

PROPERTY MANAGER TRAINING

# Reading

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# Construction

# Plans

Intro to Plan Reading | 7 Modules

# About Us

*WCI-GC has been a full-service General Contractor since 1989*

*Offices in Walnut Creek and Silicon Valley*

*Specializing in tenant improvements, healthcare, manufacturing  
and building upgrades*

*WCI has 8 PM's, 8 Superintendents, 50 field crews, 75 total strong*

*WCI is 100% Employee Owned*

# SESSION AGENDA

**01** What is a Drawing Set?

**02** The Title Block & Drawing Index

**03** Floor Plans

**04** Elevations & Sections

**05** Scale, Dimensions & Annotations

**06** Symbols, Legends & Abbreviations

**07** Putting It All Together

MODULE 01

# What is a Drawing Set?

*Understanding the 6 types of construction drawings*

C

## Civil / Site Plans

Property boundaries, grading, utilities & parking layout

A

## Architectural Plans

Floor layouts, exterior views, wall types & building sections

S

## Structural Plans

Beams, columns, foundations & load-bearing elements

M

## Mechanical Plans

HVAC systems, ductwork & equipment locations

P

## Plumbing Plans

Pipe routes, fixture locations & drainage systems

E

## Electrical Plans

Panel locations, wiring, outlets & lighting circuits

MODULE 02

# The Title Block & Drawing Index

*Your starting point for any drawing sheet*

## Project Name & Address

Confirms you have the right drawing set

## Sheet Number

Discipline prefix — e.g., A-201

## Sheet Title

Describes content — e.g., "First Floor Plan"

## Scale

e.g., 1/4" = 1'-0"

## Revision Block

Changes after original issue

## Issue Date

Confirms most current version

## Architect / Engineer Stamp

Drawings are professionally sealed

## Drawing Index / Sheet List

Lists all sheets with titles

## SHEET INDEX EXAMPLE

SHEET INDEX	
<u>GENERAL</u>	
G0.00	COVER SHEET
G0.10	SPECIFICATIONS
G0.11	SPECIFICATIONS
G0.20	SYMBOLS AND ABBREVIATIONS
G0.30	CALGREEN SHEET
<u>ARCHITECTURAL</u>	
A0.02	SITE PLAN - FOR REFERENCE ONLY
A0.10	SITE - DETAILS - FOR REFERENCE ONLY
A0.20	EXITING PLAN - FLOOR 13
A1.10	DEMOLITION FLOOR PLAN - FLOOR 13
A1.20	DEMOLITION CEILING PLAN - FLOOR 13
A2.10	FLOOR PLAN - FLOOR 13
A2.20	REFLECTED CEILING PLAN (RCP) - FLOOR 13
A2.40	FINISH PLAN - FLOOR 13
A2.60	POWER AND SIGNAL PLAN
A4.10	ELEVATOR LOBBY PLAN AND ELEVATIONS
A4.20	ENLARGED RESTROOM PLANS, SCHEDULES & ELEVATIONS
A5.10	INTERIOR ELEVATIONS
A5.10	DOOR & WINDOW SCHEDULE
A9.00	DETAILS - METAL STUD FRAMING
A9.10	DETAILS - WALLS
A9.20	DETAILS - OPENINGS
A9.30	DETAILS - CEILINGS
A9.40	DETAILS - CASEWORK
A9.50	DETAILS - ACCESSIBILITY
<u>MECHANICAL</u>	
M1.1	SCHEDULE, NOTES, LEGEND, INDEX AND DETAILS
M2.0	13TH FLOOR MECHANICAL DEMO PLAN
M2.1	13TH FLOOR MECHANICAL PLAN
<u>ELECTRICAL</u>	
E-0.0	COVER SHEET
E-0.1	TITLE 24
E-0.2	TITLE 24 - CONTINUED
E-1.0	POWER & SIGNAL PLAN
E-2.0	LIGHTING PLAN
E-3.0	PANEL SCHEDULES
<u>PLUMBING</u>	
P0.01	PLUMBING NOTES, LEGENDS AND SCHEDULES
P2.10	PLUMBING FLOOR PLAN
P3.01	PLUMBING ENERGY COMPLIANCE SHEETS

