

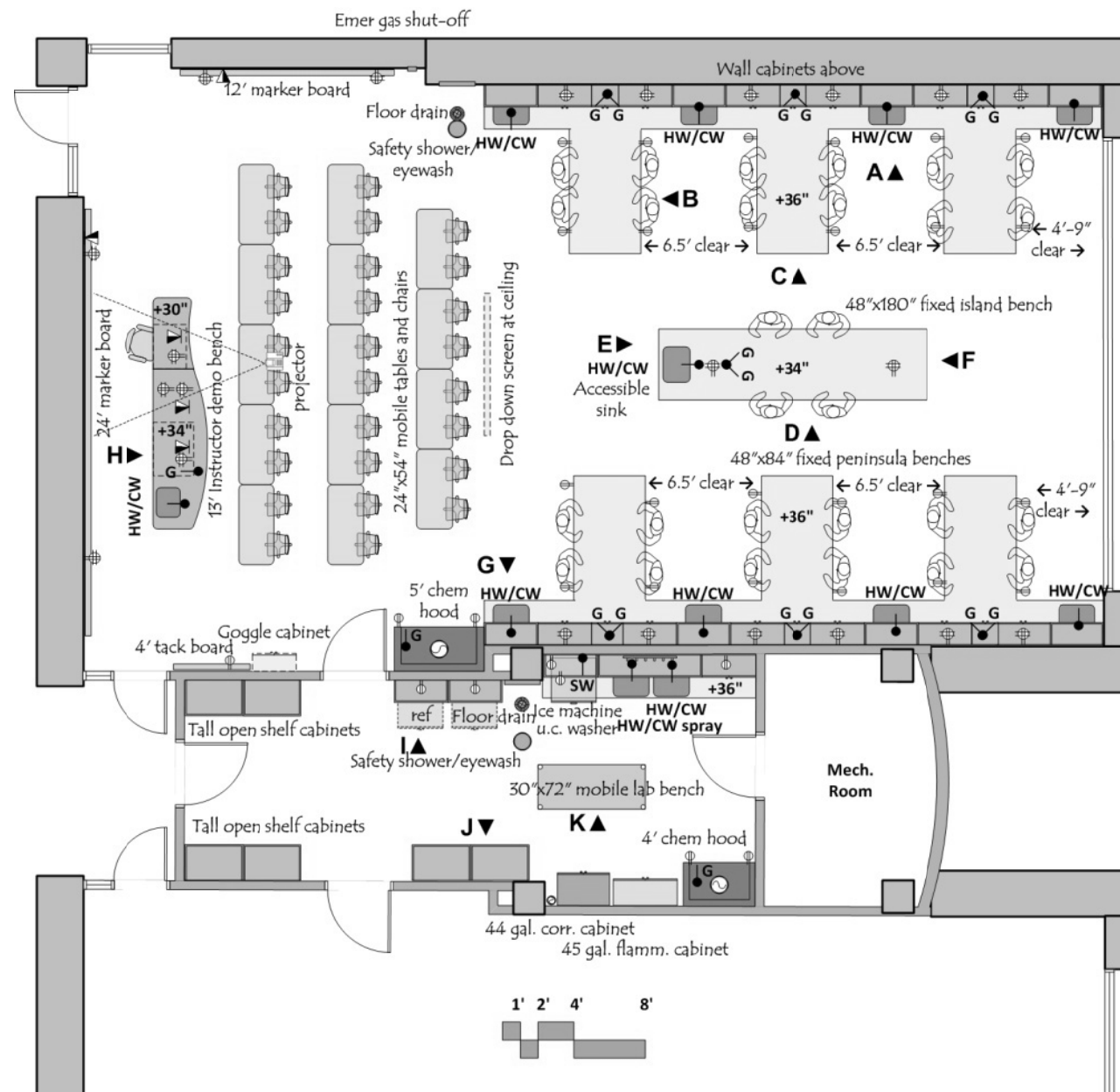
Lab Sketchbook

De La Salle Science Building

2014 Apr 16

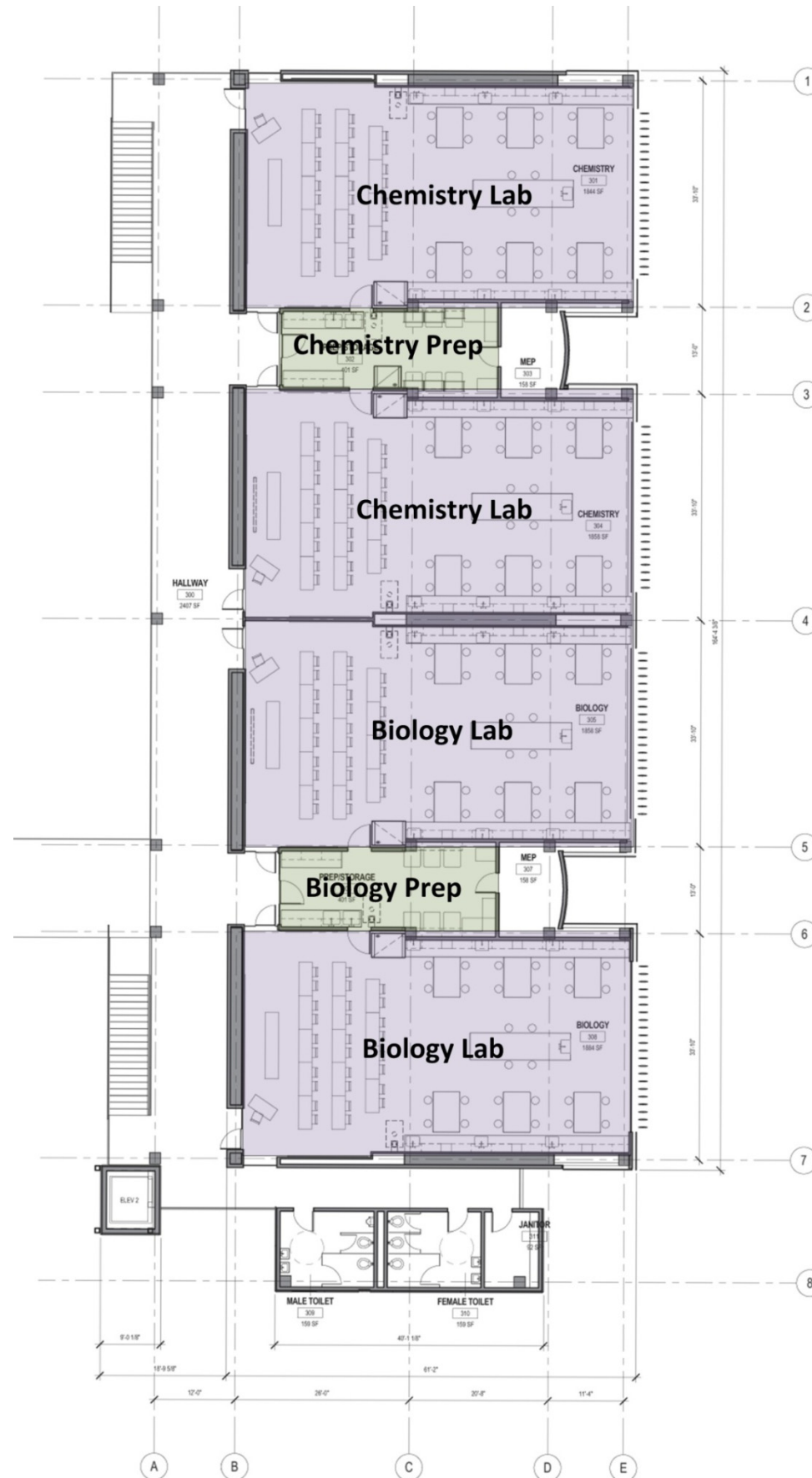


Contents



Level 3 Labs	3
Chemistry Lab & Prep.	4
Chemistry Elevations	5
Biology Lab & Prep	18
Biology Elevations	19
Level 1 Labs	32
Robotics Lab	33
Robotics Elevations	34
Core Lab & Prep.	38
Core Lab Elevations	40
Physics Lab & Prep	46
Physics Elevations	47
Section Details	55
Equipment Cut Sheets	73

