



# Seven Keys to Sustainable WordPress Projects, Inspired by Buildings

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WordCamp Portland, OR

November 3, 2018

Nick Halsey



Formerly Fishels Furniture  
5 SE Martin Luther King, Jr. Blvd., Portland

<http://djcoregon.com/news/2018/02/20/photos-burnside-bridgehead-building-brought-down/>

## Building Longevity: Buckman Building (ca. 1912 – 2017) Demolition

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<http://nick.halsey.co/>



# Benson Polytechnic High School Reconstruction

Owner:

Portland Public Schools

Project Cost (est.):

\$269 million

Planning & Design Schedule:

2016 – 2021

Construction Schedule:

2021 – 2024

Typical schedule, budget, and process for large building projects

<https://www.pps.net/Page/1838>

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<http://nick.halsey.co/>



Public Building Renovation Projects:  
Portland Building, Edith Green-Wendell Wyatt Federal Building, Washington County Public Services Building

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Built in 1982 for \$29 million

Re-building 2018 – 2020 for \$195 million

<https://www.portlandoregon.gov/portlandbuilding>

**Efficiency: The Portland Building**

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Built in 1974 as a generic office tower - Re-built 2013 as an icon for environmental sustainability

*Photos via SERA Architects / Nick Halsey*

<http://www.seradesign.com/projects/edith-green-wendell-wyatt-federal-building/>

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**Sustainability: Edith Green – Wendell Wyatt Federal Building**

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The Collective on Fourth  
Construction Progress as of October, 2018

<http://www.nextportland.com/2016/02/22/4th-harrison-approved/>

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Efficiency vs. Sustainability: Post-Tensioned Concrete Flat-Slab Structures

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Built in 1990  
Re-Building 2017 – 2019 targeting seismic resiliency  
<http://www.seradesign.com/2017/05/safe-enough-to-stay/>

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**Resiliency: Washington County Public Services Building**

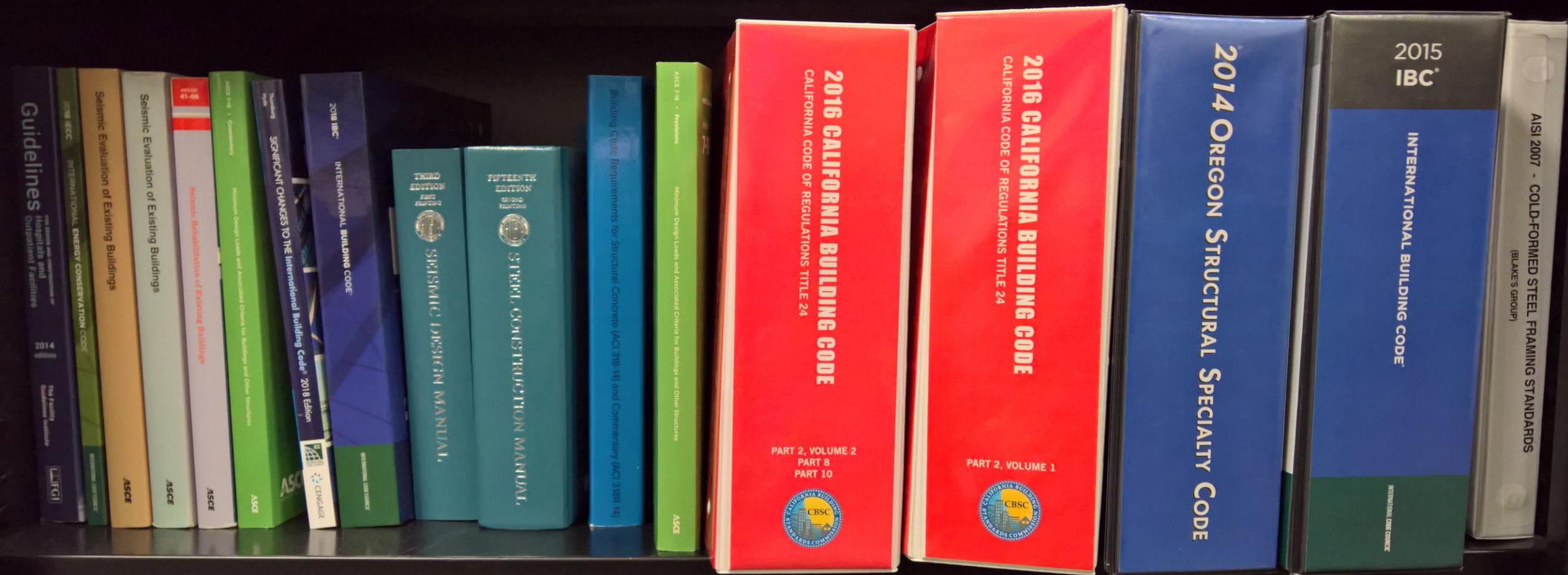
11/3/2018 | 8



# Building Codes



## Web Platform Standards



Localized, legal requirements for building construction and occupancy  
Fire, Life Safety, Egress, Accessibility, Materials, and more  
<https://www.portlandoregon.gov/bds/36807>

