

2.3.1.3.3. Select INCORPORATE from DSA Back Check Status menu (Incorporating comment turns red mark-up to green) If the comment is inadvertently incorporated, the comment can be changed to OPEN until ready to be changed to INCORPORATE

2.3.1.3.4. To provide a response to the DSA comment, right-click the comment and select reply and type a response in the open text box

2.3.1.3.5. Verify all comments have been "Incorporated"

2.3.1.3.5.1. Expand Markup list

2.3.1.3.5.2. Select Color, if red comments occur select comments and INCORPORATE

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2.3.1.4.    While in the Bluebeam Studio Session ensure online connectivity, under the Studio tab confirm that the plug icon is green and connected

**2.4.    Code Compliancy**

2.4.1.    DSA Plan Reviewer will confirm if documents are code compliant

2.4.1.1.    If the documents are not code compliant, the Design Professional will make necessary fixes using one (or a combination) of the following:

2.4.1.1.1.    Make corrections in the Bluebeam Studio Session during back check appointment

2.4.1.1.2.    Make corrections outside of the Bluebeam Studio Session during the back check appointment

2.4.1.1.2.1.    Prepare drawings per Section 1

2.4.1.1.2.2.    Upload the revised documents to the Bluebeam Studio Project Submission folder for back check

2.4.1.1.3.    Make corrections after the back check appointment and schedule an In Person Back Check per PR 18-04 Electronic Plan Review for Design Professional Section 4.3

2.4.1.2.    If documents are code compliant, the DSA EPR Administrator will approve and proceed with stamp out process

2.4.1.2.1.    Stamped documents will be placed in the Bluebeam Studio Project Approval folder by the DSA EPR Administrator and uploaded to DSAbox

**3.    POST APPROVAL DOCUMENTS**

**3.1.    Refer to Sections 5-8 of PR 18-04**

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## APPENDIX A

### NOMENCLATURE

| | |
|---|---|
| **Bluebeam Studio Project** | Digital space to manage project files and project review sessions. |
| **Bluebeam Studio Session** | Collaborative digital space for reviewing, commenting of documents and the closeout of comments. |
| **Consultant Plan Reviewer** | A plan reviewer hired and trained by DSA to preform document review and the back check with the design professional. |
| **Design Professional** | The design professional in responsible charge of the project, or his or her authorized representative. |
| **DSAbox** | A cloud-based storage site where DSA project files are located. |
| **DSA Point of Contact** | DSA Employee assigned to a consultant reviewer to complete internal DSA tasks, uploading resubmittal documents, updating eTracker completion percentages, etc. |
| **Electronic Back Check** | A paperless DSA back check performed using a computer and monitors. |
| **EPR Administrator** | A DSA EPR Administrator will set-up Bluebeam Studio Projects and Session, and will assign collaborators in DSAbox, Bluebeam Studio Projects and Sessions. |
| **Lead Plan Reviewer** | The DSA plan reviewer who arranges the back check with the design professional and the other plan reviewers, and notifies DSA EPR Administrator when the plan review documents are approvable, usually the structural reviewer. |
| **OTC Review** | DSA offers OTC project review for eligible projects to expedite the review and approval process. DSA's OTC process is primarily intended for single-story relocatable buildings, and other simple projects, utilizing designs that have been pre-approved in accordance with DSA procedure PR 07-01: Pre-Check Approval. |
| **Plan Review Tracking Table** | A document (_PR Tracking Table.pdf) that is placed in the Plan Review Session and is used to keep track of the plan review status of each document.  This document is for DSA use only. |
| **Record Set** | The documents that get approved, stamped, and uploaded to the DSABox and Bluebeam Studio Project Approved folder. |
| **Registration Administrator** | The DSA Registration Administrator will monitor the initial submittals to DSABox and update eTracker after fees and submittal documents have been received by DSA. |