Level 3 Labs

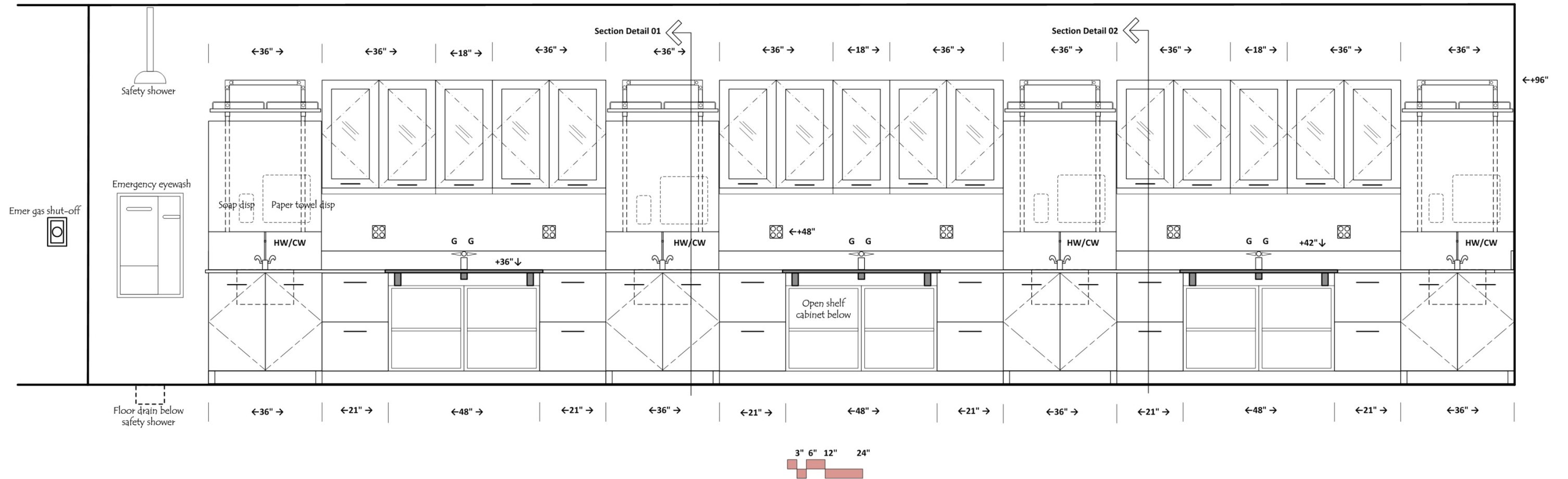


(2) Chemistry Labs with shared Prep/Store

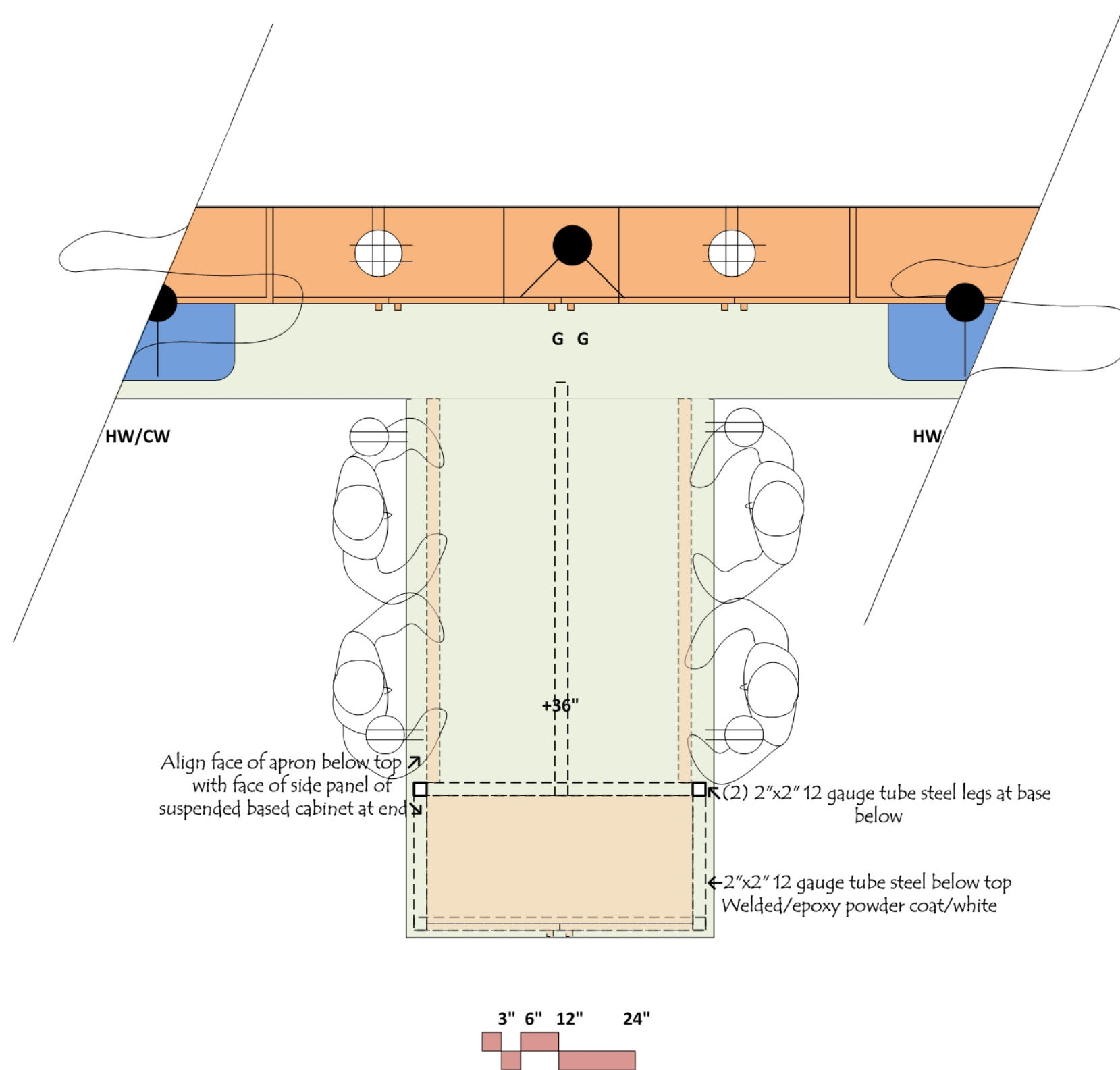
(2) Biology Labs with shared Prep/Store

Elevation A

Chemistry Lab

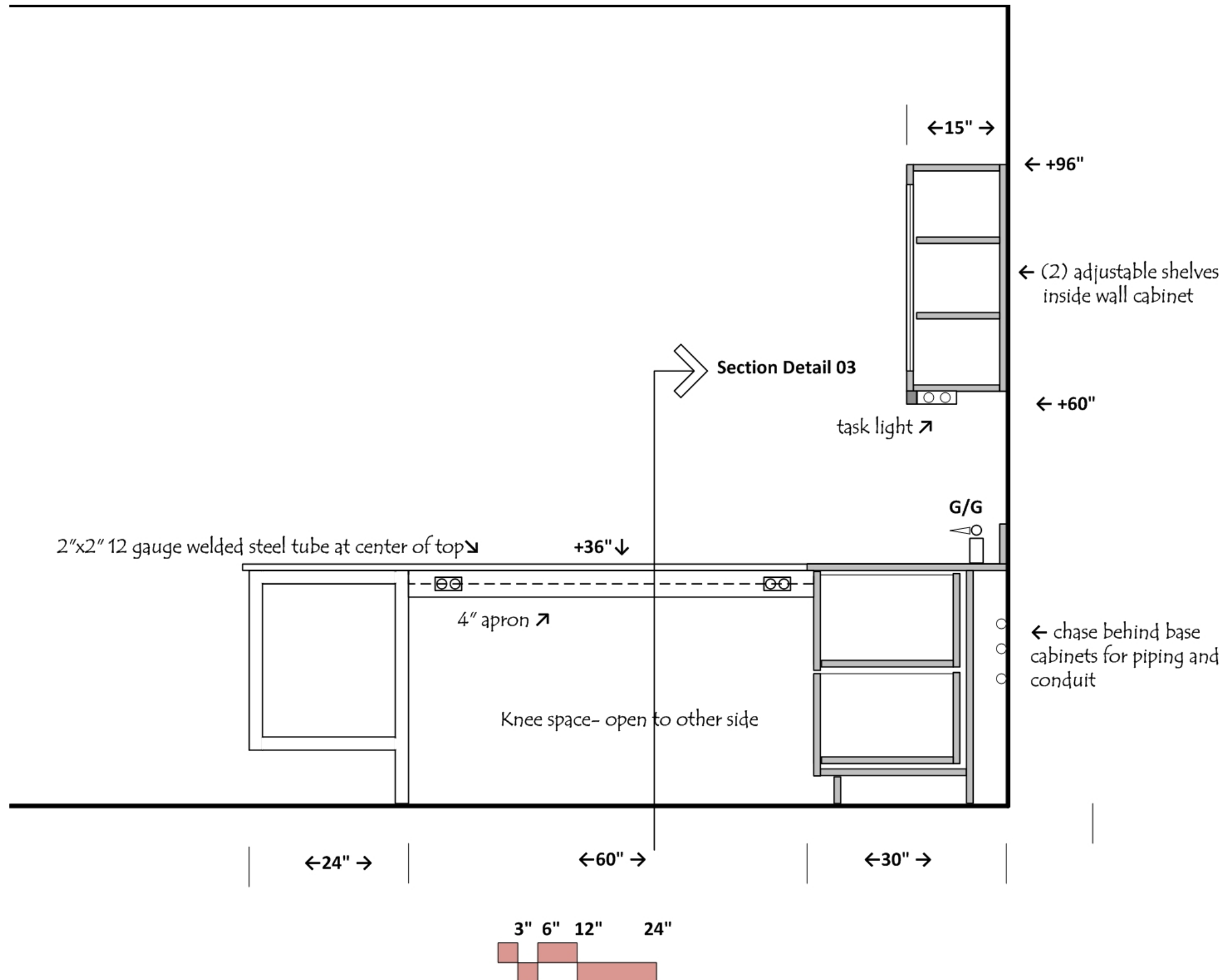


Peninsula Detail Plan Chemistry Lab



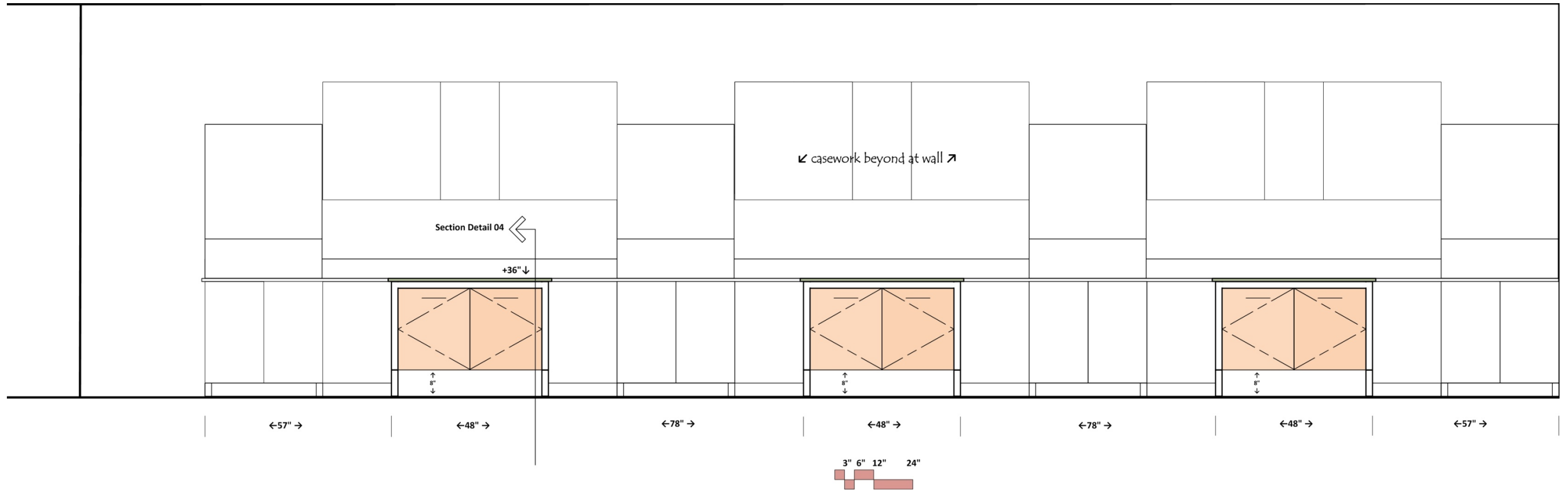
Elevation B

Chemistry Lab



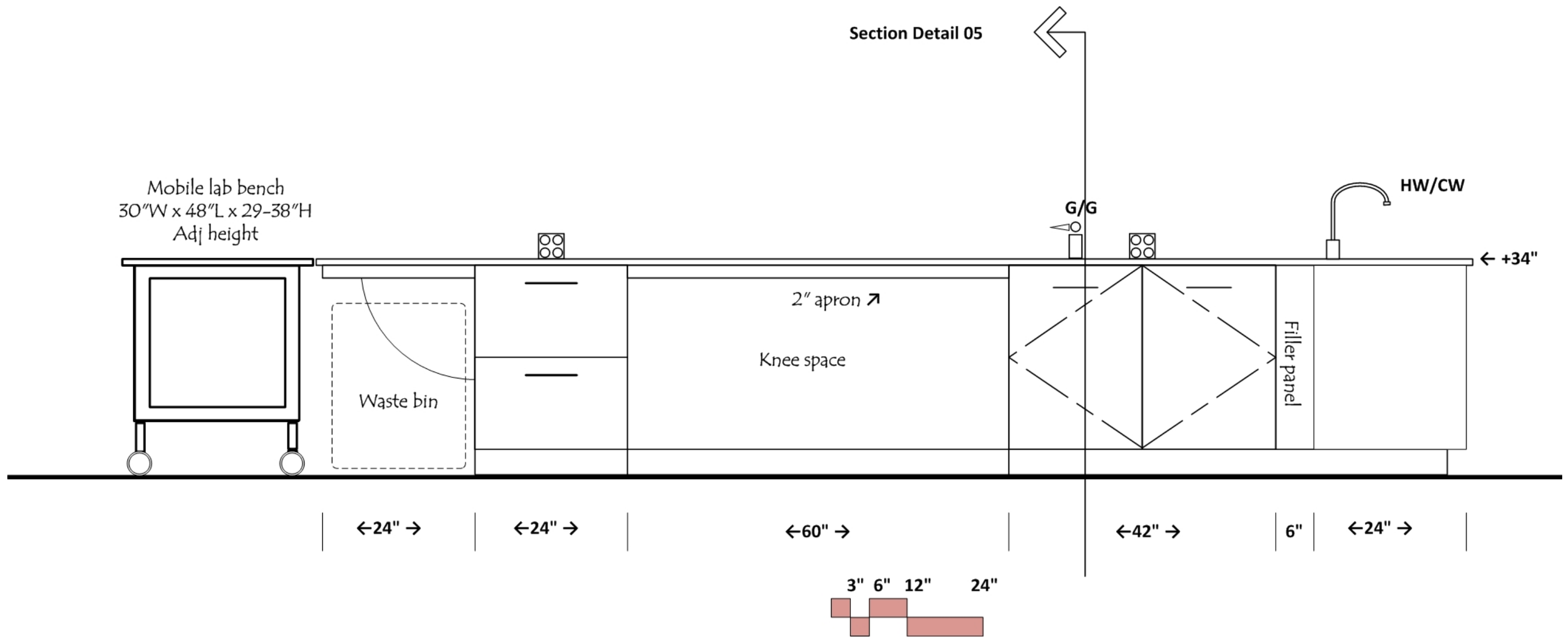
Elevation C

Chemistry Lab



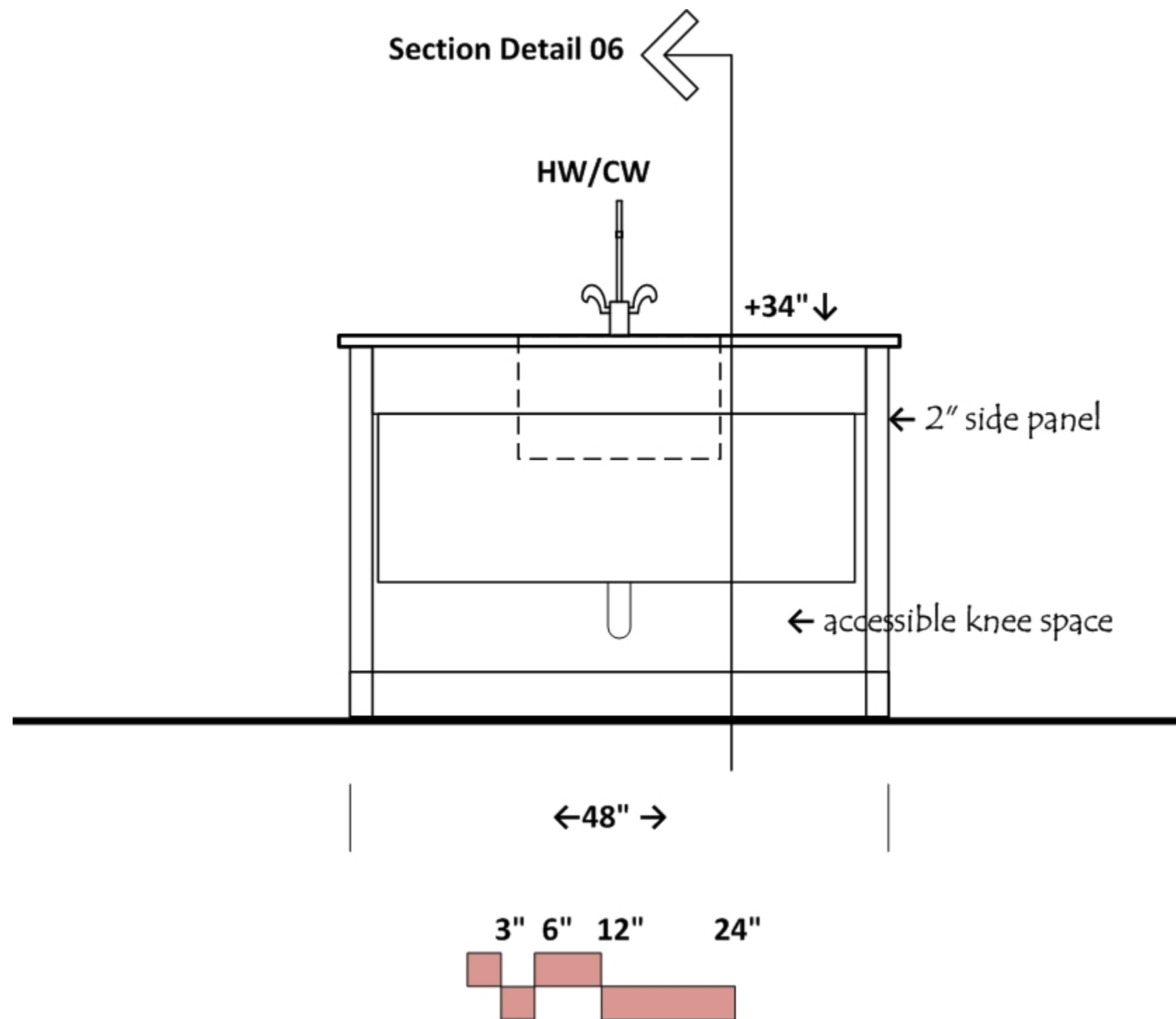
Elevation D

Chemistry Lab



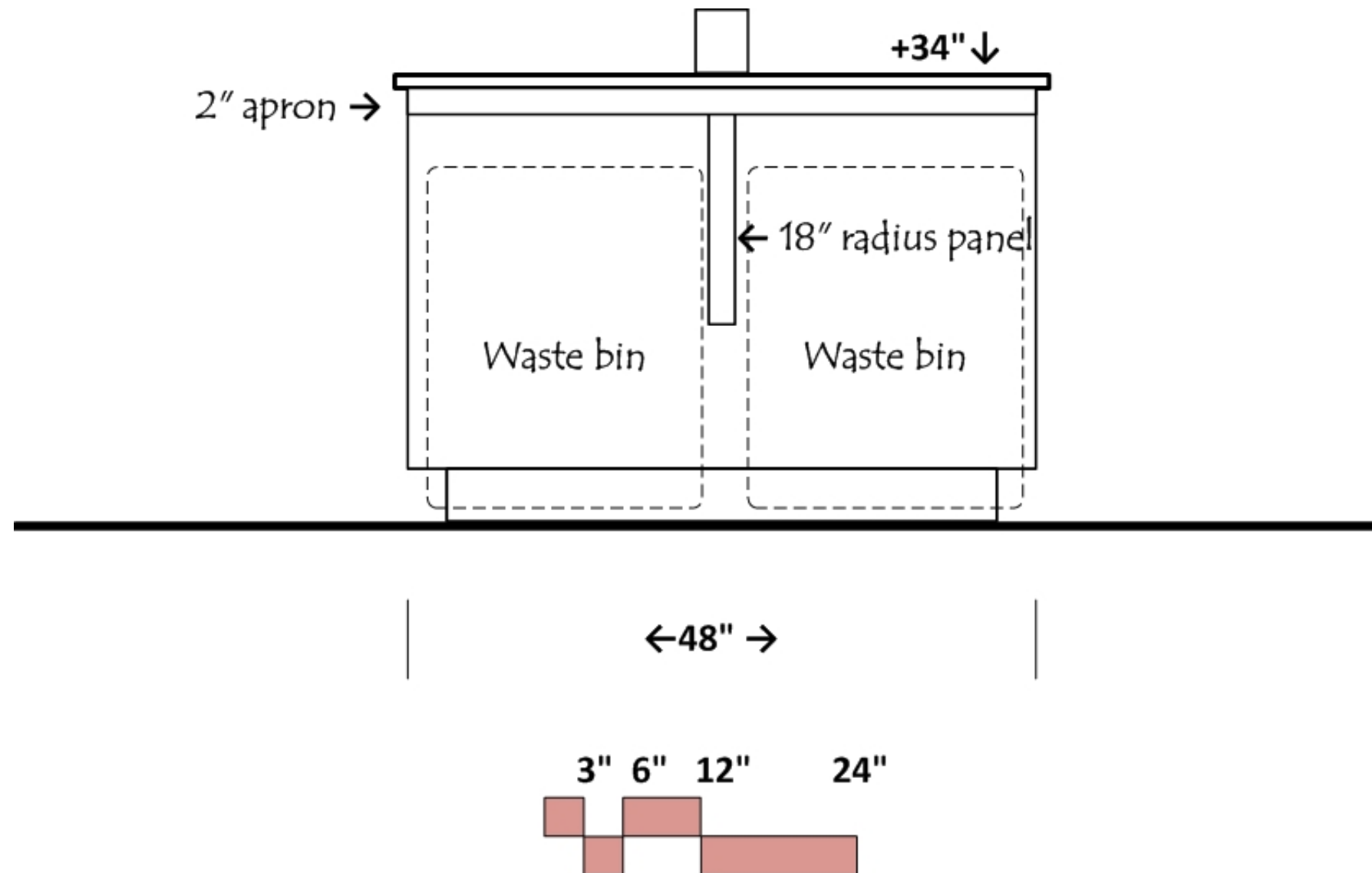
Elevation E

Chemistry Lab



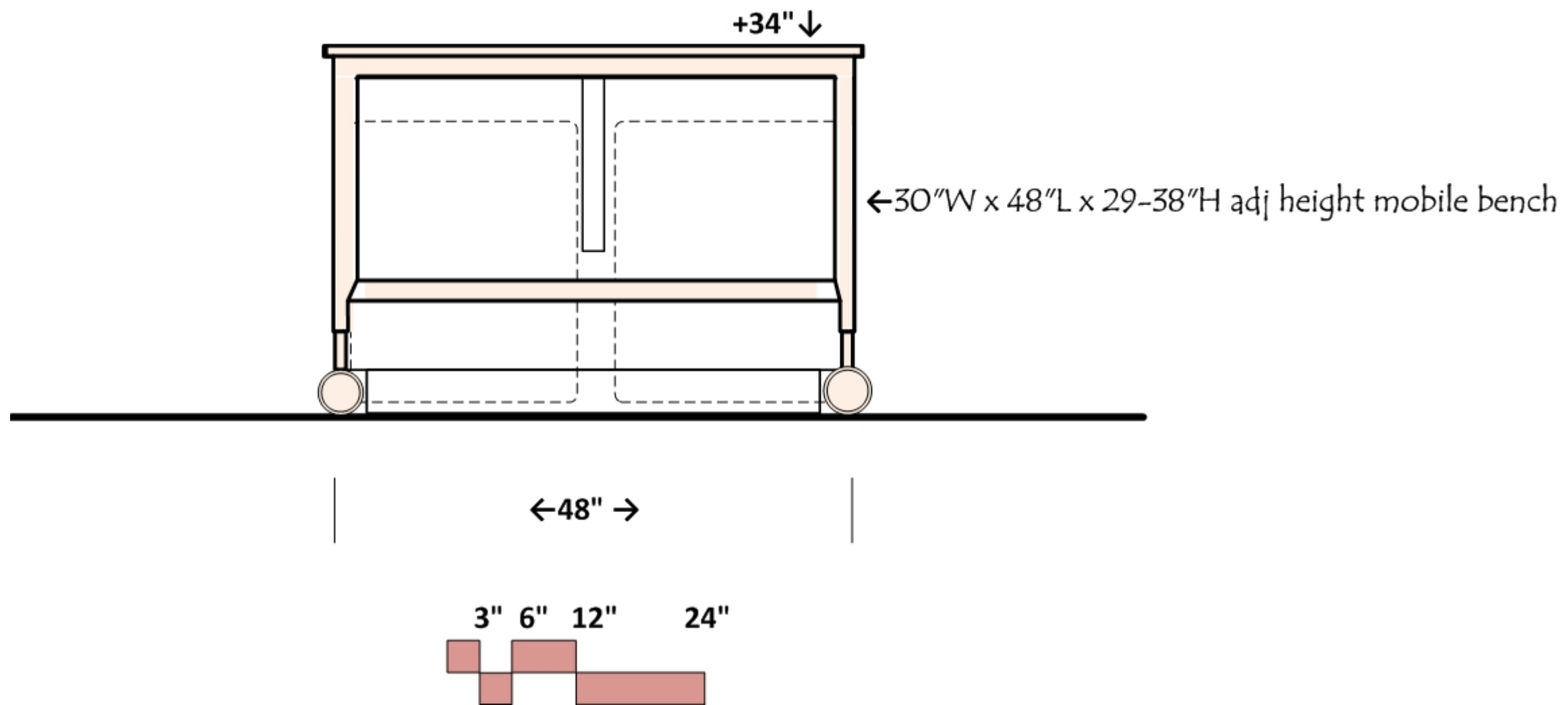
Elevation F

Chemistry Lab



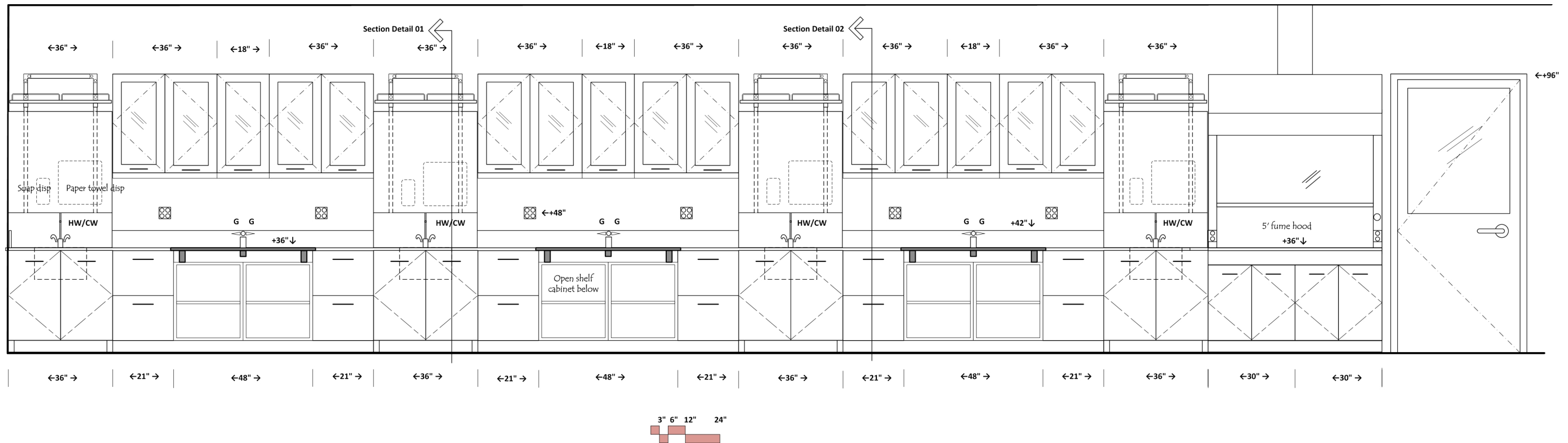
Elevation F2

Chemistry Lab



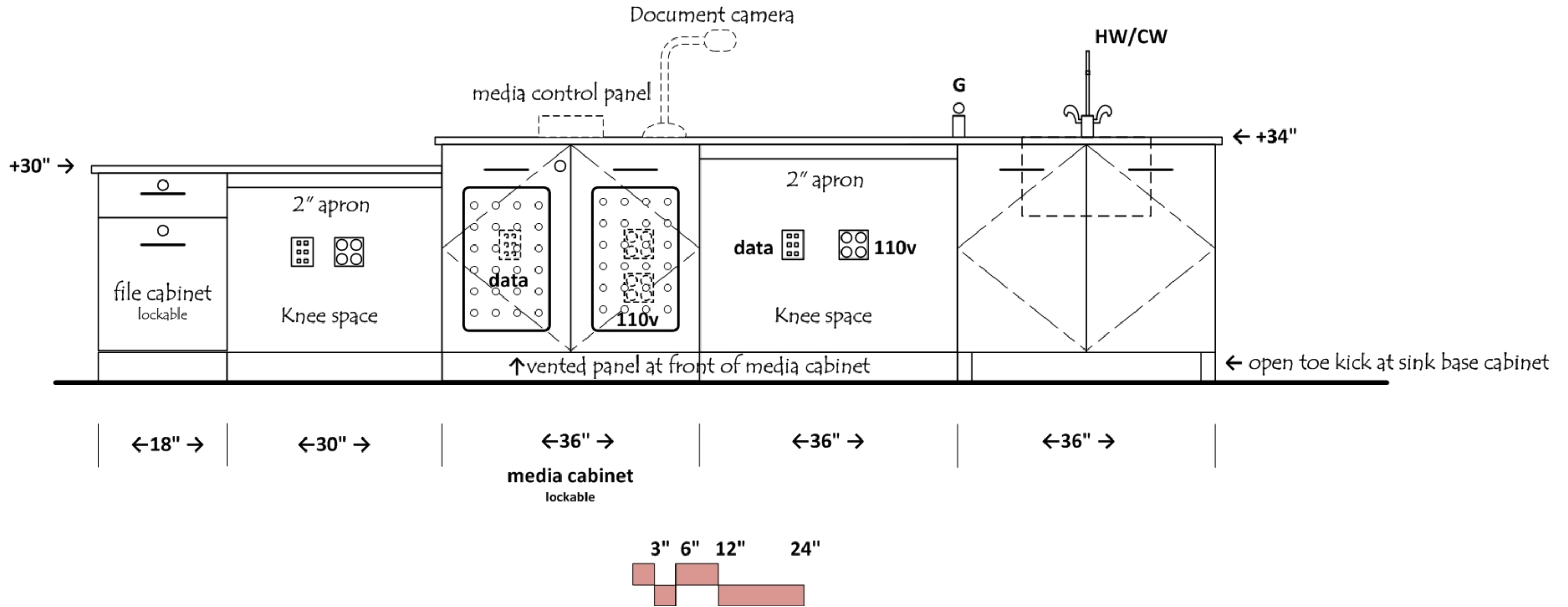
Elevation G

Chemistry Lab



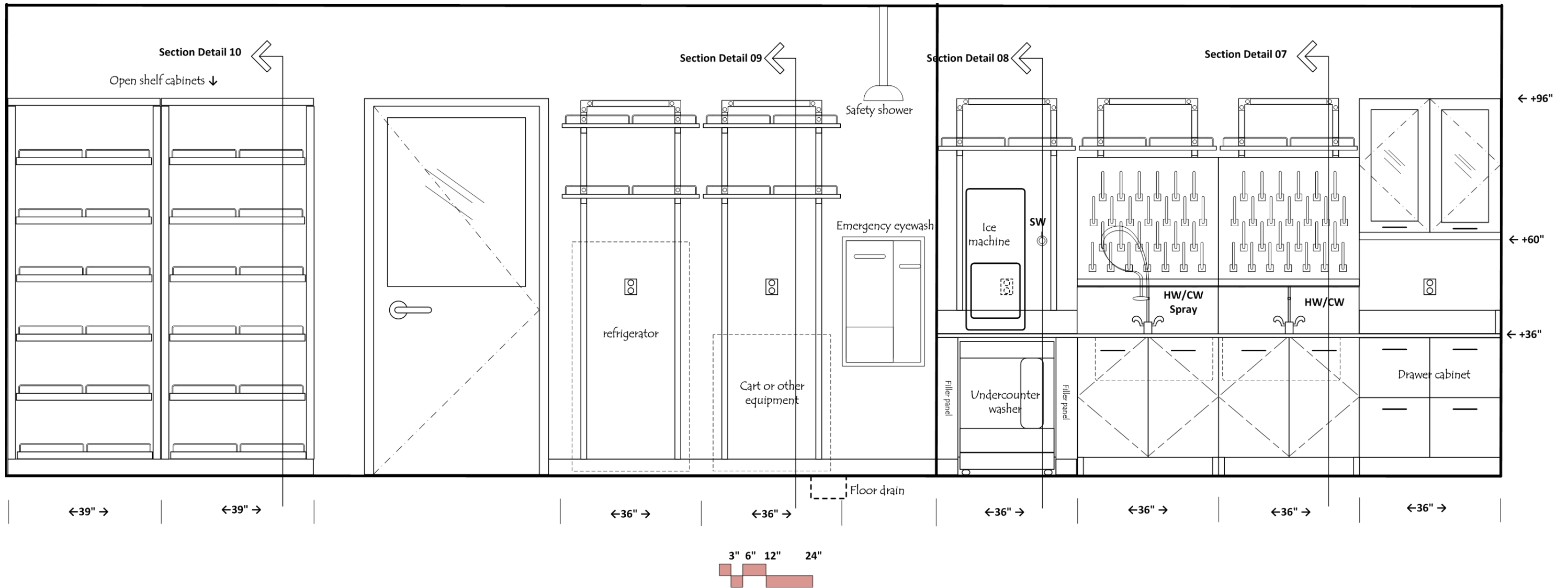
Elevation H

Chemistry Prep



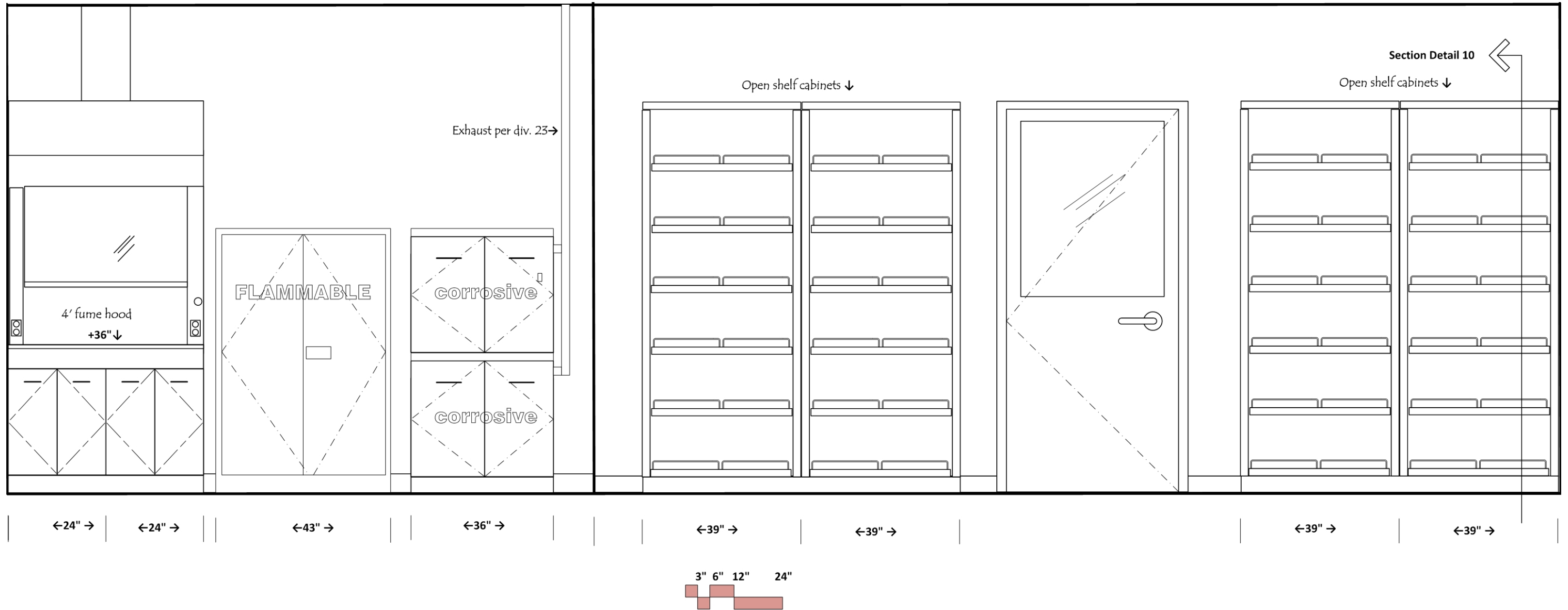
Elevation I

Chemistry Prep



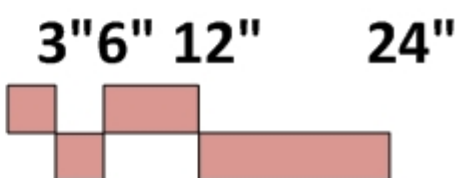
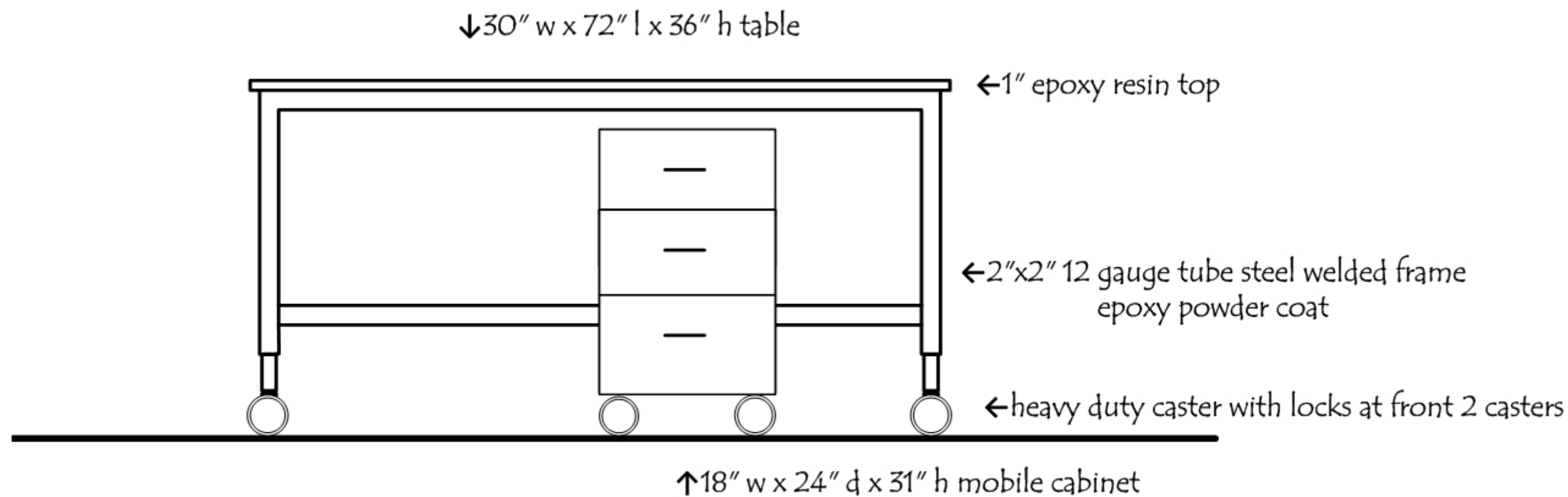
Elevation J

Chemistry Prep



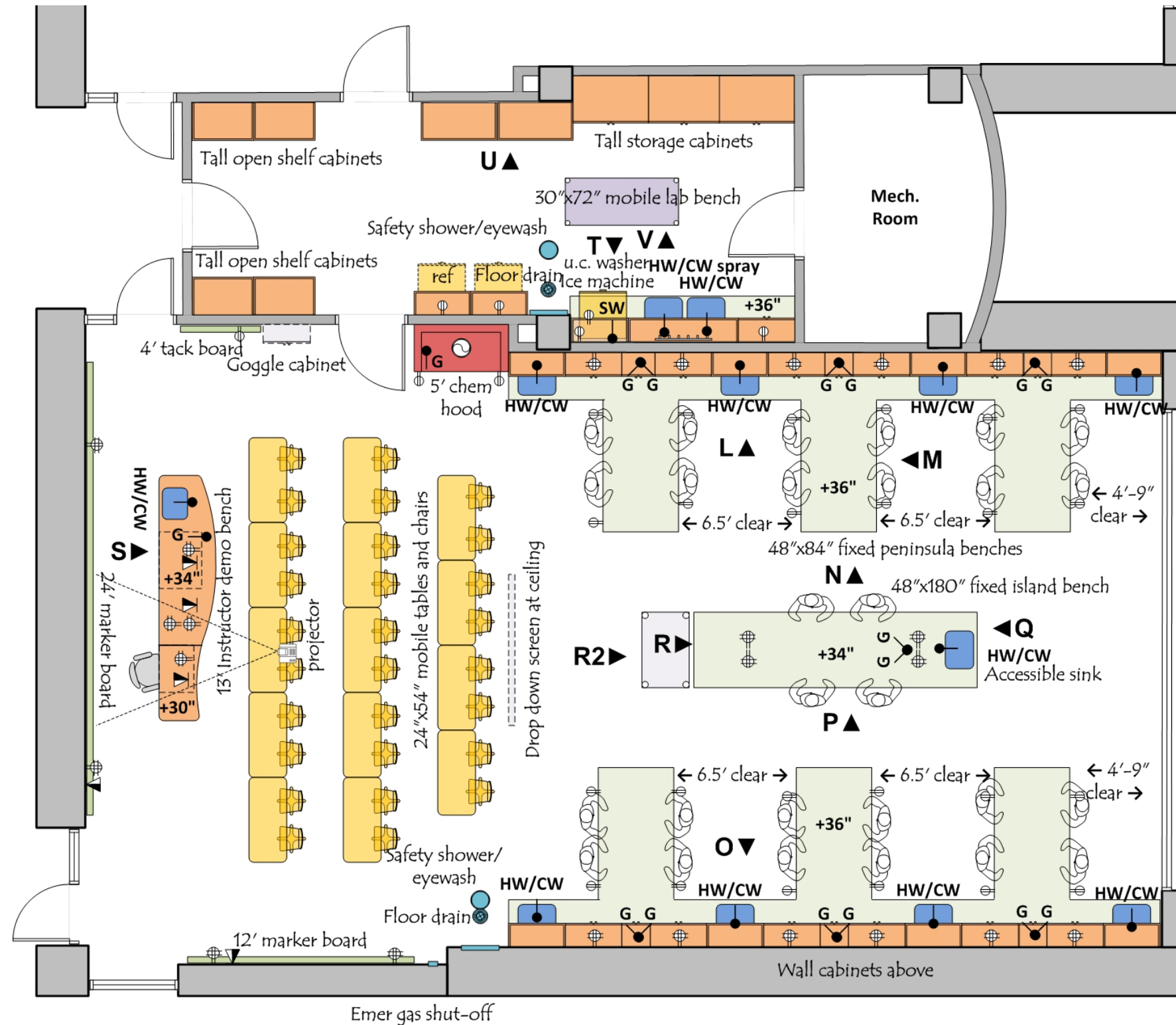
Elevation K

Chemistry Prep



Biology Lab & Prep