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# 1. Building Codes



# WEB DESIGN AND APPLICATIONS

On this page → [technology topics](#) • [news](#) • [upcoming events and talks](#)

Web Design and Applications involve the standards for building and Rendering Web pages, including HTML, CSS, SVG, device APIs, and other technologies for Web Applications (“WebApps”). This section also includes information on how to make pages accessible to people with disabilities (WCAG), to internationalize them, and make them work on mobile devices.

## HTML & CSS

HTML and CSS are the fundamental technologies for building Web pages: HTML (html and xhtml) for structure, CSS for style and layout, including WebFonts. Find resources for good Web page design as well as helpful tools.

## JavaScript Web APIs

Standard APIs for client-side Web Application development include those for Geolocation, XMLHttpRequest, and mobile widgets. W3C standards for document models (the “DOM”) and technologies such as XBL allow content providers to create interactive documents through scripting.

## Graphics

W3C is the home of the widely deployed PNG raster format, SVG vector format, and the Canvas API. WebCGM is a more specialized format used, for example, in the fields of automotive engineering, aeronautics.

## Audio and Video

Some of the W3C formats that enable authoring audio and video presentations include HTML, SVG, and SMIL (for synchronization). W3C is also working on a timed text format for captioning and other applications.

## Accessibility

W3C’s Web Accessibility Initiative (WAI) has published Web Content Accessibility Guidelines (WCAG) to help authors create content that is accessible to people with disabilities. WAI-ARIA gives

## Internationalization

W3C has a mission to design technology that works across cultures and languages. W3C standards such as HTML and XML are built on Unicode, for instance. In addition, W3C has published guidance for authors

Semantics, accessibility, data structure

HTML, CSS, JavaScript, Device APIs, WCAG, etc.

<https://www.w3.org/standards/webdesign/>

# 1. Building Codes: Web Platform Standards

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# Zoning Code



## The WordPress Philosophy



Rendering of Block 216 looking south along 9<sup>th</sup> avenue (November, 2018 proposal)

*GBD Architects via City of Portland*

<http://www.nextportland.com/2018/09/12/block-216-dar2/>

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<http://nick.halsey.co/>

**2. Zoning Code: Block 216, Portland's potential 5<sup>th</sup> tallest tower**

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Block 216 Perspective, SE Corner at SW Alder & 9<sup>th</sup> (November, 2018 proposal)

*GBD Architects via City of Portland*

<http://www.nextportland.com/2018/09/12/block-216-dar2/>

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<http://nick.halsey.co/>

## 2. Zoning Code: Block 216 & the Green Loop

## Out of the Box

“Great software should work with little configuration and setup...”

## Design for the Majority

“Many end users are non-technically minded... these are the users that we design the software for...”

## Decisions, not Options

With every option, you ask users to make a decision... avoid putting the weight of technical choices on end users

## Clean, Lean, and Mean

“The core should provide features that 80% of end users will actually use... “ customize the remaining 20%

## Strive for Simplicity

“Every version of WordPress should be easier and more enjoyable to use than the last”

## Deadlines Are Not Arbitrary

Good deadlines encourage more regular releases, reducing the importance of features landing in a particular release

## The Vocal Minority

“The number of people creating content on the internet represents less than 1% of people viewing the content”

## Our Bill of Rights

The four core freedoms of the GPL: to use, modify, redistribute, and redistribute for any purpose

The “zoning code” for WordPress projects

<https://wordpress.org/about/philosophy/>

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## Implementation

1. Focused
2. Simplified
3. Generalized
4. Automated

## Process

5. Iterative
6. Attentive
7. Open

The “zoning code” for WordPress projects

<https://wordpress.org/about/philosophy/>

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# Design Review



Peer & User / Testing & Feedback



5 MLK, DAR 1 and DAR 2 proposed view from SE 3rd Ave.

*GREC Architects via City of Portland*

<http://www.nextportland.com/2016/10/05/5-mlk-dar2/>

### 3. Design Review: 5 MLK, Proposed Designs

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5 MLK rendered view from the southwest

*GREC Architects via City of Portland*

<http://www.nextportland.com/2017/06/20/5-mlk-approved/>

### 3. Design Review: 5 MLK, Approved Design

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<http://nick.halsey.co/>



5 SE Martin Luther King Blvd. Portland, OR  
Construction progress as of October, 2018

<https://celloexpressions.com/photography/tag/5-mlk/>

### 3. Design Review: 5 MLK Today

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Installed

Featured

Popular

Latest

Favorites

Feature Filter

Search themes ...