# ELECTRONIC PLAN REVIEW FOR OVER-THE-COUNTER PROJECTS: DESIGN PROFESSIONAL OF RECORD USING BLUEBEAM 2018

## SETUP OF BLUEBEAM STUDIO ACCOUNT

**1. INSTALLING BLUEBEAM**

**1.1.** If you cannot procure Bluebeam Revu or eXtreme, then download the free Bluebeam software from the following link: https://www.bluebeam.com/solutions/vu and use the View mode in Revu 2018

Note: Bluebeam eXtreme is necessary to prepare the PDF documents, see section 1.2 for additional information

**2. SETUP BLUEBEAM STUDIO ACCOUNT**

2.1.1. First Time User – Section 2.2 – Setup with New Account

2.1.2. Previous Bluebeam User – Section 2.3 – Setup/Verify Existing Account

**2.2. Setup with New Account**

2.2.1. Open Bluebeam Studio Software

2.2.2. Window will appear

2.2.2.1. Click I Accept

2.2.3. Go to Studio Tab on left-hand column

2.2.3.1. Click Sign In

2.2.3.2. Bluebeam Studio window will open

2.2.3.3. Select Create one at bottom of screen

2.2.4. Add your email

2.2.5. Enter Display Name (First Last Company)

2.2.5.1. Example: John Doe, ABC Company

2.2.6. Create a password (Must include: upper case, lower case, # and special character)

2.2.7. Confirm Password

2.2.8. Click Create Account

2.2.9. Click I Accept

2.2.10. You have now created your Bluebeam Studio account

2.2.10.1. If you receive and error message please see Appendix B

2.2.11. Open Welcome email from Bluebeam Studio

2.2.11.1. Click Validate Email

2.2.11.2. Return to Bluebeam

2.2.12. Go to Revu menu > Preferences

2.2.13. Go to General

2.2.13.1. Confirm name in user box (First Last, Company)

2.2.14. Go to Tools

2.2.14.1. Click Markup at top of Preferences window

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2.2.14.2.   Check Autosize Text Box and Callout Markups

2.2.15.   Click Okay

2.2.16.   Proceed to Section 3.

**2.3.   Setup/Verify Existing Account**

2.3.1.   Open Bluebeam Studio Software

2.3.2.   Go to Revu menu > Preferences

2.3.3.   Go to General

2.3.3.1.   Confirm name in user box (First Last, Company)

2.3.4.   Go to Studio

2.3.4.1.   Click Login icon (arrow pointing left)

2.3.5.   Enter Email and Password

2.3.5.1.   Check Keep me signed in

2.3.5.2.   Click Sign In

2.3.6.   Click Servers at top of Preferences window

2.3.7.   Double left click email address

2.3.8.   Check name for proper naming convention

2.3.8.1.   First Last, Company

Example: John Doe, ABC Company

2.3.8.2.   If Incorrect go to Appendix B Section 1.3

2.3.8.3.   Click OK

2.3.9.   Go to Tools

2.3.9.1.   Click Markup at top of Preferences window

2.3.9.2.   Check Autosize Text Box and Callout Markups

2.3.10.   Go to General

2.3.10.1.   Confirm Name in user box (First Last, Company)

2.3.11.   Click Okay

2.3.12.   Proceed to Section 3.

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3.  **DEMO BLUEBEAM STUDIO PROJECT/SESSION**

     (NOTE: The following procedure is a one-time process)

     3.1.1.  Join Bluebeam Studio Project

          3.1.1.1.  Click Join

          3.1.1.2.  Enter Bluebeam Studio Project ID Number: **543-932-143**

          3.1.1.3.  Bluebeam Studio Project Folder structure contains the following, to expand collapsed folders left click on parent folder on left-hand panel or double click folders on main screen