Similar for 2 Biology Labs



ARCHITECTURAL

Occupancy: E
 Number of students: 28
 Floor: VCT or ground sealed concrete
 Walls: gypsum board and enamel paint
 Ceiling: 10' acoustic tile
 Doors: 3⁶/x8⁰ with window
 Acoustic Attenuation: NC 40 or less
 Light Attenuation: at exterior windows
 Security: card key access

STRUCTURAL

Vibration attenuation: 4,000 micro inches/sec or less

MECHANICAL

72 deg. F +/- 2 deg
 On/off switch for fume hood control
 On/off switch for lab room and prep room exhaust

ELECTRICAL

110v fourplex and duplex outlets (maximum of four duplex per circuit)
 Wired and wireless data
 Lighting: indirect fluorescent @ 50-60 f.c. with dimmer

PLUMBING

Hot/Cold water at sinks with vacuum breakers
 Natural gas at lab benches and fume hoods
 Domestic water at safety shower/eyewash
 Floor drain at safety showers

CONTRACTOR FURNISHED EQUIPMENT

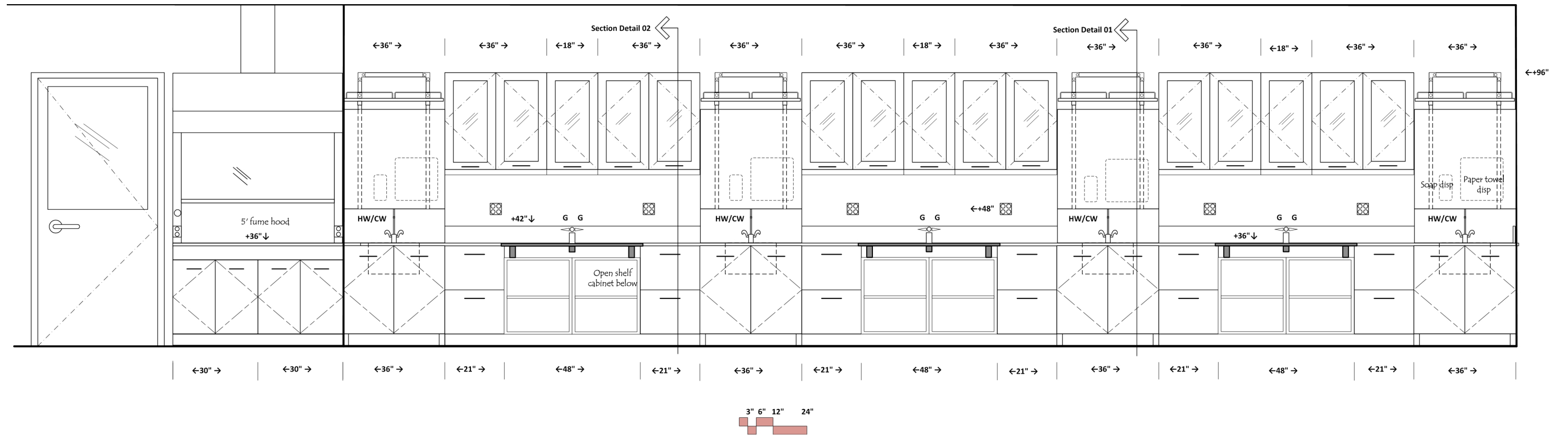
Wood (bamboo) casework- base cabinets, wall cabinets, tall cabinets
 Epoxy resin tops and sinks
 Faucets & fittings
 Chemical Fume Hood- Constant volume with on/off control
 Writing board/Smart board/Screens
 Media cabinet
 Fire extinguisher cabinet