**Halsey Creative Works**  
Artists and scientists showcasing bold and innovative ideas.

**Linework WordPress Theme**

Linework is a clean small business theme designed to showcase and adapt to your brand. With a custom logo, the ability to customize every color in the theme with live preview, featured images, and a menu and widget area, you can make Linework your own quickly and easily. Linework is at its best on sites with a few main pages and also supports a homepage blog.

*Linework is a clean, light, dynamic, and highly-customizable canvas where your content shines and your brand flourishes.*

Built around a dynamic canvas of lines, Linework features a simple, traditional layout that puts the focus on your content. Customize the colors, density, and animation of the linework graphic, which is unique and custom with every page load. Enjoy customizing your site with instant live previews of theme options in the customizer.

© 2016 Halsey Creative Works | Proudly powered by WordPress | Theme: Linework by Halsey Themes

Current: Linework

Customize

**ADIRONDACK**

HOME POSTS THE EYES HAVE IT YOUTH

PANORAMA

VIEW MORE

MAYA ANGELOU

Perhaps travel cannot prevent misery, but by demonstrating that all peoples cry...

VIEW MORE

Adirondack

Live Preview

Cello Expressions Music, WordPress, and more...

Concrete Canoe: DiSCovery II

04 10 14

For the second year, I was a part of USC ASCL's Concrete Canoe Team. We had a great year, placing 6th overall in our competition a year after placing 14th. The Concrete Canoe competition is one of the biggest competitions for civil engineering students in the country, with hundreds of schools participating each year. USC is in the Pacific

Figure/Ground

Live Preview

**FUKASAWA**

HOME ABOUT ME PAGE TEMPLATES ARCHIVE TEMPLATE FULL WIDTH TEMPLATE SAMPLE PAGE

Window Snip

Home Sample page Testimonial Menu Item

**Garfunkel**

You're shaking my confidence daily

HOME ABOUT HITCHCOCK DROPDOWN STYLE GUIDE

**HITCHCOCK**

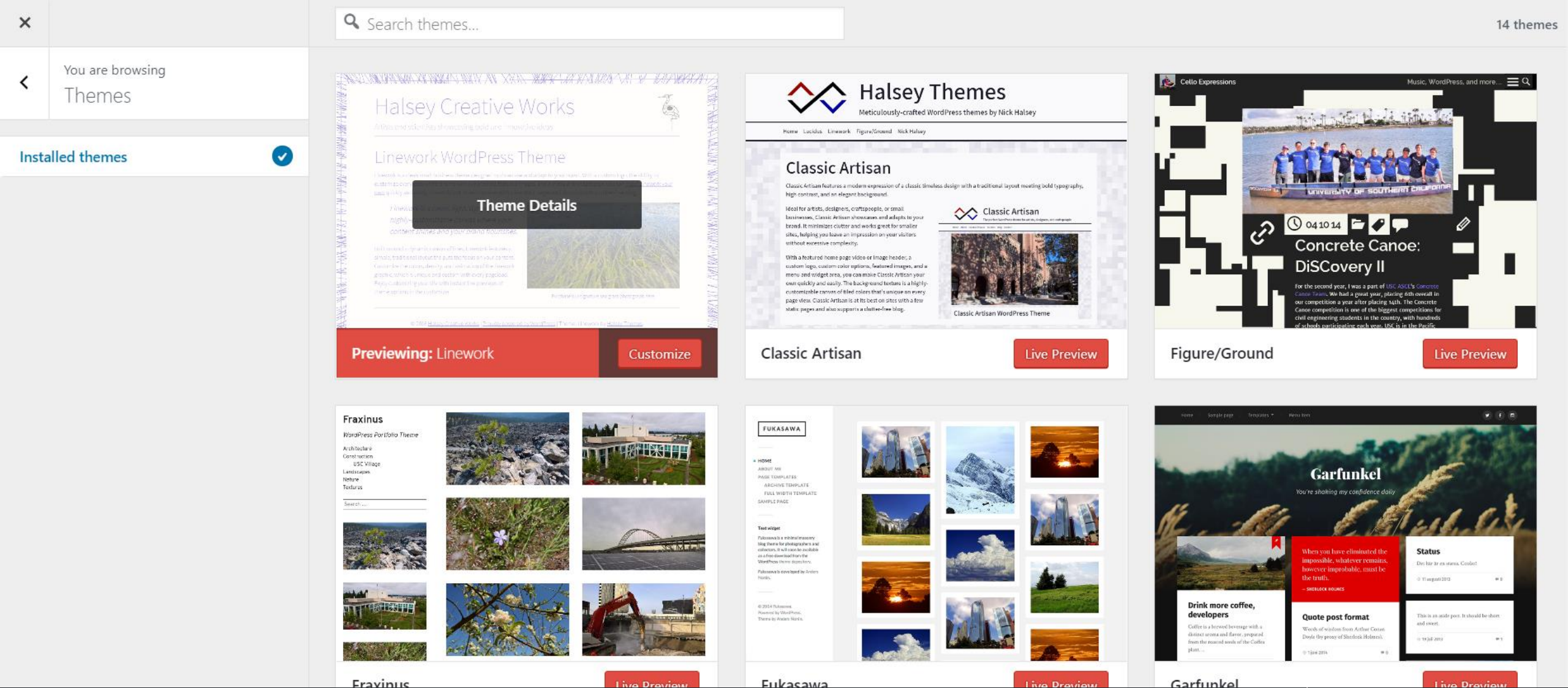
A Minimal Portfolio Theme for Designers, Photographers and Other Creatives