| Bluebeam Project Folders | Description |
|---|---|
| Project Root – OFFICE_APPNO INC# PROJECT NAME | |
| Increment Number | |
| A.  Submission | This is the Bluebeam Studio Project folder where the Design Professional submits Version 2 (_V2) and greater documents |
|    1.  Plan Review Documents | |
|    2.  Post Approval Documents | |
|      A.  Deferred Submittals | |
|      B.  Revisions | |
|      C.  Addenda | |
|      D.  Construction Change Documents | |
| B.  DSA Review | This Bluebeam Studio Project folder is for DSA USE ONLY.  The Design Professional and Consultant Reviewer (if applicable) will not see it listed in the Bluebeam Studio Project |
|    1.  Plan Review Documents | |
|    2.  Post Approval Documents | |
|      A.  Deferred Submittals | |
|      B.  Revisions | |
|      C.  Addenda | |
|      D.  Construction Change Documents | |
| C.  Approval | This is the Bluebeam Studio Project folder where DSA places the approved documents |
|    1.  Plan Review Documents | |
|    2.  Post Approval Documents | |
|      A.  Deferred Submittals | |
|      B.  Revisions | |
|      C.  Addenda | |
|      D.  Construction Change Documents | |

          3.1.1.4.  Documents will be submitted to the submission folders by the Design Professional

          3.1.1.5.  DSA Plan reviewers will copy documents from the submission folders to the DSA Review folders.

          3.1.1.6.  Five DSA review Sessions will be set-up as needed to review submittals including the following:

               3.1.1.6.1.  Plan Review

               3.1.1.6.2.  Deferred Submittals

3.1.1.6.3.    Revisions

3.1.1.6.4.    Addenda

3.1.1.6.5.    Construction Change Documents

3.1.1.7.    After joining the Bluebeam Studio Project there are several ways to join the Bluebeam Studio Sessions within each project

3.1.1.8.    Open Bluebeam Software

3.1.1.9.    Connect to Bluebeam Studio

3.1.1.10.    Under Studio tab select Join

3.1.1.11.    Ender Bluebeam Studio Session ID Number: **545-676-364**

3.1.1.12.    Click Okay

3.1.2.    Additional methods to join Bluebeam Studio Sessions

3.1.2.1.    Via Bluebeam Studio Project

3.1.2.1.1.    Right Click Project name

3.1.2.1.2.    Select Show Sessions

3.1.2.1.3.    Select Plan Review Session to join

3.1.2.2.    Via Bluebeam Studio Session List

3.1.2.2.1.    Select session containing document for review

3.1.2.3.    While in the Bluebeam Studio Session ensure online connectivity, under the Studio tab confirm that the plug icon is green and connected

3.1.3.    Check that naming convention is correct under "Attendees"

3.1.3.1.    First Last, Company

3.1.4.    Open test document listed under "Documents"

3.1.4.1.    DWG_V1

3.1.5.    View Bookmarks

3.1.5.1.    Located under blue ribbon tab

3.1.5.2.    Select a Page

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**APPENDIX B**

**1.    TROUBLESHOOTING IN BLUEBEAM**

**1.1.    Login Errors**

    1.1.1.    IF - You created new account, email is already in use

        1.1.1.1.    Close sign in page (X) top right corner

        1.1.1.2.    Click Sign In on Bluebeam Studio tab

        1.1.1.3.    Login using Company email

    1.1.2.    IF - Forgot Password, email or password provided is incorrect

        1.1.2.1.    Click forgot password

        1.1.2.2.    Enter email in Reset Password window

        1.1.2.3.    Follow emailed instructions (Email is from Bluebeam, If it does not appear in in inbox, check spam or other folders)

        1.1.2.4.    Return to Appendix A Section 2.2.5

    1.1.3.    IF - Other Errors, the email or password provided is incorrect

        1.1.3.1.    Confirm email and password were entered properly

        1.1.3.2.    Clicked forgot password – no email received

        1.1.3.3.    Confirm email was entered properly

        1.1.3.4.    Check spam folder in email

        1.1.3.5.    Account may not exist – Go to Appendix B Section 2.2

**1.2.    Incorrect Naming Convention**

    1.2.1.    Your name in the edit server window is incorrect

        1.2.1.1.    If it is selectable and you can edit it, do so at this time

            1.2.1.1.1.    First Last, Company

            1.2.1.1.2.    Return to Section

        1.2.1.2.    If it is grayed out and cannot be selected, go to studio.bluebeam.com

        1.2.1.3.    Login using @company.com email and Bluebeam password

        1.2.1.4.    Go to My Profile

            1.2.1.4.1.    Update Default Name

            1.2.1.4.2.    First Last, Company

            1.2.1.4.3.    Click Update Profile

        1.2.1.5.    Return to Bluebeam Software

            1.2.1.5.1.    Log out

            1.2.1.5.2.    Return to Section 4.2.7

**1.3.    Change Bluebeam Default Save Location to Bluebeam Projects**

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1.3.1.    Go to Revu menu > Preferences