COLLEGE FURNISHED EQUIPMENT

Chairs
 Benchtop analytical instruments
 Scientific equipment
 refrigerator

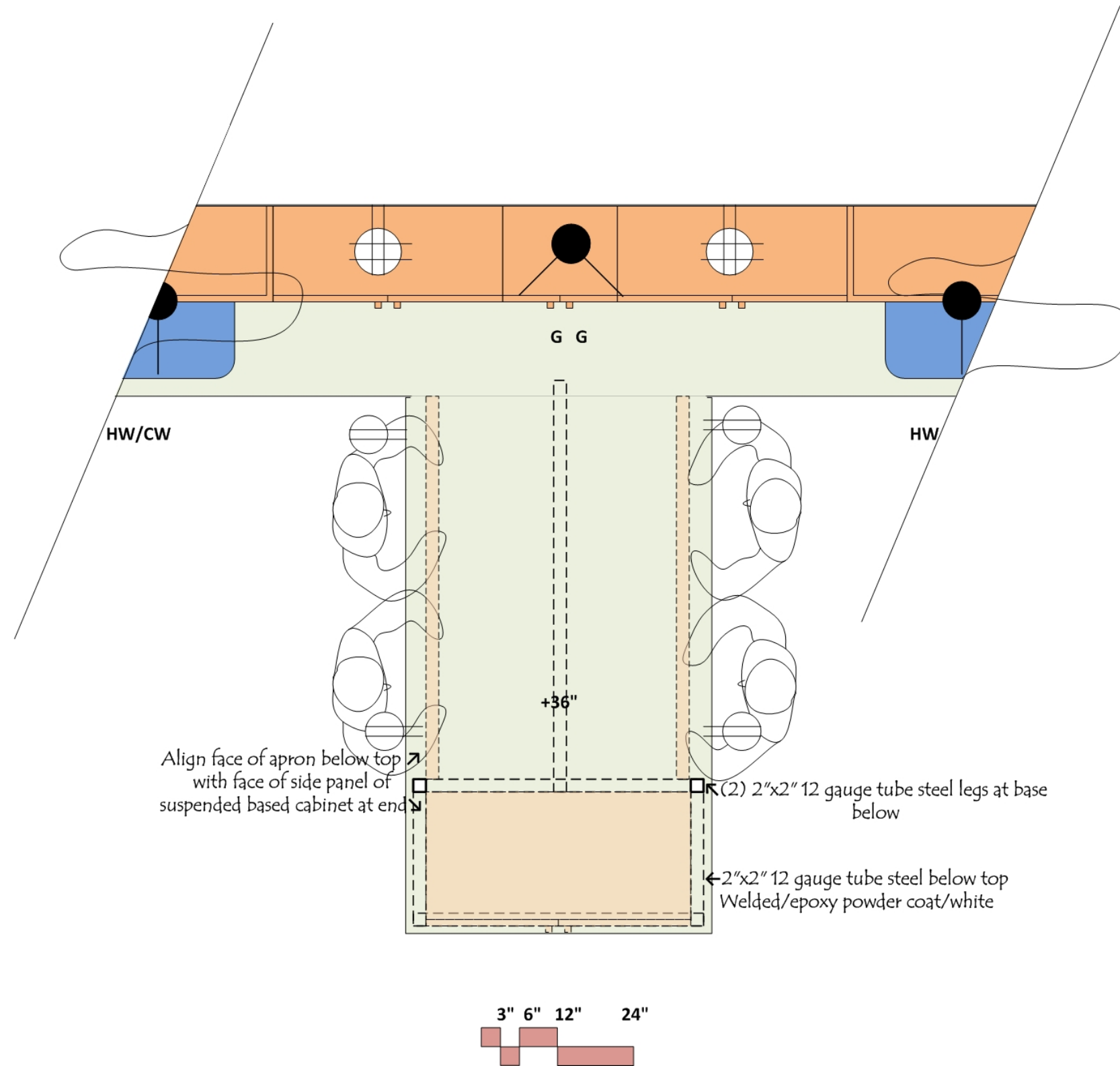
Elevation L

Biology Lab



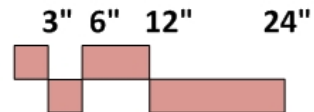
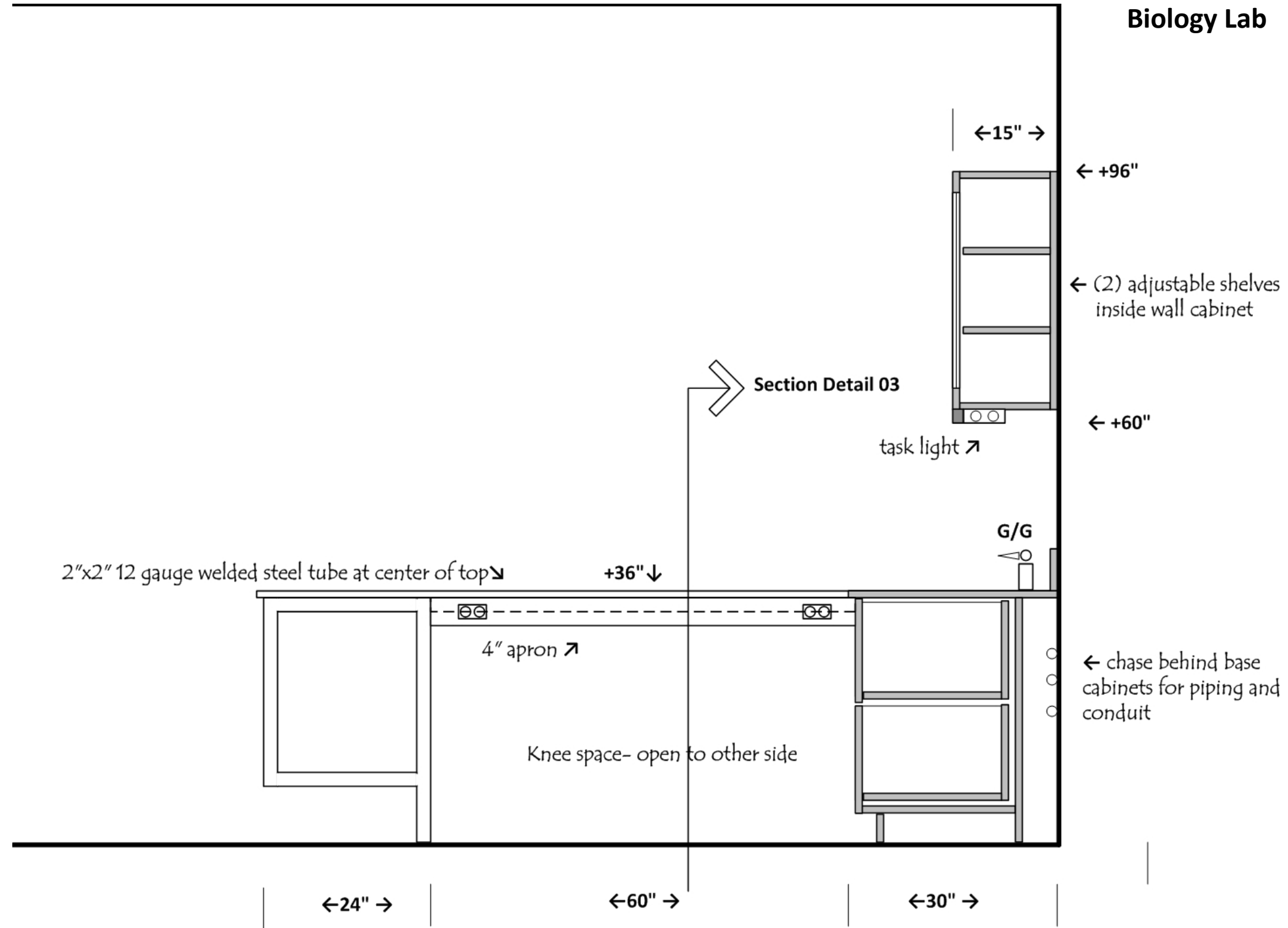
Peninsula Detail Plan