Customize theme install design, October 2016 proposal

<https://make.wordpress.org/core/2016/10/03/feature-proposal-a-new-experience-for-discovering-installing-and-previewing-themes-in-the-customizer/>

WordCamp Portland 2018 | Nick Halsey | <http://nick.halsey.co/>

### 3. Peer Feedback: Core Theme Installation (Customizer)



Customize theme install design, October 2017 proposal (shipped in WordPress 4.9)  
<https://make.wordpress.org/core/2017/10/24/a-new-themes-experience-in-the-customizer/>

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 Nick Halsey |  
<http://nick.halsey.co/>

# 3. Peer Feedback: Core Theme Installation (Customizer)

# Modular Construction



## Content Structure



University of Southern California – USC Village Precast Façade

Los Angeles, CA – Completed 2017

<https://celloexpressions.com/photography/tag/usc-village/>

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## 4. Modular Construction: Precast/Prefab Façade Panels

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# Complete Sheet Music Library

Welcome to Cello Expressions' Sheet Music Library. Sort by columns by clicking on the headings; view every piece under a designation by clicking on the sheet music details and PDF download page (in a new tab). A note on difficulty: these are rough (and potentially inconsistently categorized) and is labeled as "easier" doesn't necessarily mean it's easy. All arrangements are by Nick Halsey, except where noted otherwise. If he is not listed as the arranger, the piece is a transposed public domain piece for cellos. Embedded recordings are by Cello Expressions Cello Ensemble, YouTube recordings are by Boulogne Cello Ensemble, or request performance tips, VST simulated recordings, or new arrangement, please contact us. Most arrangements can also easily be arranged for other instruments.

Title	Composer	Genre	Difficulty	# of Parts
Es ist ein Ros' entsprungen (Op. 122 No. 8) <span>New</span>	Johannes Brahms	Classical (Romantic)	mixed	4
Finlandia Hymn <span>New</span>	Jean Sibelius	Classical (Romantic)	mixed	4
Metamorphosis on Prokofiev's Toccata - I. Preludio-Corale <span>New</span>	Lawrence Liu	Modern/Atonal	mixed	5-6
Game of Thrones Theme Song <span>New</span>	Ramin Djawadi	Theme Song	intermediate	4
Silent Night (Duet) <span>New</span>	Franz Xaver Gruber	Holiday	advanced	2
March in D <span>New</span>	Nick Halsey	Classical	mixed	4
Auld Lang Syne <span>New</span>	Scots Folk Song (lyrics by Robert Burns)	Classical	mixed	4
Chorale from Cantata BWV 43 - "Ermunter dich, mein schwacher Geist" <span>New</span>	Johann Sebastian Bach	Classical	intermediate	4

Now Playing: Etude #1 for Four Cellos (Nick Halsey) 0:09

## Cello Expressions Sheet Music Library

Free compositions and arrangements by Nick Halsey

Search ...