MODULE 03

# Floor Plans

*The most common drawing type — seeing the building from above*

1

## Exterior Walls

Thick solid lines forming the building perimeter

2

## Interior Walls

Thinner solid lines dividing interior spaces

3

## Doors

Gap in wall + quarter-circle arc showing swing direction

4

## Windows

Three parallel lines drawn within a wall segment

5

## Stairs

Parallel lines with arrow labeled UP or DN

6

## Plumbing Fixtures

Standardized symbols for toilets, sinks, tubs

7

## Columns

Solid squares or circles at wall intersections

8

## Room Labels

Text showing room name and sometimes square footage

9

## North Arrow

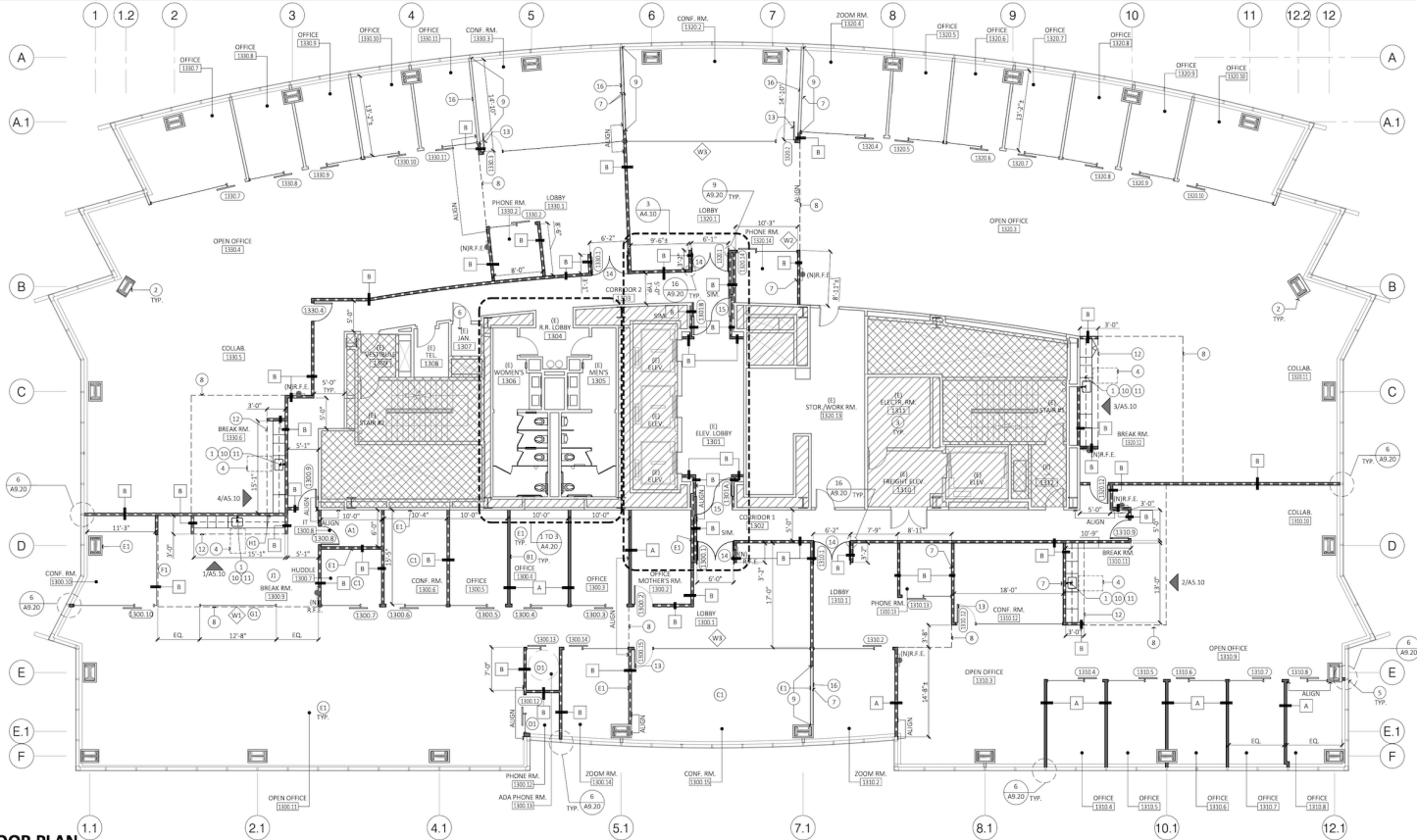
Indicates orientation — which side faces which direction

10

## Reference Marks

Circles with numbers pointing to detail or section sheets

# Floor Plan



**PROPOSED FLOOR PLAN**

1/8" = 1'-0"

MODULE 04

# Elevations & Sections

*Understanding vertical relationships in the building*

## Elevation Drawings

*A straight-on view of the building's exterior face — like looking at it from outside.*

### As a property manager, look for:

- Building height and roofline shape
- Exterior materials and finishes
- Window and door placement
- Accessible entry slopes
- Labeled by compass direction (North, South, East, West Elevation)