Biology Lab



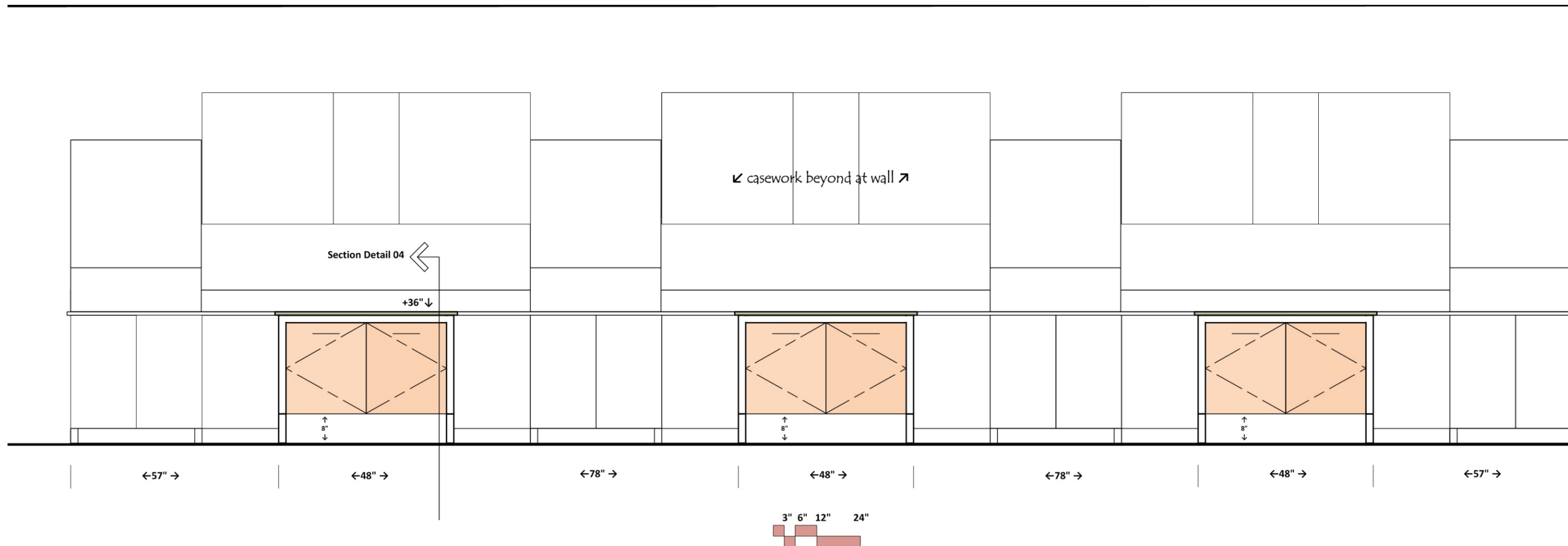
Elevation M

Biology Lab



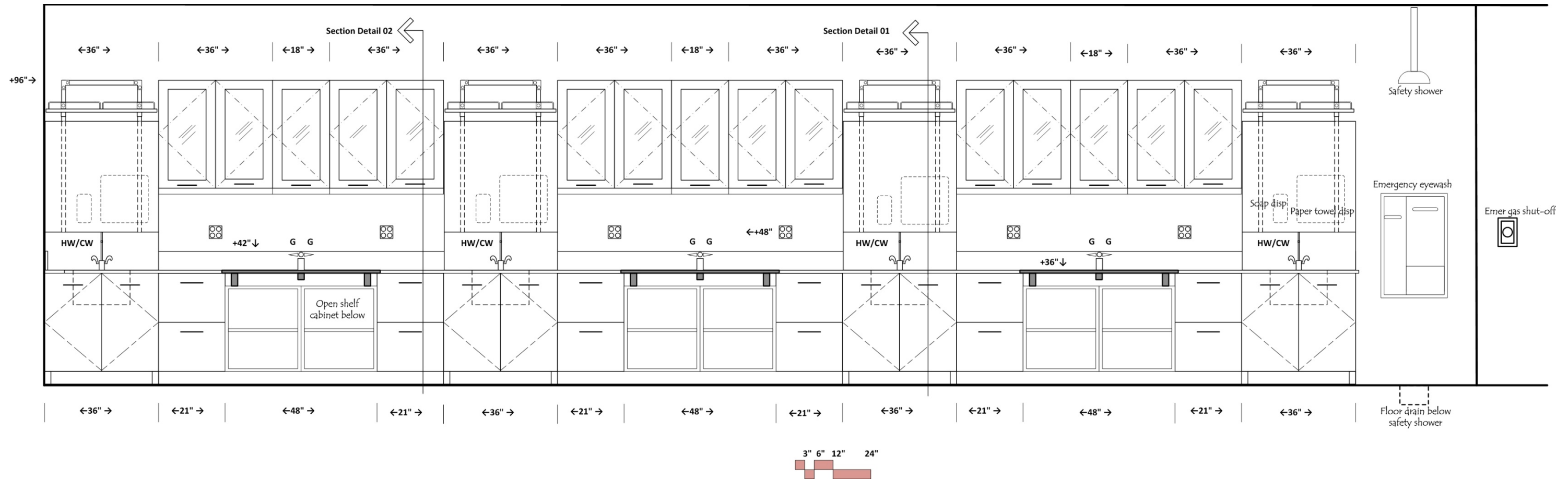
Elevation N

Biology Lab



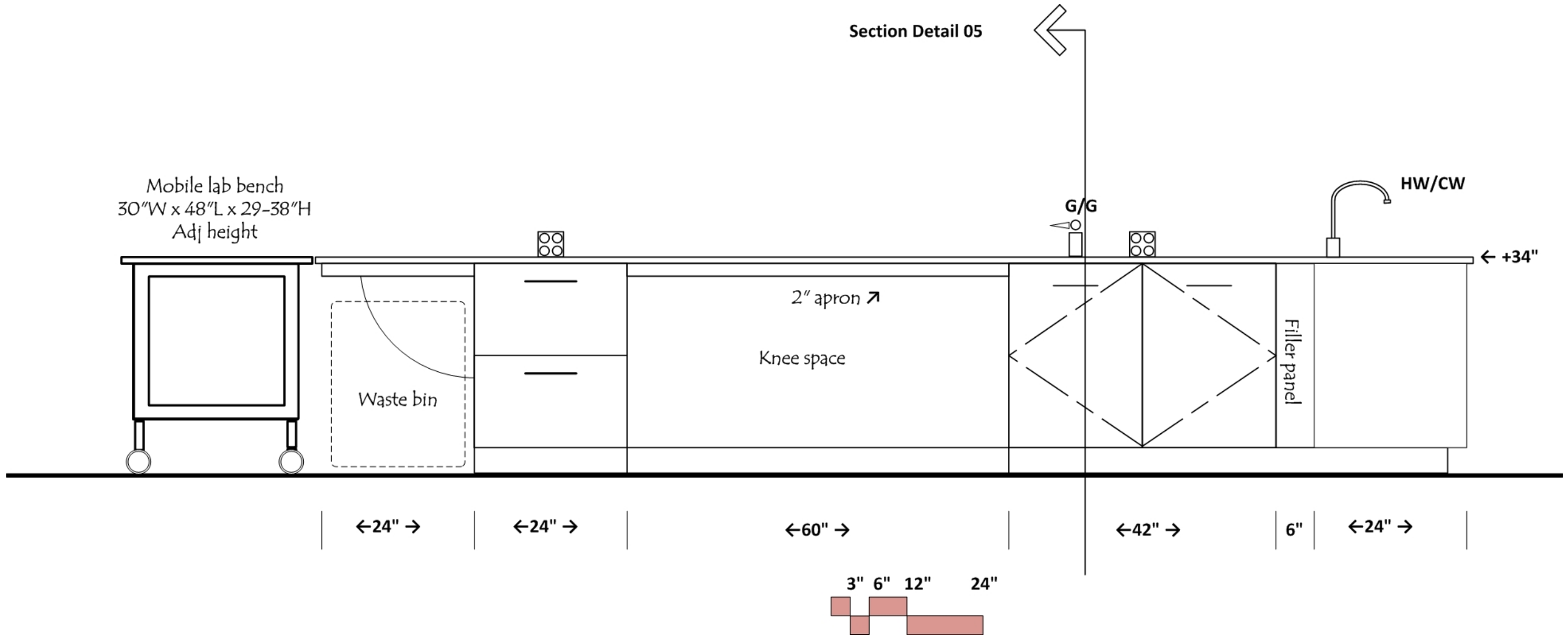
Elevation O

Biology Lab

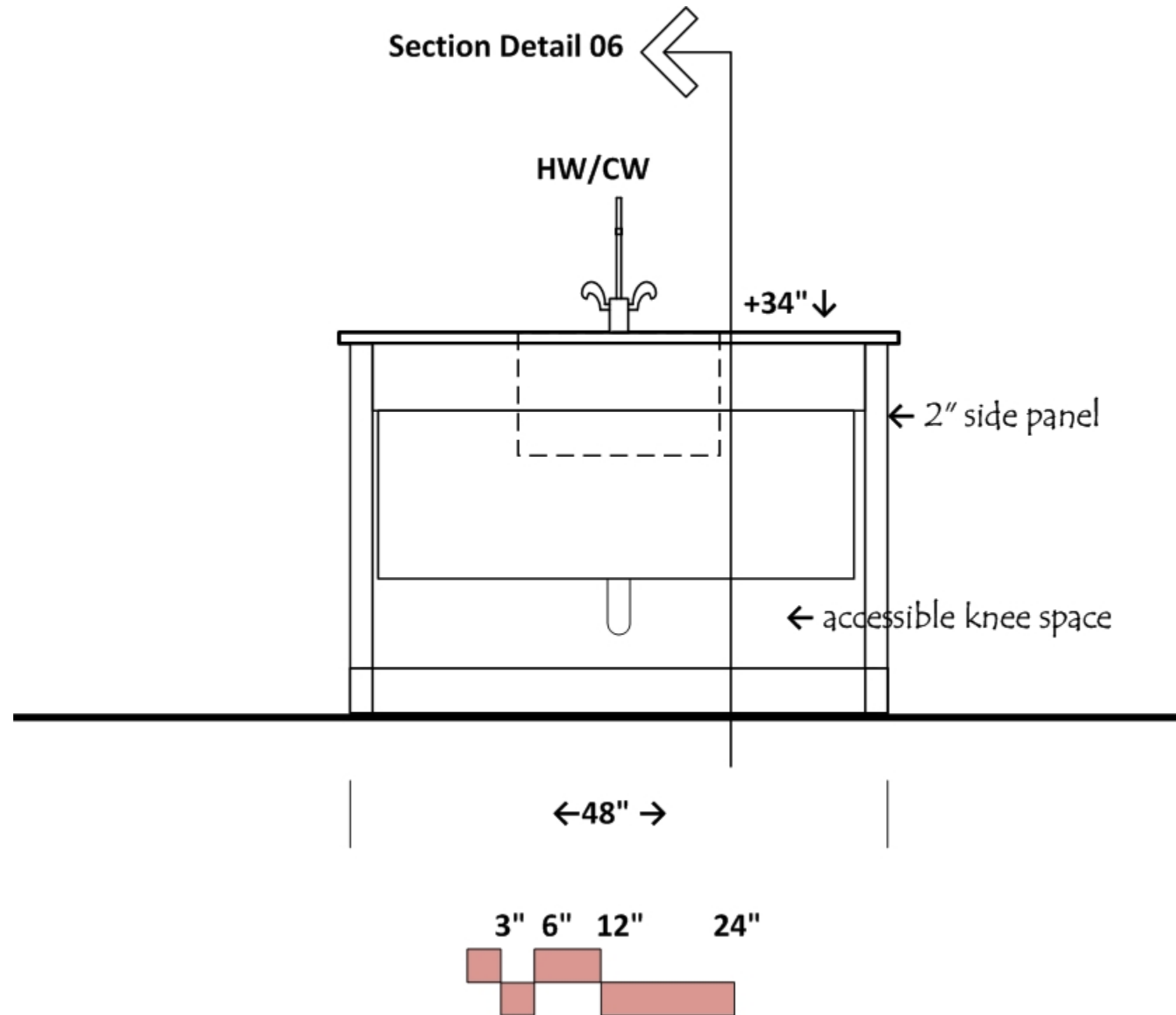


Elevation P

Biology Lab

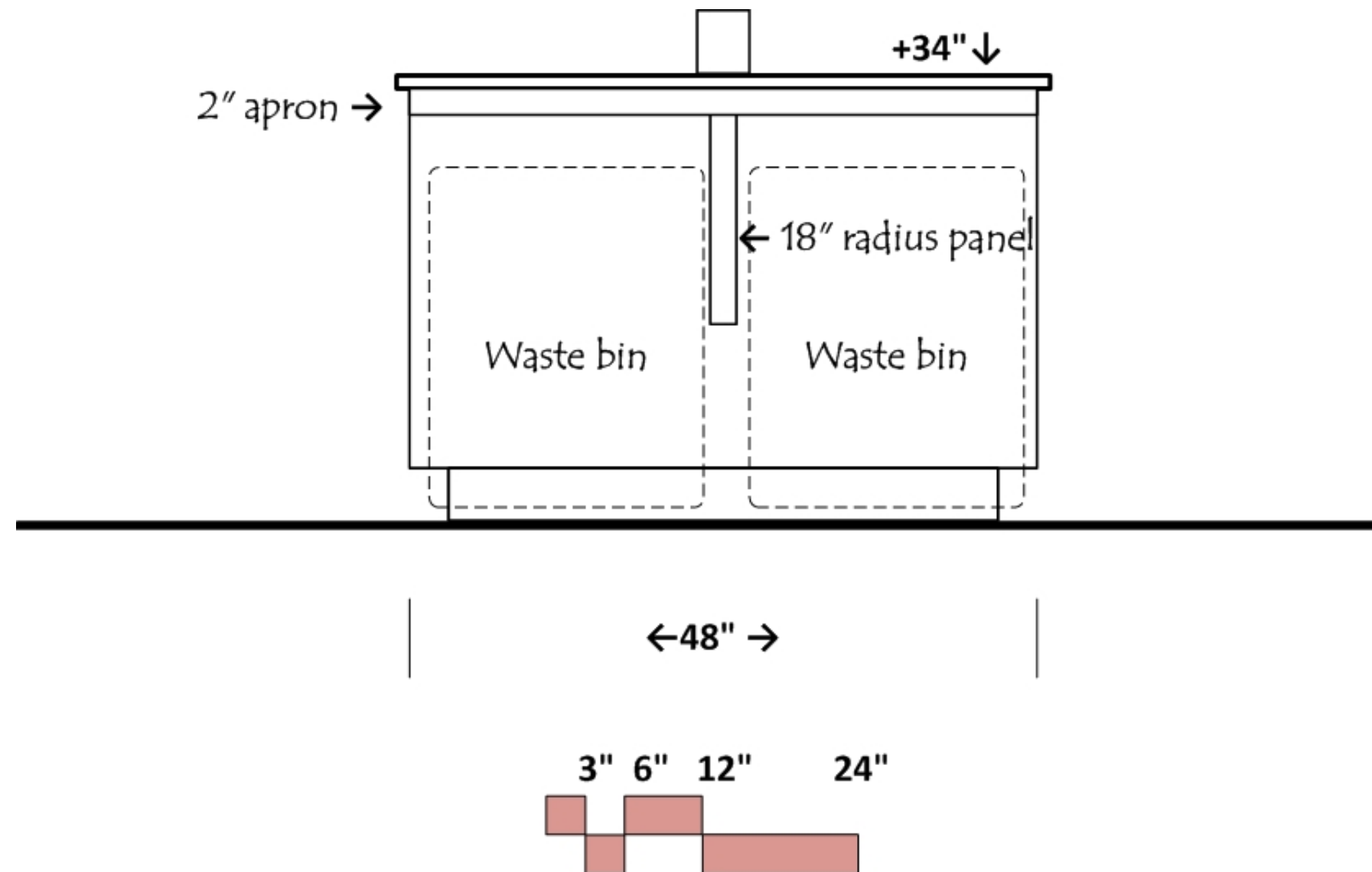


Elevation Q
Biology Lab



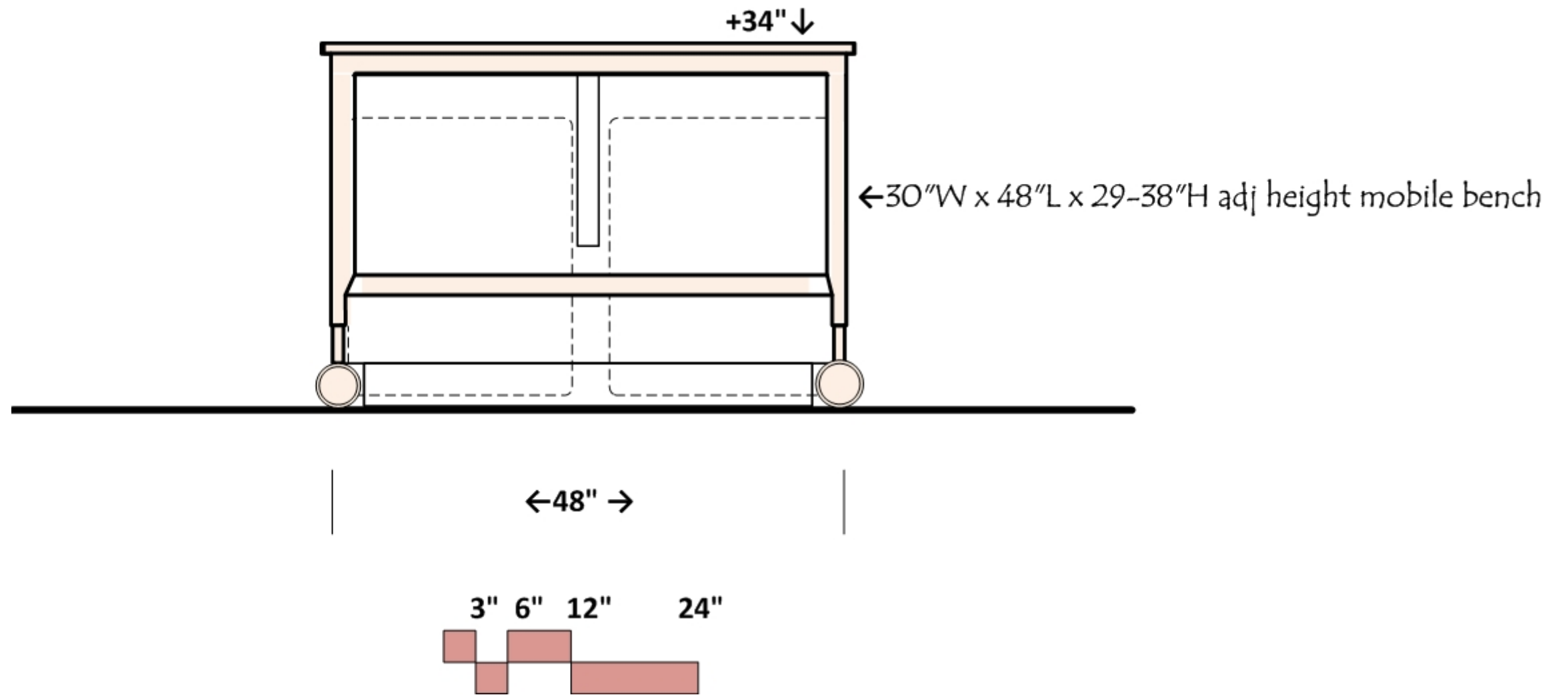
Elevation R

Biology Lab



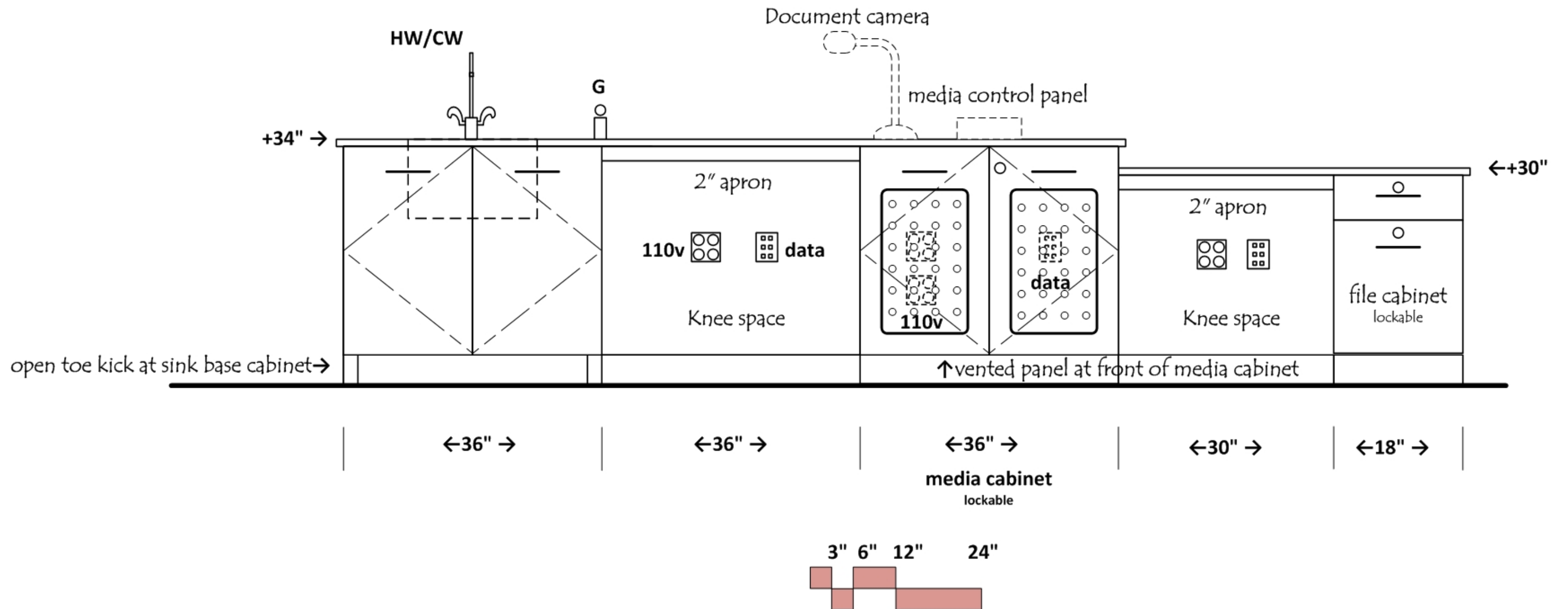
Elevation R2

Biology Lab



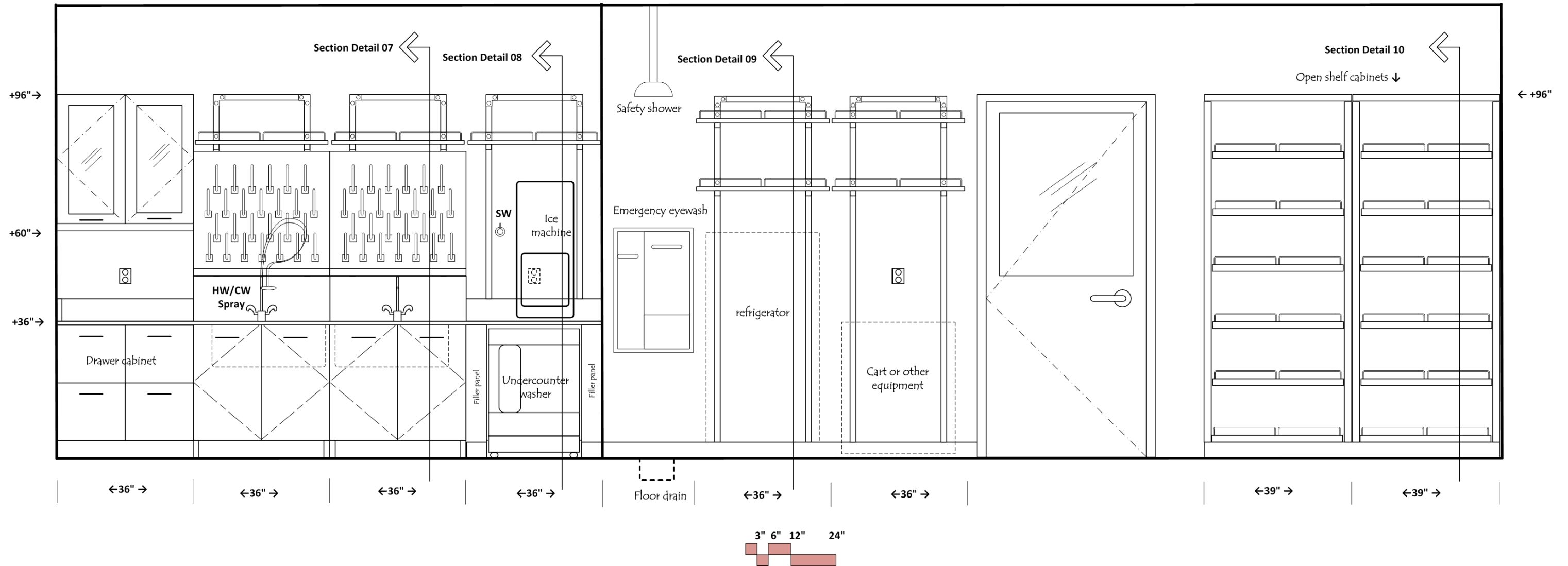
Elevation S

Biology Lab



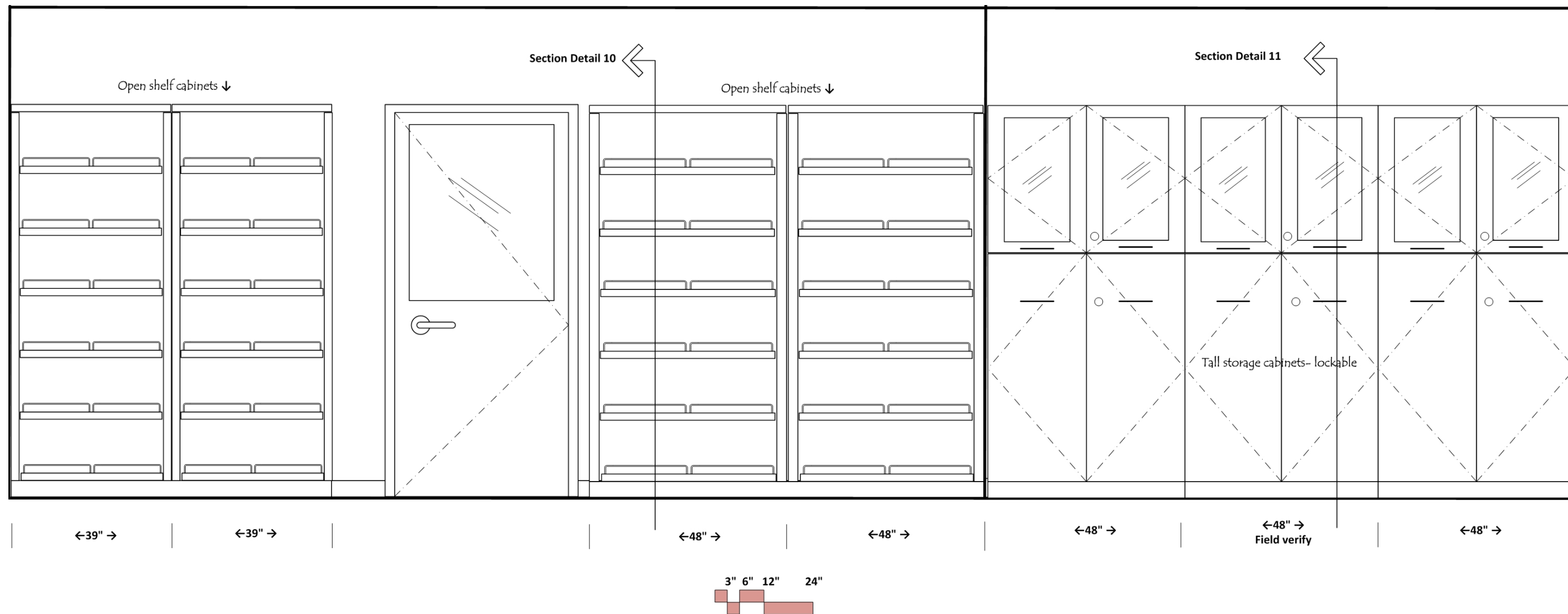
Elevation T

Biology Prep



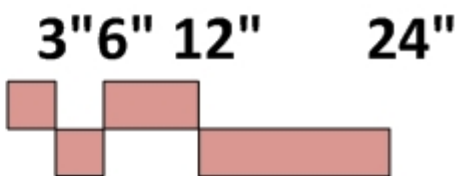
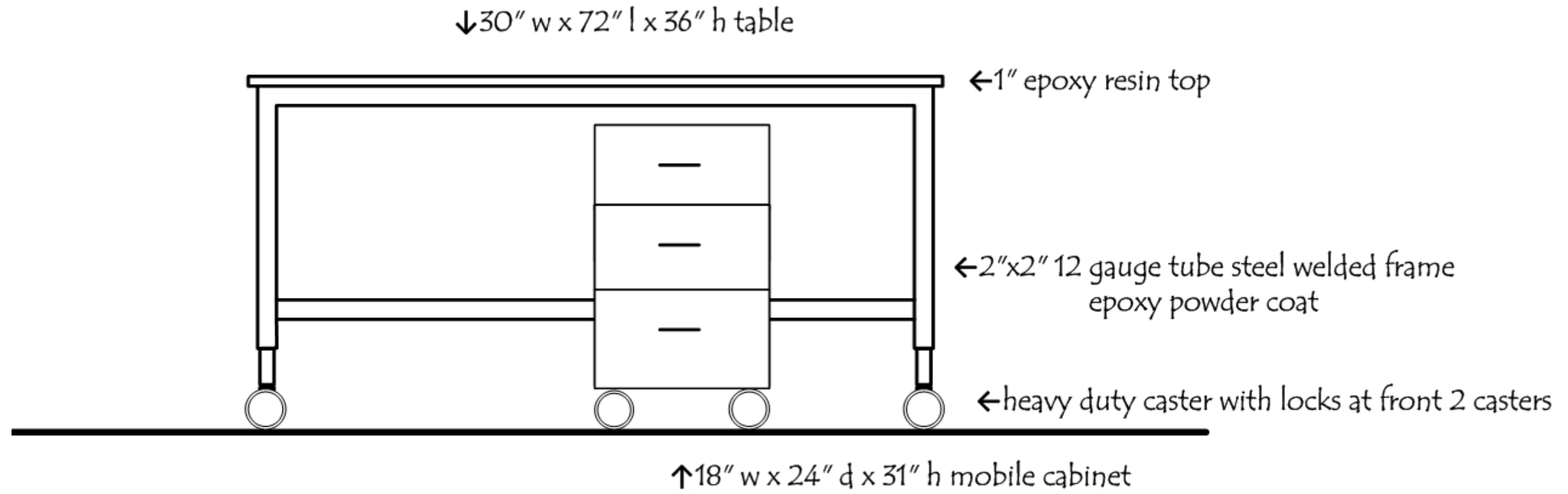
Elevation U

Biology Prep

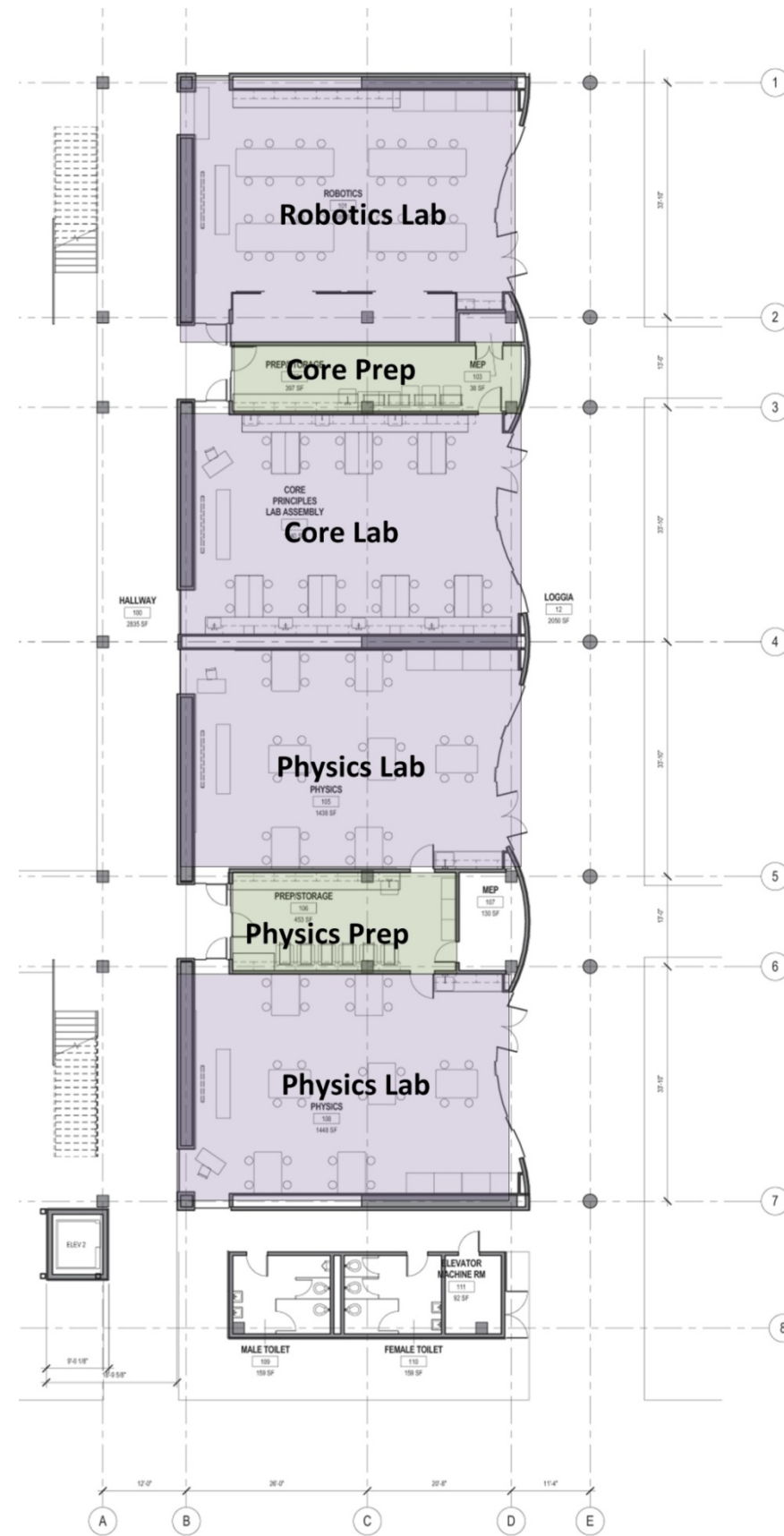


Elevation V

Biology Prep



Level 1 Labs

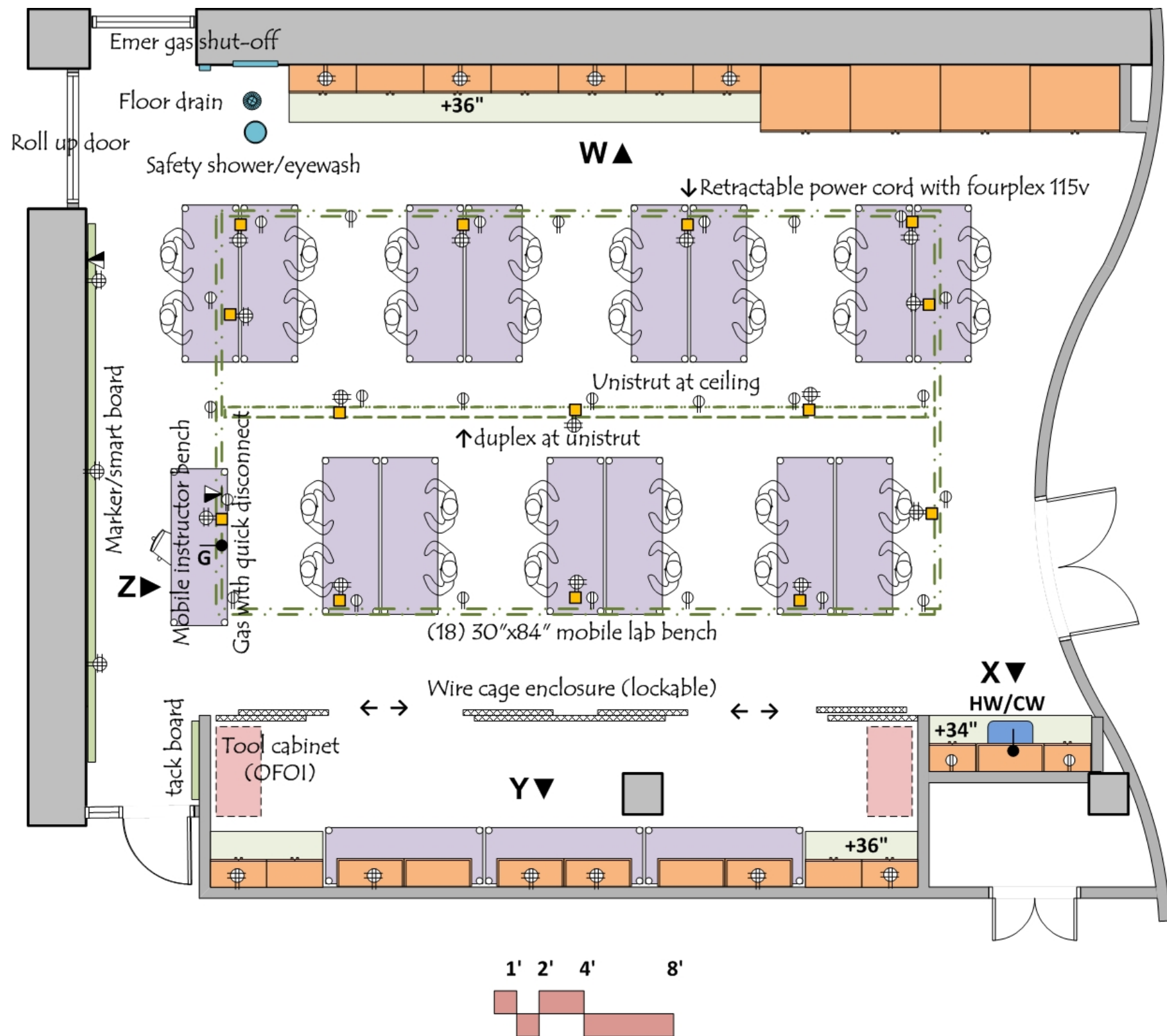


(1) Robotics Lab

**(1) Core Principles Lab with
dedicated Prep/Store**

**(2) Physics Labs with shared
Prep/Store**

Robotics Lab



ARCHITECTURAL

Occupancy: E
 Number of students: 28
 Floor: VCT or ground sealed concrete
 Walls: gypsum board and enamel paint
 Ceiling: 10' acoustic tile
 Doors: 3⁶/x8⁰ with window
 Acoustic Attenuation: NC 40 or less