### INSTRUMENTATIONS

- 2 Cellos 3 Cellos
- 4 Cellos 5 Cellos
- 6 Cellos 7 Cellos 8 Cellos 10 Cellos
- Alto Bass Bassoon Cello
- Cello Choir Cello Duet
- Cello Ensemble
- Cello Quartet
- Cello Trio Chimes Clarinet
- Drums Duet English Horn
- Expanded Cello

Search ...

	Genre	Parts
<b>A Repeating Alleluia</b> By Calvin Hampton	Classical, Modern Era	4 Cellos, Cello Choir
<b>Angels We Have Heard on High</b> By Traditional	Holiday	3 Cellos, Cello
<b>Tallis' Canon</b> By Thomas Tallis	Classical, Early Music	4 Cellos, Cello Ensemble
<b>The First Noel</b> By Traditional	Holiday	3 Cellos, Cello
<b>Philanthropic Reflections</b>	Classical, Modern	2 Cellos, Cello

Links on a page & custom database tables → custom post type, taxonomies, metadata, blocks

- <https://celloexpressions.com/music/>
- <https://celloexpressions.com/blog/new-sheet-music-library-the-story/>

## 4. Content Structure: Sheet Music Library

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# Retrofit



Iterate



Built in 1998

Retrofitted in 2017 for seismic resiliency

<http://www.seradesign.com/2018/03/braced-for-safety-washington-countys-law-enforcement-center/>

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<http://nick.halsey.co/>

## 5. Seismic Retrofit: Washington County Law Enforcement Center

**Halsey Creative Work** HOME BLOG ABOUT ABOUT THE TESTS IMAGE ALIGNMENT ON A PAGE LOREM IPSUM ABOUT CONTACT LINEWORK WORDPRESS THEME

Artists and scientists showcasing bold and innovative ideas

HOME

BLOG PAGE

ABOUT THE TESTS

DOG, BIRDS, WAVES

POST FORMATS

PUMP HOUSE, GARDEN, AND FOREST

LINEWORK WORDPRESS THEME

Improved user experience through instant previews of changes

Enabled by the customize selective refresh and postMessage APIs in WordPress 4.5

<https://celloexpressions.com/blog/fourteen-colors-gets-instant-live-preview/>

## 5. Iterate: Instant Live Preview for the Fourteen Colors Plugin

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<http://nick.halsey.co/>

× Publish ⚙️

< Customizing Linework

Settings for the linework theme, customizing the linework background and other design elements.

**Linework Color**  
Select Color

**Background Color**  
Select Color

**Initial Line Density**  
[Slider]

Animate Linework  
*Animate the linework background graphic, drawing new lines over time.*

Fade in Page  
*Showcase the linework graphic by fading in the page contents with a brief delay*

zackhalsey.co Hide Controls [Icons]

# Halsey Creative Works

Artists and scientists showcasing bold and innovative ideas



## WordPress Websites for Halseys

Welcome to halsey.co. We're using this domain to host personal websites for Halsey family members, as well as their name-related businesses. We're planning on eventually adding a history of the Halsey family in the United States here too. Are you interested in a website at your-first-name.halsey.co or an email address of your-first-name@halsey.co? Email Nick @ this domain to see if we can work something out.

### Halsey Sites

 [Zack Halsey.](#)  [Dave Halsey.](#) [Kimberly Halsey.](#)

Home Nick Halsey Dr. Kimberly Halsey A Fourty Niner's Diary Halsey Themes

Improved user experience through instant previews of changes

Enabled by the customize selective refresh and postMessage APIs in WordPress 4.5

<https://celloexpressions.com/blog/a-strategy-for-custom-colors-in-the-customizer/>