1.3.2.    In the preferences window on the left hand side bar, go to Studio

1.3.3.    Select Studio

1.3.4.    Uncheck the box "Open and save files to Studio from toolbar only"

1.3.5.    Click Okay

**1.4.    Send Bluebeam Studio Support Ticket**

1.4.1.    Across the top of the Bluebeam Window go to Help Menu

1.4.2.    Click Report and Issue

1.4.3.    Attach Log Files window will appear

1.4.3.1.    Click Yes to send all information to Bluebeam Studio

1.4.4.    Email will open in local email application

1.4.5.    Include a brief description of the issue and send

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**APPENDIX C**

**DOCUMENT NAMING TABLE**

| | Document Type | Naming Convention | Naming Convention with Increment (Increment 1 example shown) |
|---|---|---|---|
| Initial Plan Review Submittal Docs with Version 1 (_V1) Identifier | Drawings | DWG_V1 | INC 01_DWG_V1 |
| | Specifications | SPC_V1 | INC 01_SPC_V1 |
| | DSA 103 | 103_V1 | INC 01_103_V1 |
| | Supporting Document Type (examples shown) | Structural Calcs_V1 | INC 01_Structural Calcs_V1 |
| | | Hydraulic Calcs_V1 | INC 01_Hydraulic Calcs_V1 |
| | | Geotechnical Report_V1 | INC 01_Geotechnical Report_V1 |
| | | DSA1_V1 | INC 01_DSA1_V1 |
| | | DSA1-MR_V1 | INC 01_DSA1-MR_V1 |
| | | A#_____ Existing Drawings | INC 01_A#_____Existing Drawings |
| | Additional blank pages as required by DSA | DSA Additional Comments | INC 01_DSA Additional Comments |

| | Document Type | Naming Convention | Naming Convention with Increment (Increment 1 example shown) |
|---|---|---|---|
| Resubmitted Plan Review Docs with Version 2* (_V2*) Identifier | Drawings | DWG_V2 | INC 01_DWG_V2 |
| | Specifications | SPC_V2 | INC 01_SPC_V2 |
| | DSA 103 | 103_V2 | INC 01_103_V2 |
| | Supporting Document Type (examples shown) | Structural Calcs_V2 | INC 01_Structural Calcs_V2 |
| | | Hydraulic Calcs_V2 | INC 01_Hydraulic Calcs_V2 |
| | | Geotechnical Report_V2 | INC 01_Geotechnical Report_V2 |
| | | DSA1_V2 | INC 01_DSA1_V2 |
| | | DSA1-MR_V2 | INC 01_DSA1-MR_V2 |
| | | A#____ Existing Drawings | INC 01_A#_____ Existing Drawings |
| | Additional blank pages as required by DSA | DSA Additional Comments | INC 01_DSA Additional Comments |

*All documents submitted after the initial submittal must have sequential version numbers

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### APPENDIX D

NOTE: These guidelines are provided to help develop consistent formatting across all disciplines. Design Professionals who submit electronic documents to DSA shall follow the guidelines below for the construction of PDF documents.