 Light Attenuation: at exterior windows
 Security: card key access

STRUCTURAL

Vibration attenuation: 4,000 micro inches/sec or less

MECHANICAL

72 deg. F +/- 2 deg
 On/off switch for lab room exhaust

ELECTRICAL

110v fourplex and duplex outlets (maximum of four duplex per circuit; max of 2 duplex per circuit at unistrut frame at ceiling)
 Wired and wireless data
 Lighting: indirect fluorescent @ 50-60 f.c. with dimmer

PLUMBING

Hot/Cold water at sink with vacuum breakers
 Natural gas at overhead unistrut with quick disconnect
 Domestic water at safety shower/eyewash
 Floor drain at safety showers

CONTRACTOR FURNISHED EQUIPMENT

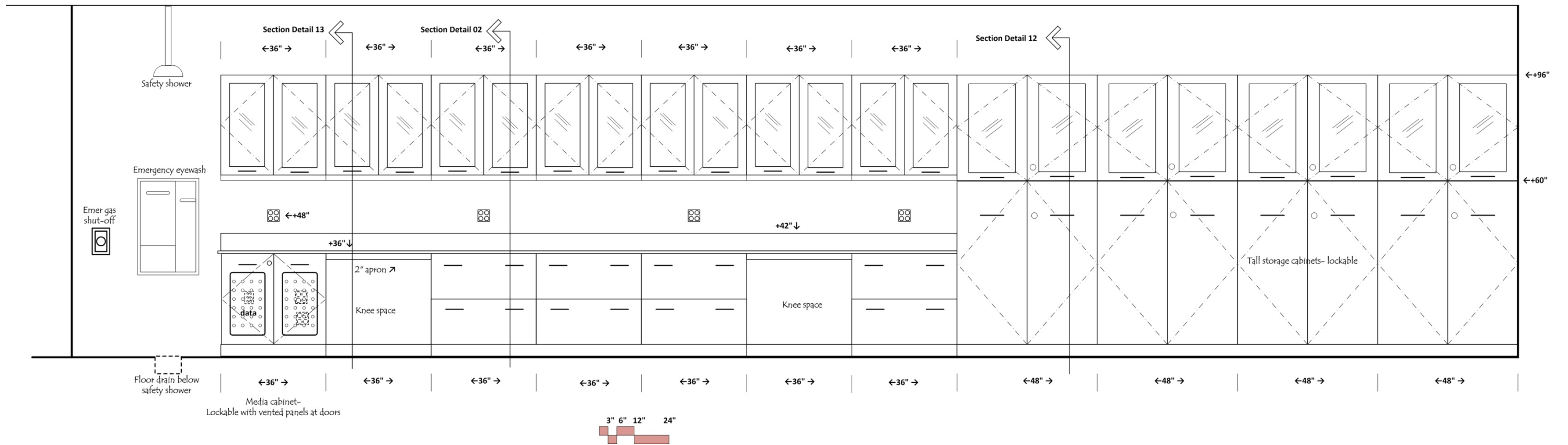
Wood (bamboo) casework- base cabinets, wall cabinets, tall cabinets
 Epoxy resin tops and sinks
 Faucets & fittings
 Mobile lab benches
 Unistrut frame at ceiling- 500 lb. point load capacity at any location
 Writing board/Smart board/Screens
 Media cabinet
 Fire extinguisher cabinet

COLLEGE FURNISHED EQUIPMENT

Chairs
 Benchttop analytical instruments
 Scientific equipment
 tool cabinets
 shop equipment and tools
 shop vac

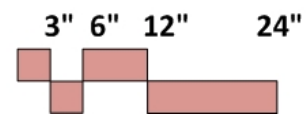
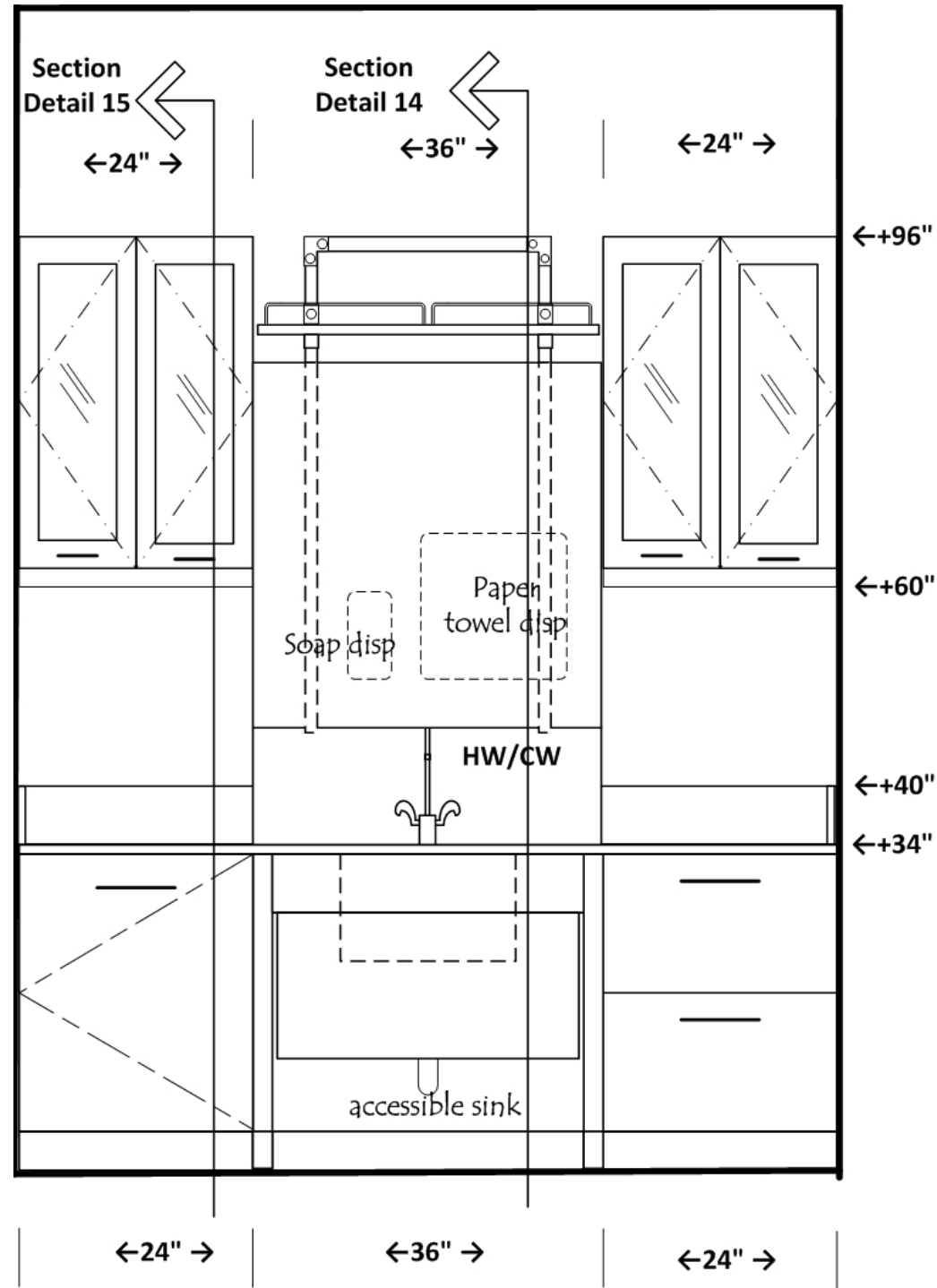
Elevation W