## 5. Iterate: Instant Live Color Preview for the Linework Theme

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<http://nick.halsey.co/>

# Adaptive Reuse





Built ca. 1912

Re-built 2018

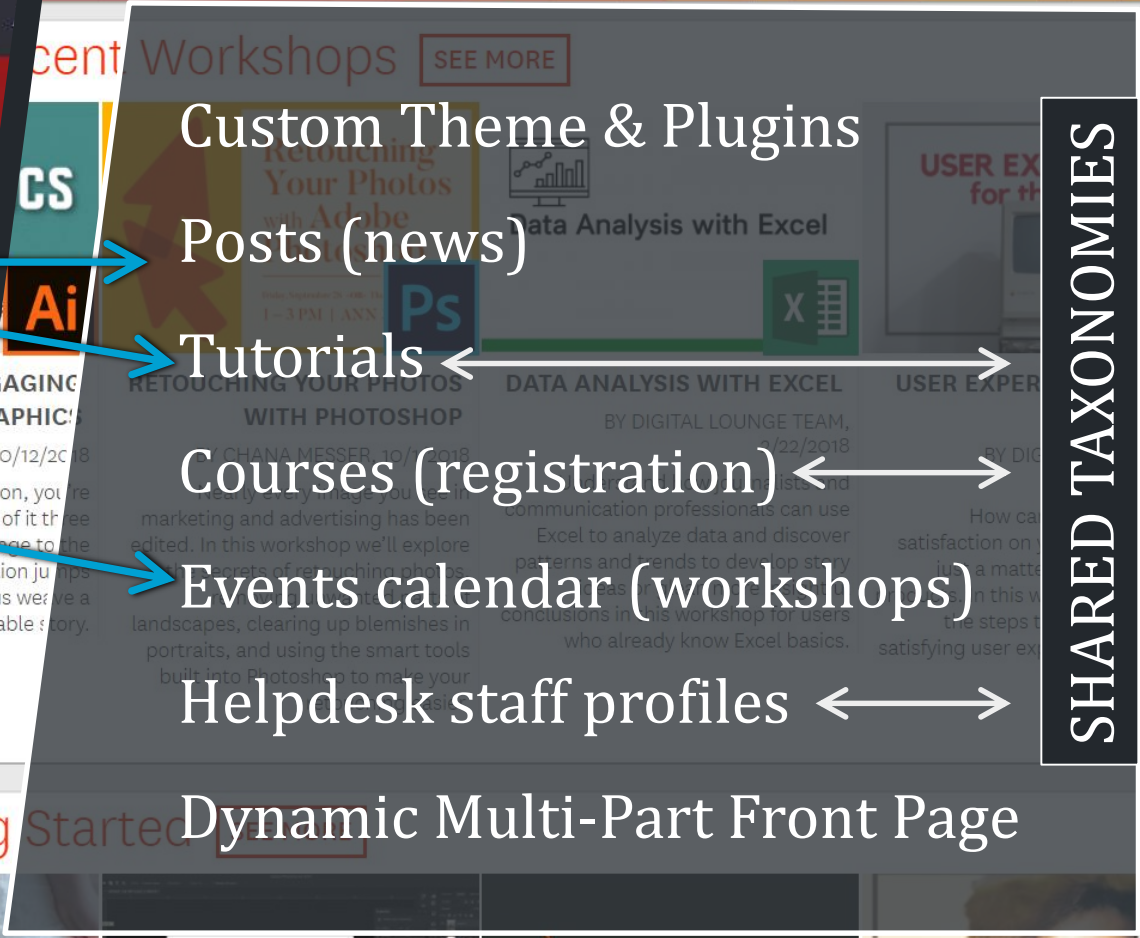
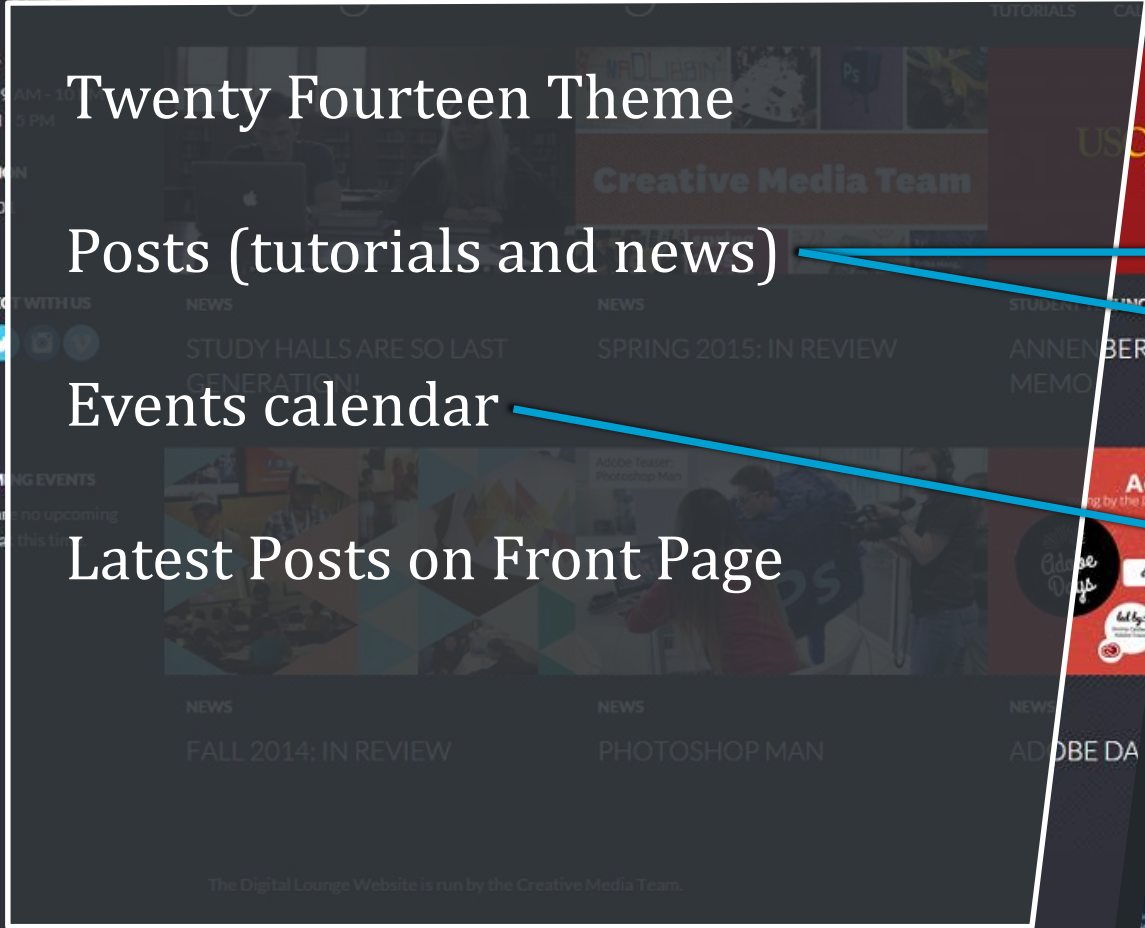
<http://reddonsalmon.com/>