### 1.    PDF CREATION GUIDELINES

### 1.1.    Formatting

1.1.1.    Alignment: plan drawings created in CAD program must line up when overlaid electronically.

1.1.2.    Consistent plot location in paper space

1.1.3.    Consistent gridline visibility across disciplines

1.1.4.    Naming convention of structures should be consistent across disciplines.

1.1.5.    Sheet size and orientation of sheets should be consistent
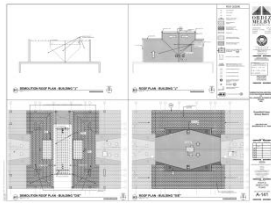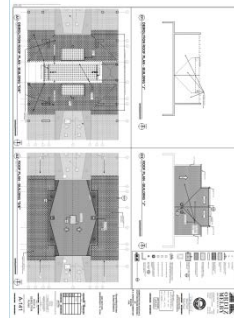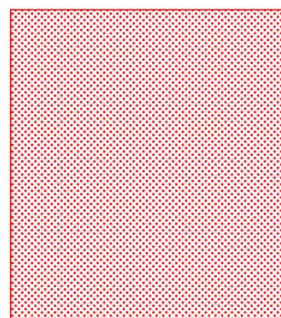


**CORRECT**                          **INCORRECT**

1.1.6.    All submittals should be black and white.  The use of colors on PDFs should be kept to a minimum as not to impact file size and rendering speed

1.1.6.1.    If colors are used they should not be used in a way that will impact the content of the document if printed in black and white

1.1.7.    Minimize the use of hatch fills.  If hatch fills are used then provide efficient fills (see below ) to prevent slowdown rendering speed and to reduce
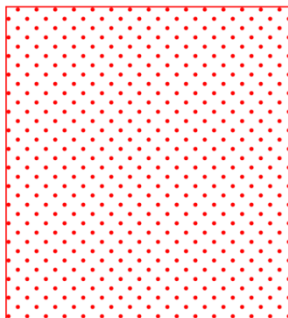


**CORRECT**                          **INCORRECT**

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      1.1.8.     Use true type font to allow search ability within the PDF document

**1.2.    PDF Creation**

      1.2.1.     PDF's should be created directly from authoring application

      1.2.2.     Use Vector based lines. No Raster and no scanned documents except when documents are not available in their native format such as PC drawings and old referenced drawings, etc. Scanned documents shall be legible and free from streaks and shall be prepared as specified per Section 1.2.1

      1.2.3.     Remove all unnecessary viewports.

      1.2.4.     Remove all Meta Data

      1.2.5.     Maintain output scale when printing to PDF. Use Print to Scale, do not Print to Fit Page.

      1.2.6.     Do not submit password protected documents or 'Restricted' documents.

      1.2.7.     Do not use digital signatures via Sign Document option.  See images below for clarification of what is ACCEPTED and what is NOT ACCEPTED.
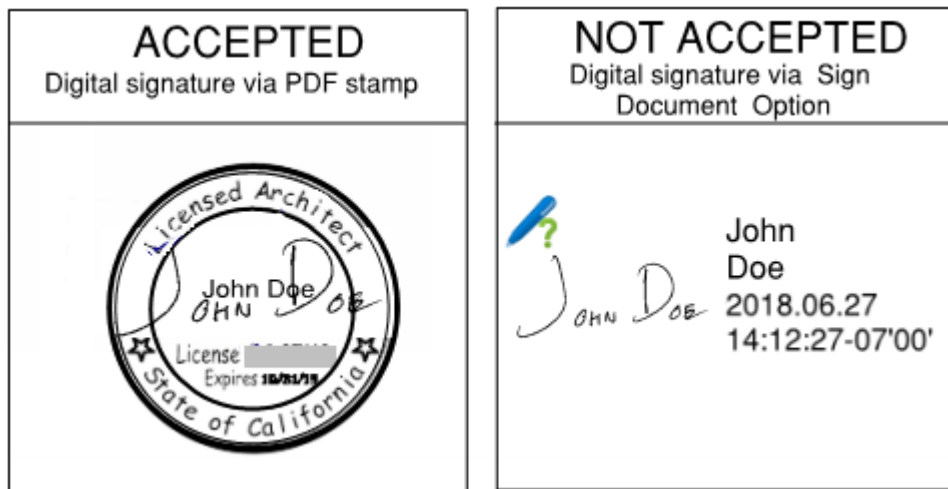
A Division of the State Architect (DSA) Procedure documents are a process or series of steps that DSA staff and/or external stakeholders must complete in order to fulfill one or more administrative requirements of DSA's plan and construction review programs.