Robotics Lab



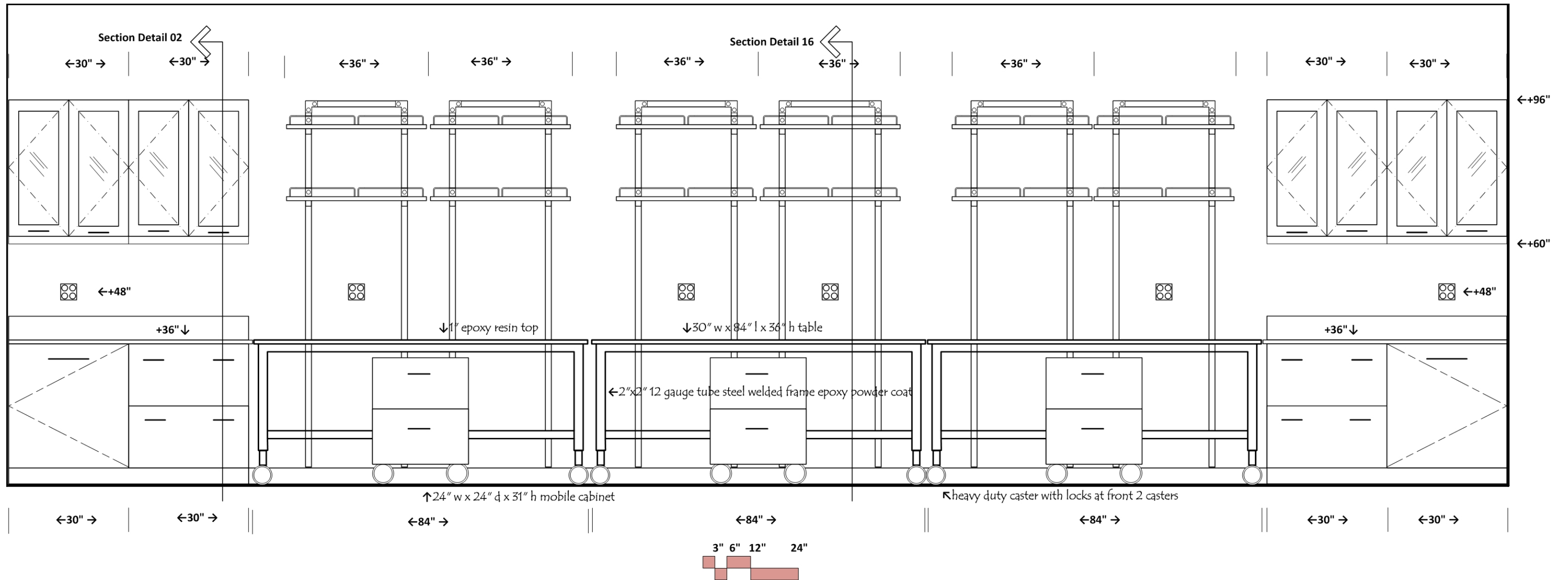
Elevation X

Robotics Lab



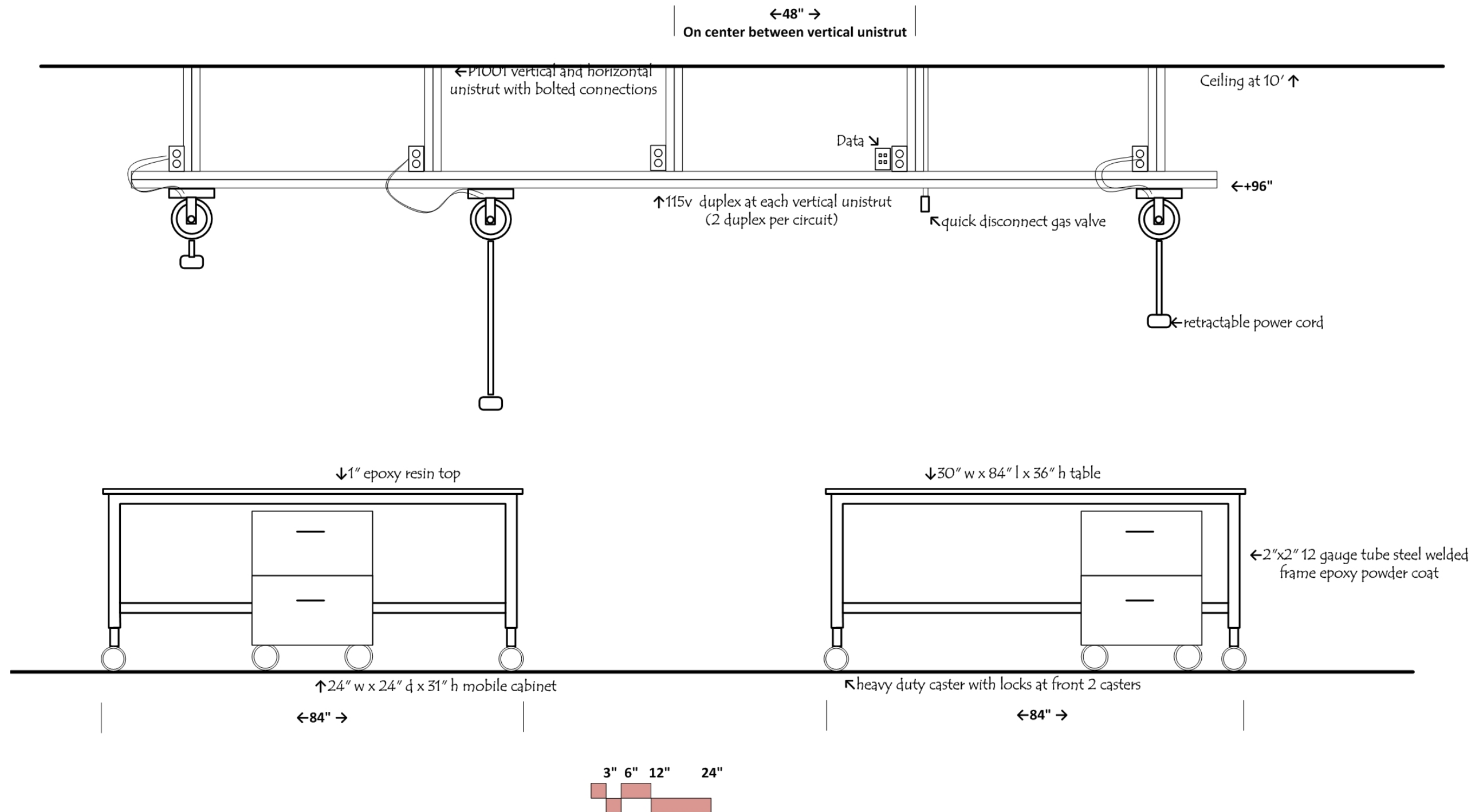
Elevation Y

Robotics Lab

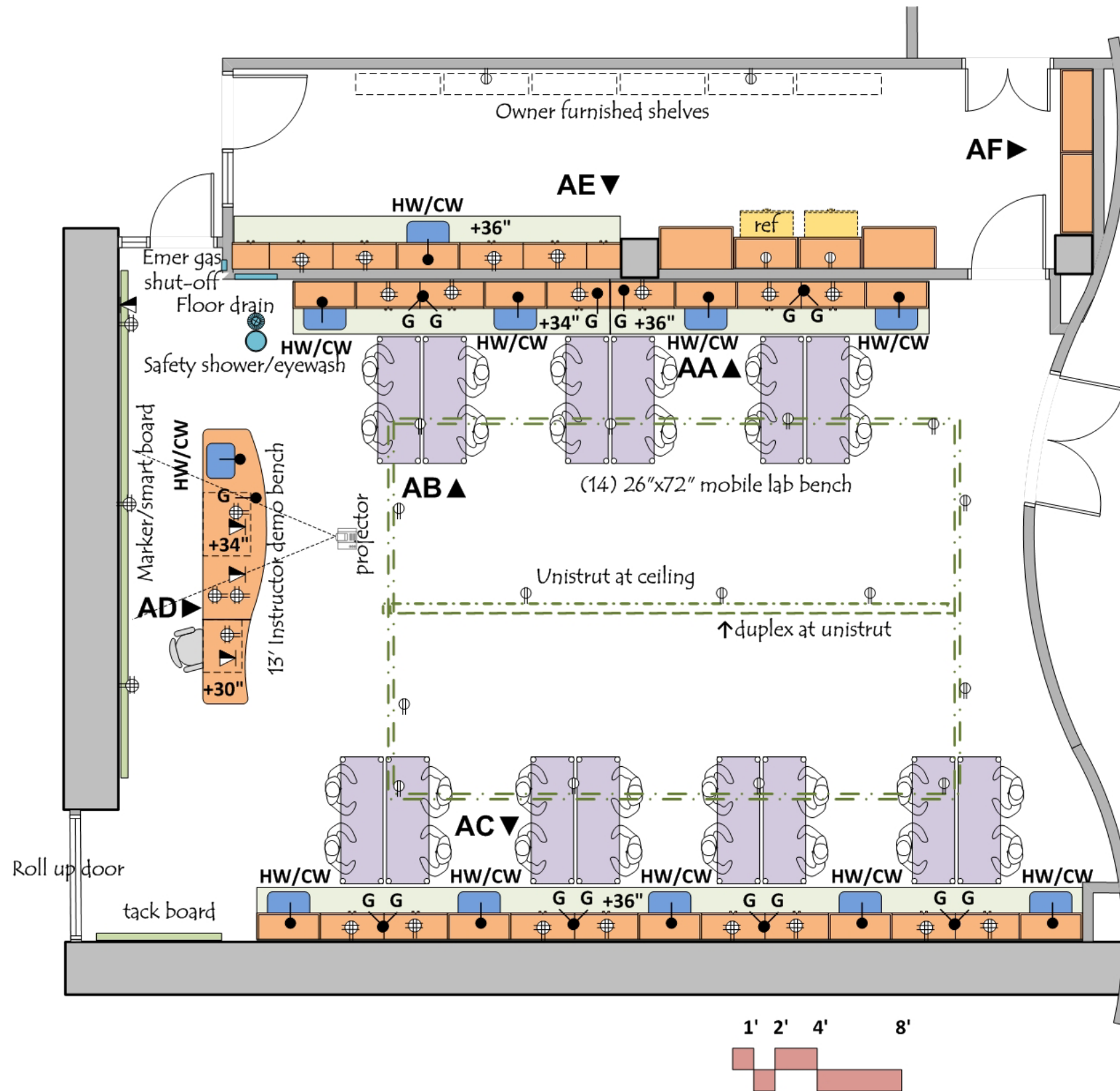


Elevation Z

Robotics Lab



Core Lab & Prep



ARCHITECTURAL

Occupancy: E
 Number of students: 28
 Floor: VCT or ground sealed concrete
 Walls: gypsum board and enamel paint
 Ceiling: 10' acoustic tile
 Doors: 3⁶/x8⁰ with window
 Acoustic Attenuation: NC 40 or less
 Light Attenuation: at exterior windows
 Security: card key access

STRUCTURAL

Vibration attenuation: 4,000 micro inches/sec or less

MECHANICAL

72 deg. F +/- 2 deg
 On/off switch for lab room exhaust

ELECTRICAL

110v fourplex and duplex outlets (maximum of four duplex per circuit; max of 2 duplex per circuit at unistrut frame at ceiling)
 Wired and wireless data
 Lighting: indirect fluorescent @ 50-60 f.c. with dimmer

PLUMBING

Hot/Cold water at sink with vacuum breakers
 Natural gas at perimeter benches
 Domestic water at safety shower/eyewash
 Floor drain at safety showers

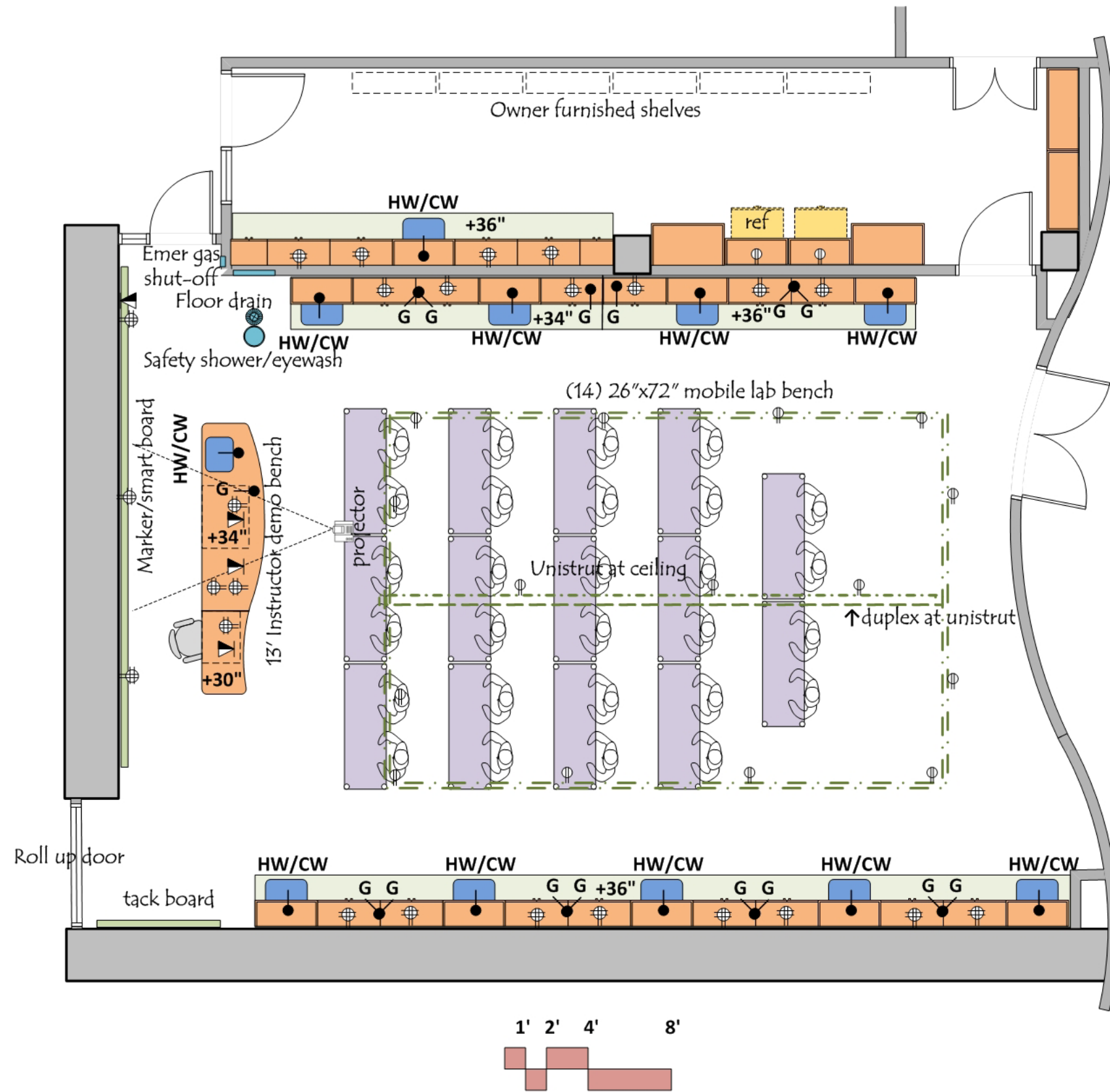
CONTRACTOR FURNISHED EQUIPMENT

Wood (bamboo) casework- base cabinets, wall cabinets, tall cabinets
 Epoxy resin tops and sinks
 Faucets & fittings
 Mobile lab benches
 Unistrut frame at ceiling- 500 lb. point load capacity at any location
 Writing board/Smart board/Screens
 Media cabinet
 Fire extinguisher cabinet

COLLEGE FURNISHED EQUIPMENT

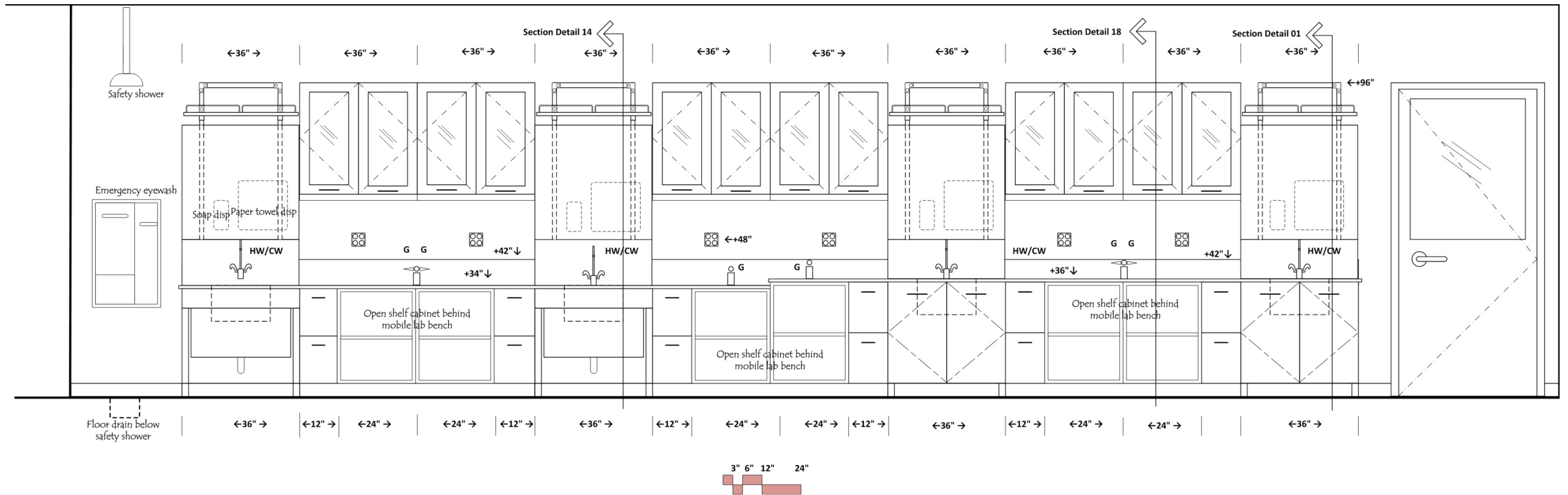
Chairs
 Benchttop analytical instruments
 Scientific equipment
 Refrigerator