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<http://nick.halsey.co/>

## 6. Adaptive Reuse: Redd East, Foundry → Event Center



SHARED TAXONOMIES

Twenty Fourteen Theme

Custom Theme & Plugins

Posts (tutorials and news)

Posts (news)

Events calendar

Tutorials

Latest Posts on Front Page

Courses (registration)

Events calendar (workshops)

Helpdesk staff profiles

Dynamic Multi-Part Front Page

Digital Lounge at the University of Southern California Annenberg School for Communication and Journalism

Website: physical space with helpdesk, collaborative workspace, workshops, courses, and digital tutorials

<http://www.annenbergdl.org/>

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## Tool: Illustrator

Adobe Illustrator is an industry-standard vector graphics app that helps you create digital artwork in today's world. This includes logos, icons, sketches, typography and complex illustrations for print, web, interactive, video and mobile. Our tutorials will help you get started with Illustrator to build simple shapes and other more advanced projects.



CREATING ENGAGING  
**INFOGRAPHICS**

THURS 10/4 • 1 - 3 PM

**CREATING ENGAGING INFOGRAPHICS**

BY CHANA MESSER, 10/12/2018

When you hear information, you're likely to only remember 10% of it three days later. Add a relevant image to the information, and your

**ILLUSTRATOR CERTIFICATION COURSE, THURSDAYS 6PM - 8PM**

WITH CHANA MESSER, FALL 2018

Course full, 5 on the waitlist

Adobe Illustrator  
Using the Illustrator Pen Tool

**ILLUSTRATOR PEN TOOL**

BY TRIET NGUYEN, 3/23/2018

There are many things you can do in Illustrator, but it can be agreed that two of the most vital tools that open other doors are the Pen Tool and Pathfinder tool.

**Introduction to Illustrator: Creating a Simple Postcard**

**INTRODUCTION TO ILLUSTRATOR: CREATING A SIMPLE POSTCARD**

BY CHANA MESSER, 2/26/2018

Want to add more skills to your resume? Adobe Illustrator is an industry-standard vector graphics app that helps you create

**MAKING A SIMPLE, COHESIVE ICON SET IN ILLUSTRATOR**

Thursday, 01/25  
1:00 - 3:00pm

**MAKING A SIMPLE, COHESIVE ICON SET IN ILLUSTRATOR**

BY CHANA MESSER, 1/26/2018

Learn how easy it is to create your own custom cohesive icon set in Adobe Illustrator. We'll show you good examples of icon sets and

Digital Lounge at the University of Southern California Annenberg School for Communication and Journalism