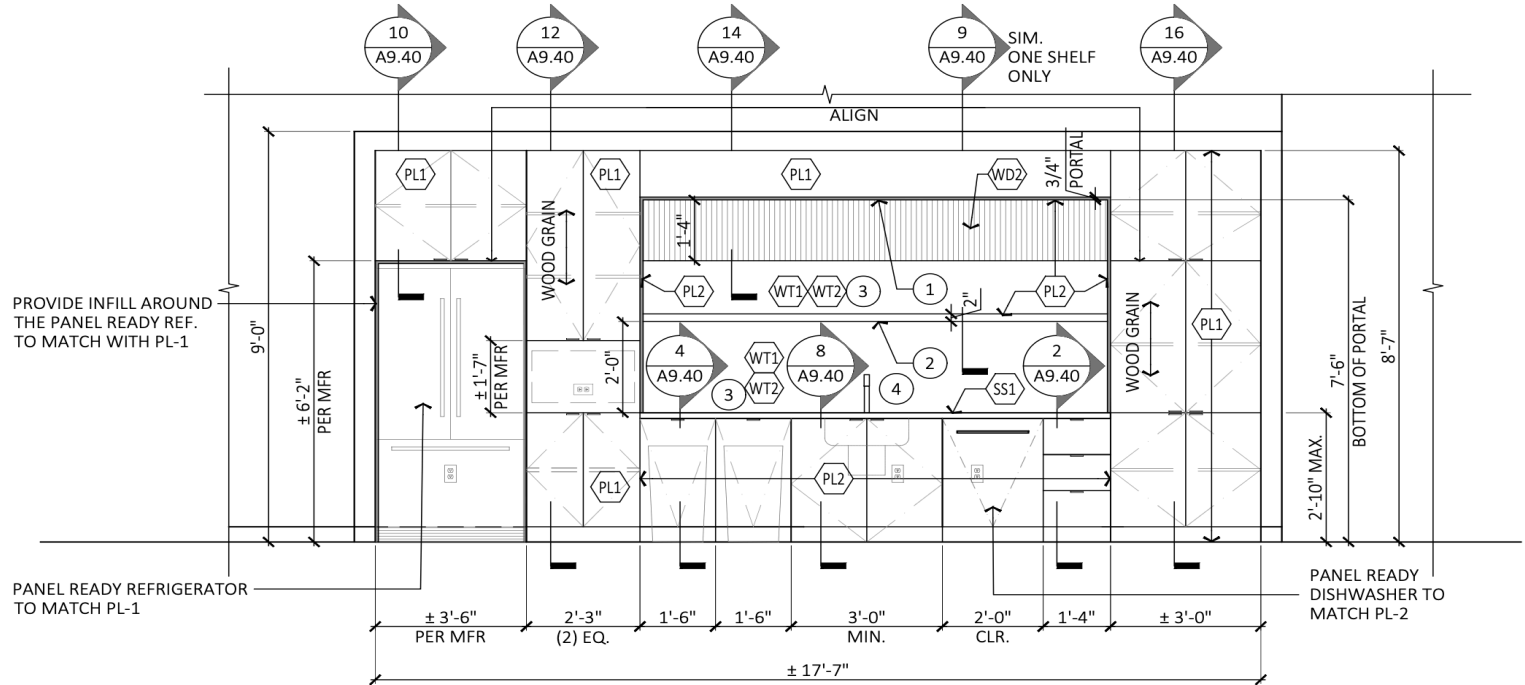
## Section Drawings

*A vertical cut through the building — like slicing a layer cake and viewing the cross-section.*

### As a property manager, look for:

- Floor-to-ceiling & floor-to-floor heights
- Structural members (beams, joists)
- Mechanical shaft and chase locations
- Crawl space or basement depth
- Roof slope and construction assembly

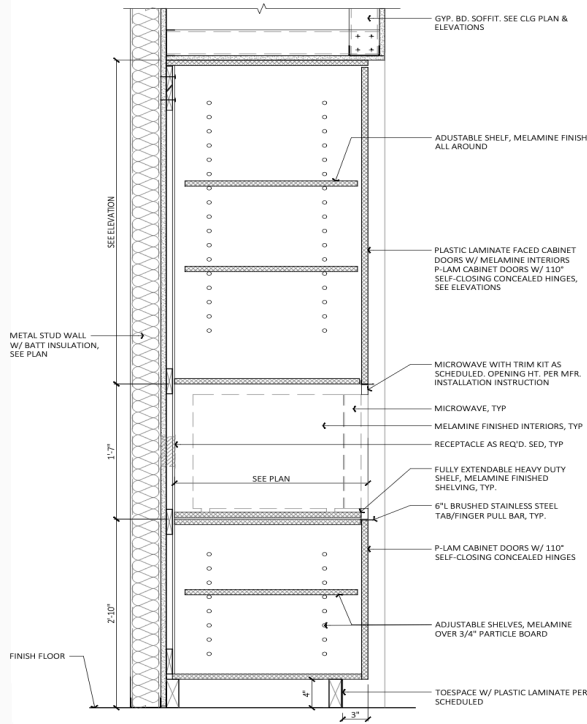
1A. ELEVATION @ ELEVATOR LOBBY | Scale: 3/8" = 1'-0"