"Tool" taxonomy cross-linking tutorials, courses, news, and helpdesk staff

<http://www.annenbergdl.org/>

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<http://nick.halsey.co/>

# Balancing Disruptive Innovation



Gutenberg, Change, and the Future



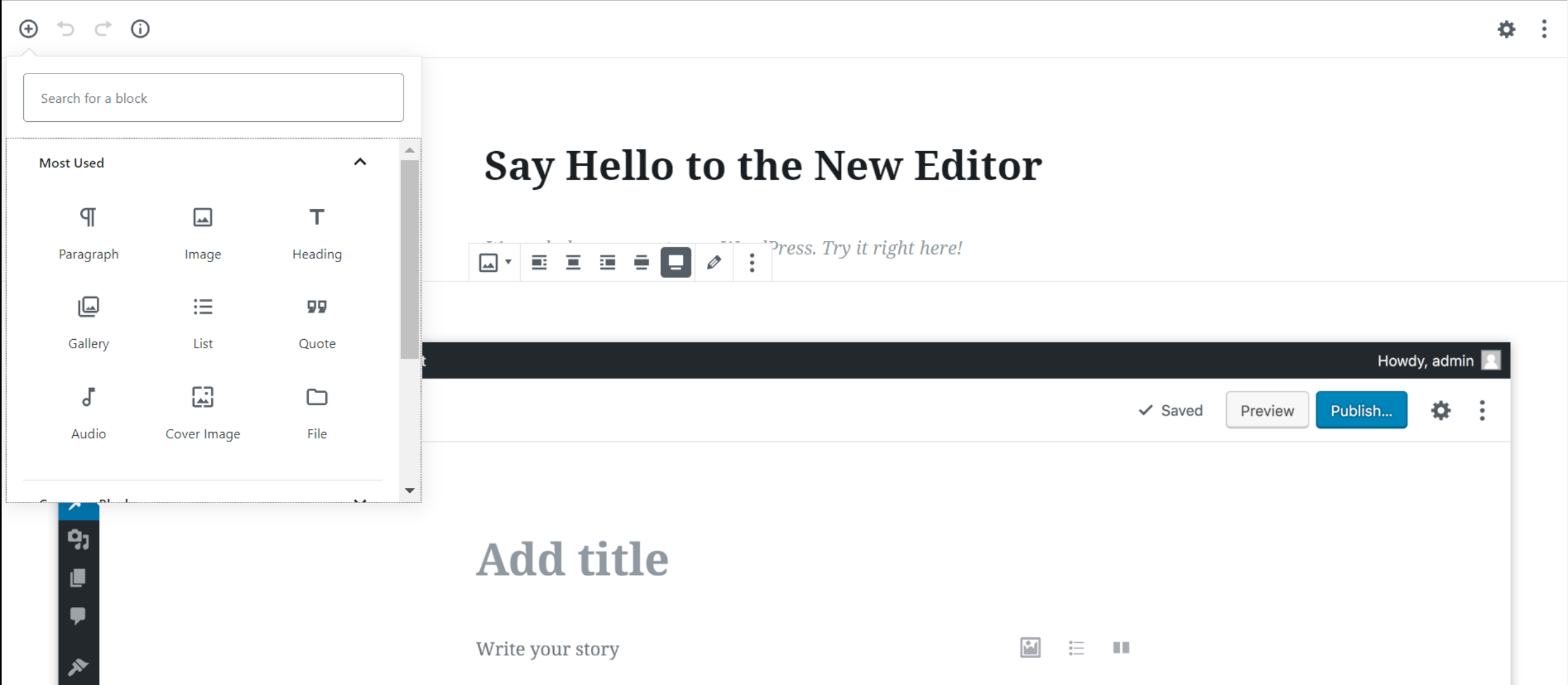
Proposed 11-story mass-timber tower (permitted for construction but unfunded, on hold as of July 2018)

*Lever Architecture via City of Portland*

<https://www.frameworkportland.com/>

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Nick Halsey |  
<http://nick.halsey.co/>

## 7. Distributive Innovation: Framework



The new block-based editor (and more to come)  
Scheduled to ship with WordPress 5.0 in November, 2018  
<https://wordpress.org/gutenberg/>

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<http://nick.halsey.co/>

## 7. Disruptive Innovation: “Gutenberg”

# Seven Keys to Sustainable WordPress Projects



1. Building Codes
  2. The WordPress Philosophy
  3. Design & Code Review
  4. Modular Construction
- 
5. Retrofit / Iterate
  6. Adaptive Reuse
  7. Balance Disruptive Innovation