## 3. INTERIOR ELEVATION - BREAK ROOM #1320.12

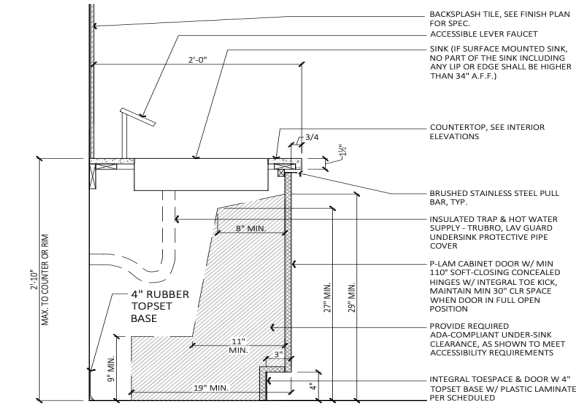
SCALE: 3/8"=1'-0"

LOUVER WOOD PANEL | Scale: 3" = 1'-0"



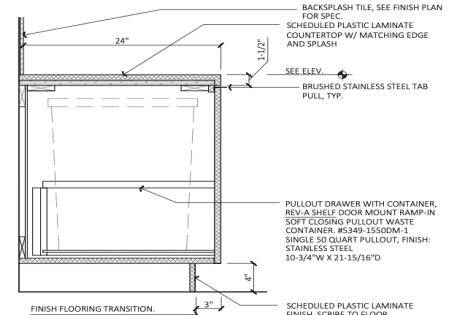
**12** FULL HEIGHT CASEWORK W/ OPEN SHELVES  
BREAK RM #145

SCALE: 1-1/2" = 1'-0"



**8** CASEWORK SECTION THRU SINK UPPER & LOWER CABINETS

SCALE: 1-1/2" = 1'-0"



**8** BASE CABINET W/ PULL-OUT WASTE RECEPT.

SCALE: 1-1/2"

MODULE 05

# Scale, Dimensions & Annotations

*How to measure drawings accurately and interpret notes*

A scale ratio tells you how drawing inches map to real-world feet. Example:  $1/4" = 1'-0"$  means  $1/4$  inch on paper = 1 foot in reality.

**1"=20'**

Site Plans

**1/8"=1'-0"**

Building Overview

**1/4"=1'-0"**

Standard Floor Plans

**1/2"=1'-0"**

Toilet Room Layouts

**1"=1'-0"**

Interior Details

## Reading Dimensions

- Dimensions use feet and inches:  $12'-6"$  = twelve feet, six inches
- Measurements are typically to the face of the stud (wall framing), not the finished surface
- Always verify critical dimensions — if strings don't add up, flag it before work begins
- Look for "VIF" (Verify in Field) — that dimension must be confirmed on-site by the contractor
- Pro Tip — Check scale against a door — most are 3'

MODULE 06

# Symbols, Legends & Abbreviations

*Finding and using the drawing legend and key terms*

<b>FF&amp;E</b>	Furniture, Fixtures & Equipment
<b>NIC</b>	Not in Contract
<b>HVAC</b>	Heating, Ventilation & Air Conditioning
<b>MEP</b>	Mechanical, Electrical & Plumbing
<b>GC</b>	General Contractor
<b>AHJ</b>	Authority Having Jurisdiction
<b>IFC</b>	Issued for Construction

<b>AFF</b>	Above Finished Floor
<b>TYP</b>	Typical (applies to all similar conditions)
<b>SIM</b>	Similar (not identical)
<b>VIF</b>	Verify in Field
<b>CLG</b>	Ceiling
<b>ETR</b>	Existing to Remain

MODULE 07

# Putting It All Together

*Group activity: Reviewing a Tenant Improvement drawing set*

**Scenario:** An office tenant is moving into the 13<sup>th</sup> floor in your building. You have received a Tenant Improvement (TI) drawing set from the tenant's architect. Your job: review the drawings before tomorrow's contractor meeting.

1

What sheet shows the overall floor plan? What is the total square footage?

2

How many new partition walls are being added? How can you tell they're new vs. existing?

3

Is there a new accessible restroom? How did you determine this from the plans?

4

What ceiling height is shown in the open area? Which drawing type tells you?

5

Are there any dimensions labeled VIF? What does that mean for the project?

6

What does the revision block say? Is this the most current version?

**Work in pairs · 10 minutes · Reconvene to discuss answers as a group**

# Q & A

## *Questions & Wrap-Up*

- Always start with the title block and drawing index
- Floor plans show layout; sections show heights
- Check the revision block — use only the latest version
- Ask when dimensions don't add up

**Knowledge Check Quiz**