Core Lab & Prep Lecture configuration



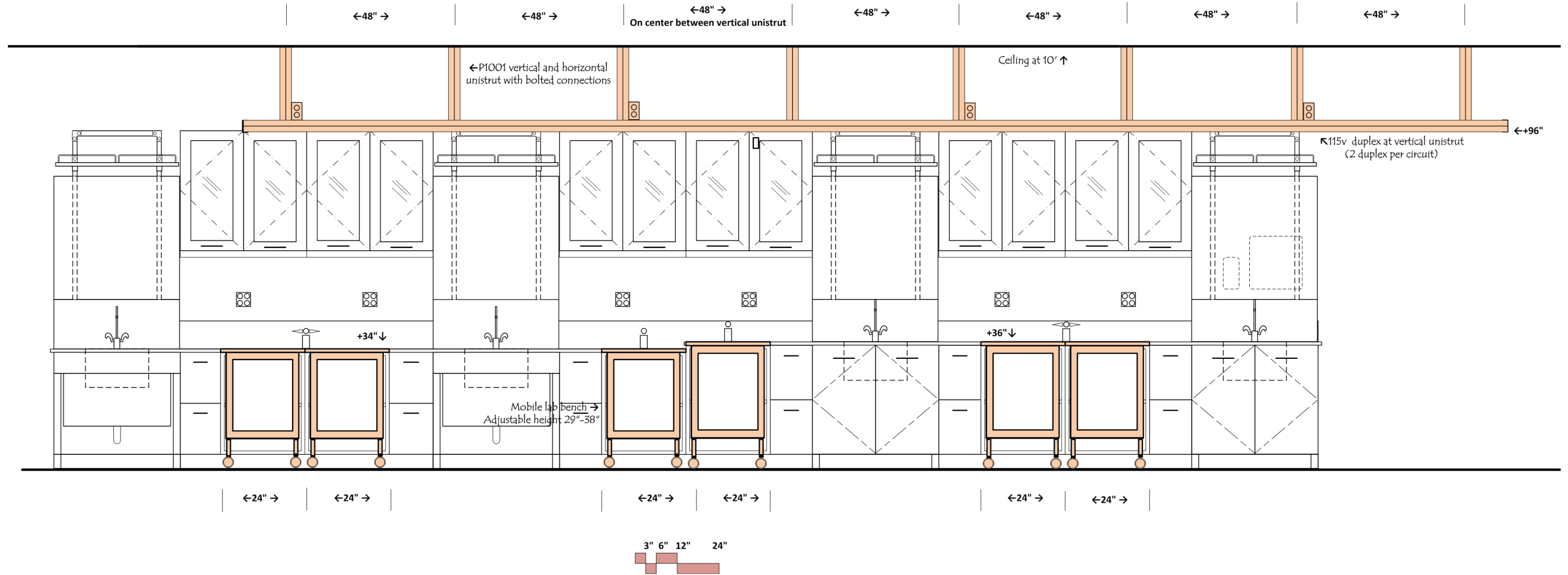
Elevation AA

Core Lab



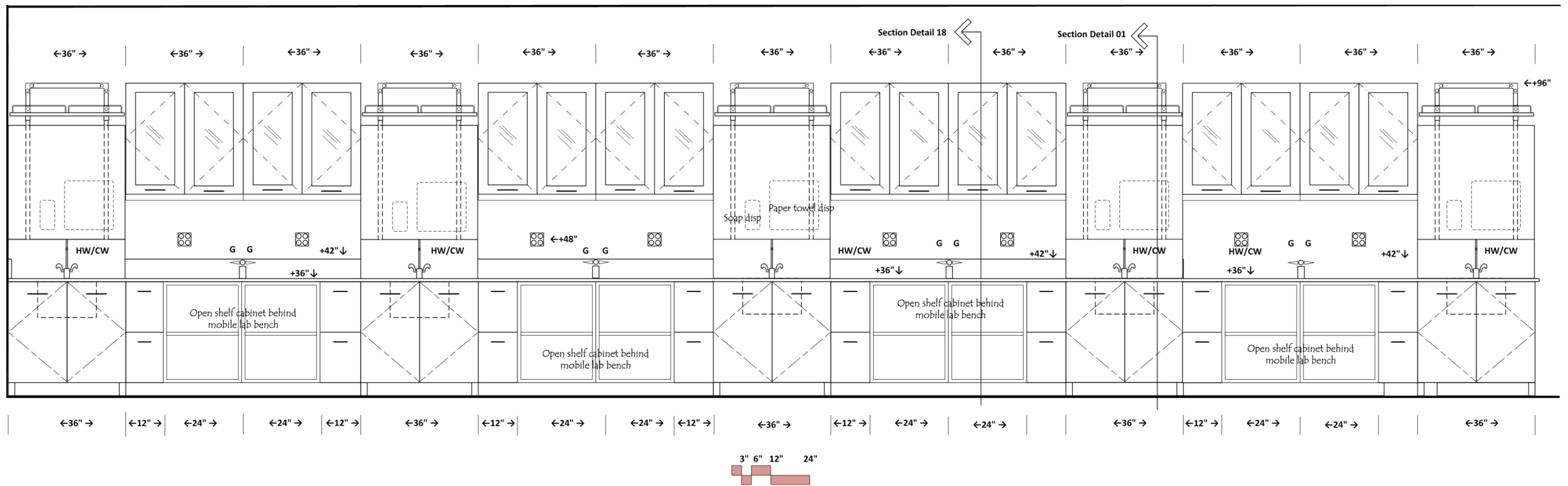
Elevation AB

Core Lab



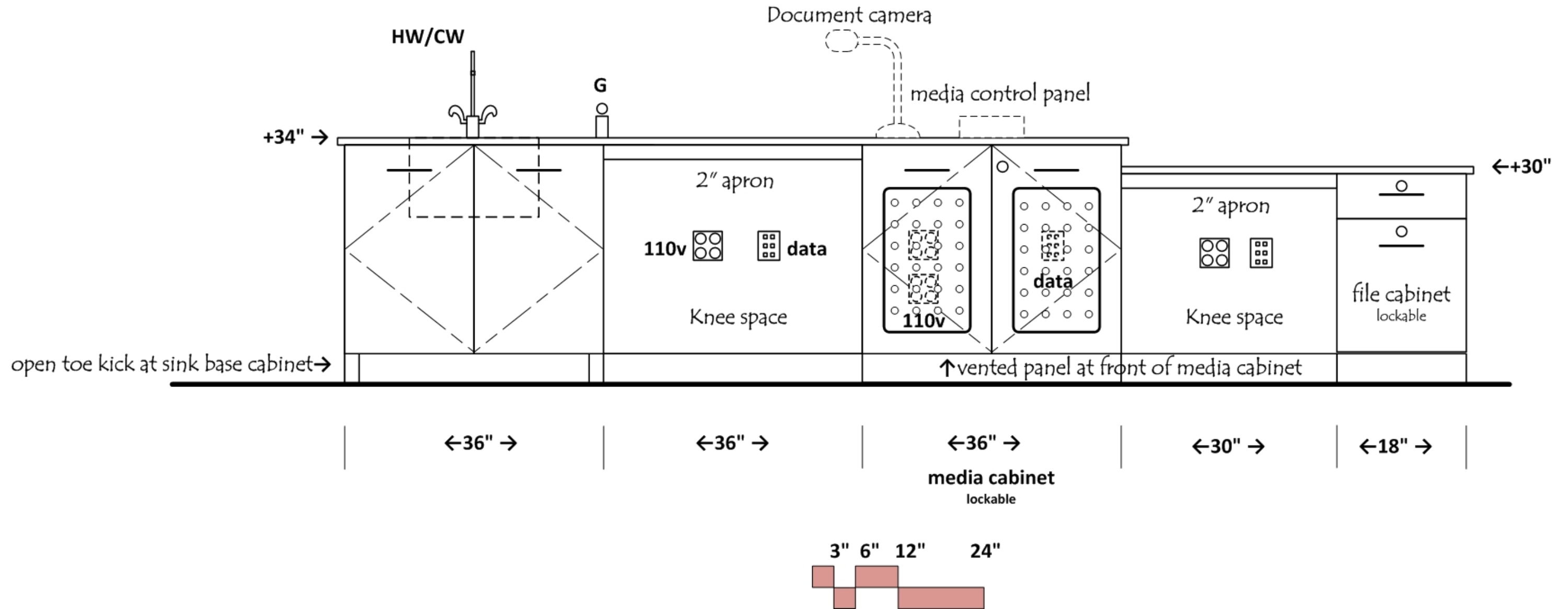
Elevation AC

Core Lab



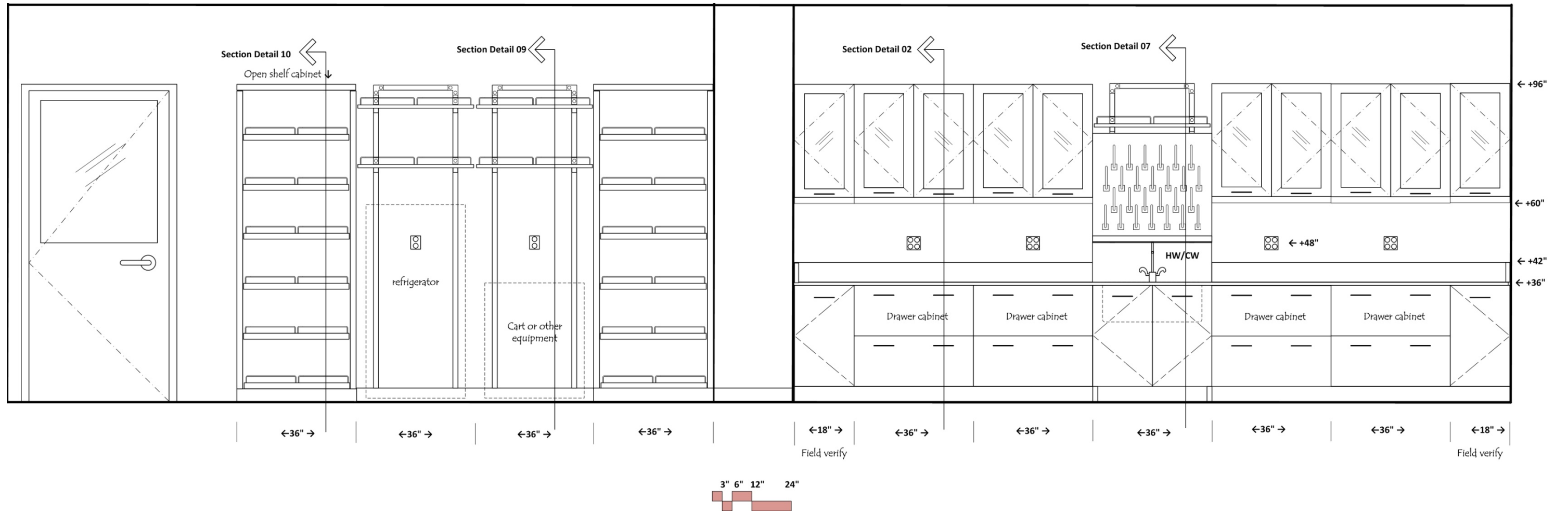
Elevation AD

Core Lab



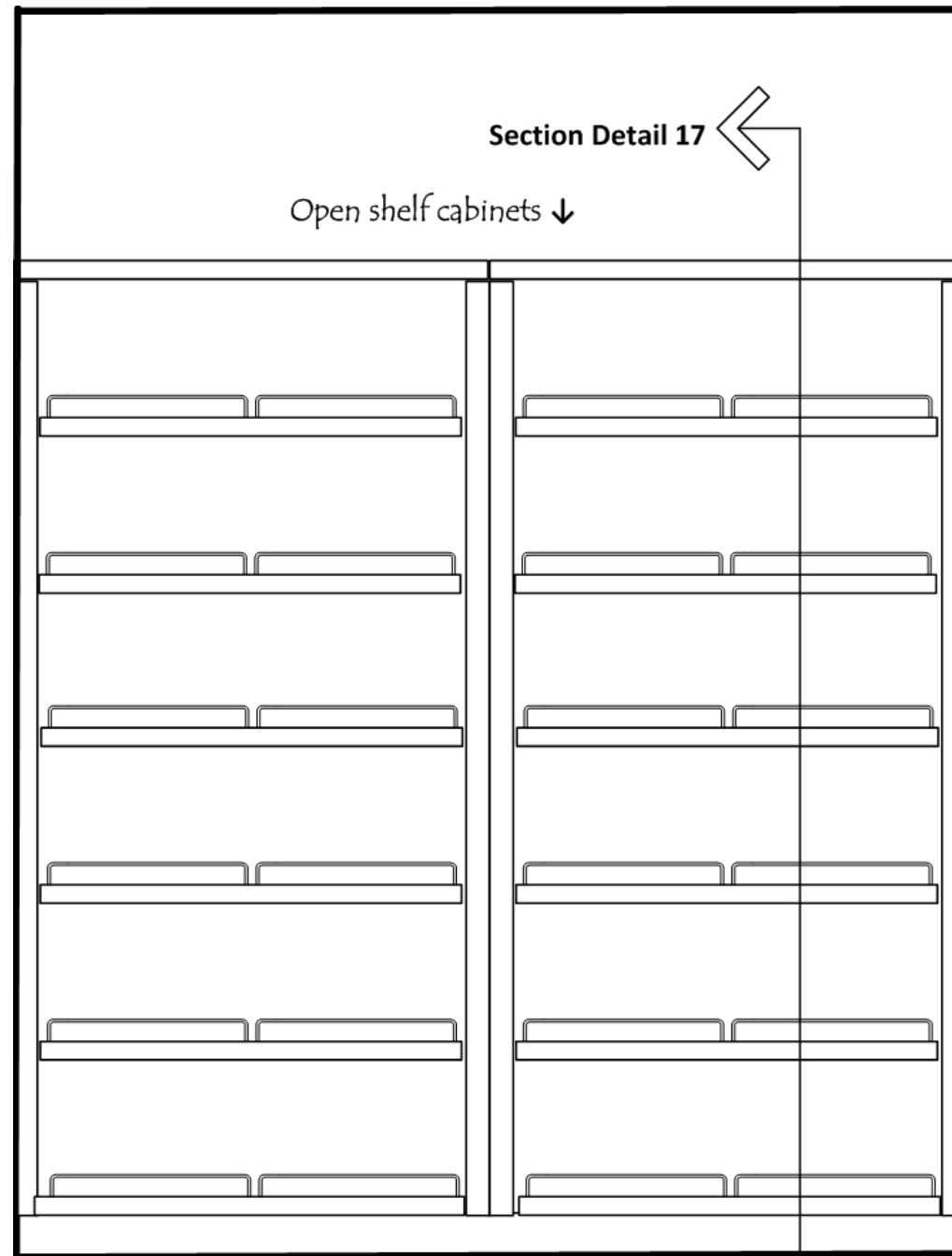
Elevation AE

Core Prep



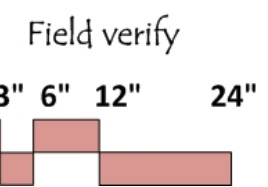
Elevation AF

Core Lab



←46" →

←46" →



Physics Lab & Prep

Similar for 2 Physics Labs



ARCHITECTURAL

Occupancy: E
 Number of students: 28
 Floor: VCT or ground sealed concrete
 Walls: gypsum board and enamel paint
 Ceiling: 10' acoustic tile
 Doors: 3⁶/x8⁰ with window
 Acoustic Attenuation: NC 40 or less
 Light Attenuation: at exterior windows
 Security: card key access

STRUCTURAL

Vibration attenuation: 4,000 micro inches/sec or less

MECHANICAL

72 deg. F +/- 2 deg
 On/off switch for room exhaust

ELECTRICAL

110v fourplex and duplex outlets (maximum of four duplex per circuit; max of 2 duplex per circuit at unistrut frame at ceiling)
 Wired and wireless data
 Lighting: indirect fluorescent @ 50-60 f.c. with dimmer

PLUMBING

Hot/Cold water at sink with vacuum breakers
 Natural gas at unistrut above instructor demo bench
 Domestic water at safety shower/eyewash
 Floor drain at safety showers

CONTRACTOR FURNISHED EQUIPMENT

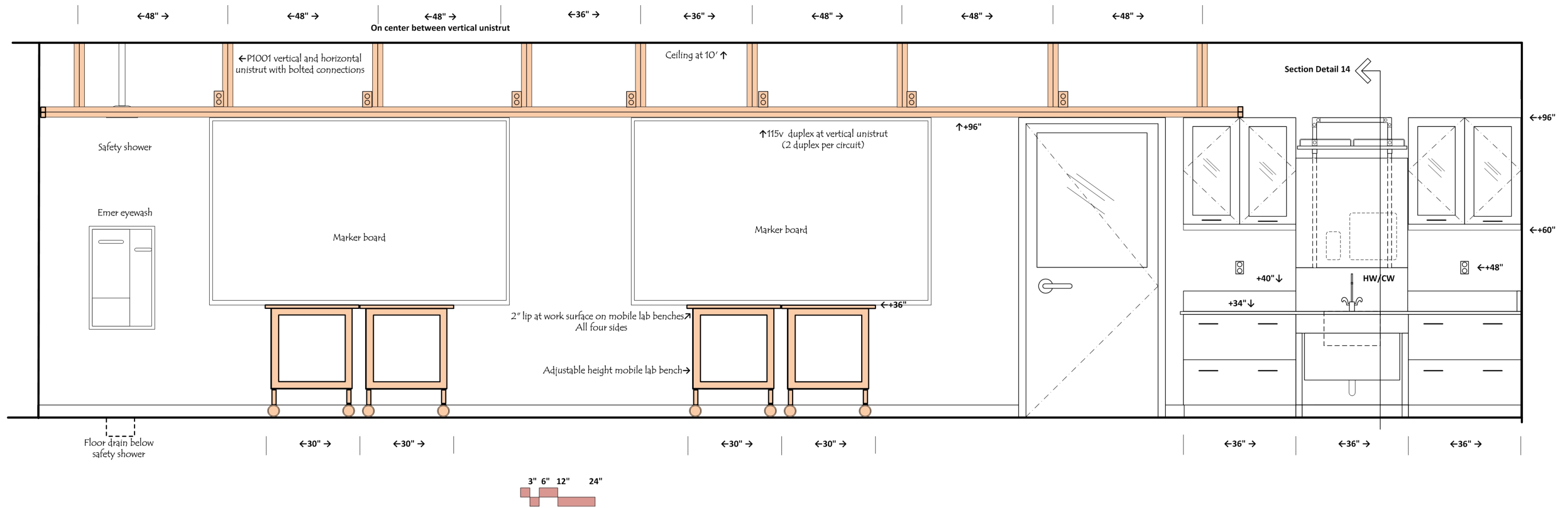
Wood (bamboo) casework- base cabinets, wall cabinets, tall cabinets
 Epoxy resin tops and sinks
 Faucets & fittings
 Mobile lab benches
 Unistrut frame at ceiling- 500 lb. point load capacity at any location
 Writing board/Smart board/Screens
 Fire extinguisher cabinet

COLLEGE FURNISHED EQUIPMENT

Chairs
 Benchtop analytical instruments
 Scientific equipment
 mobile media cabinet

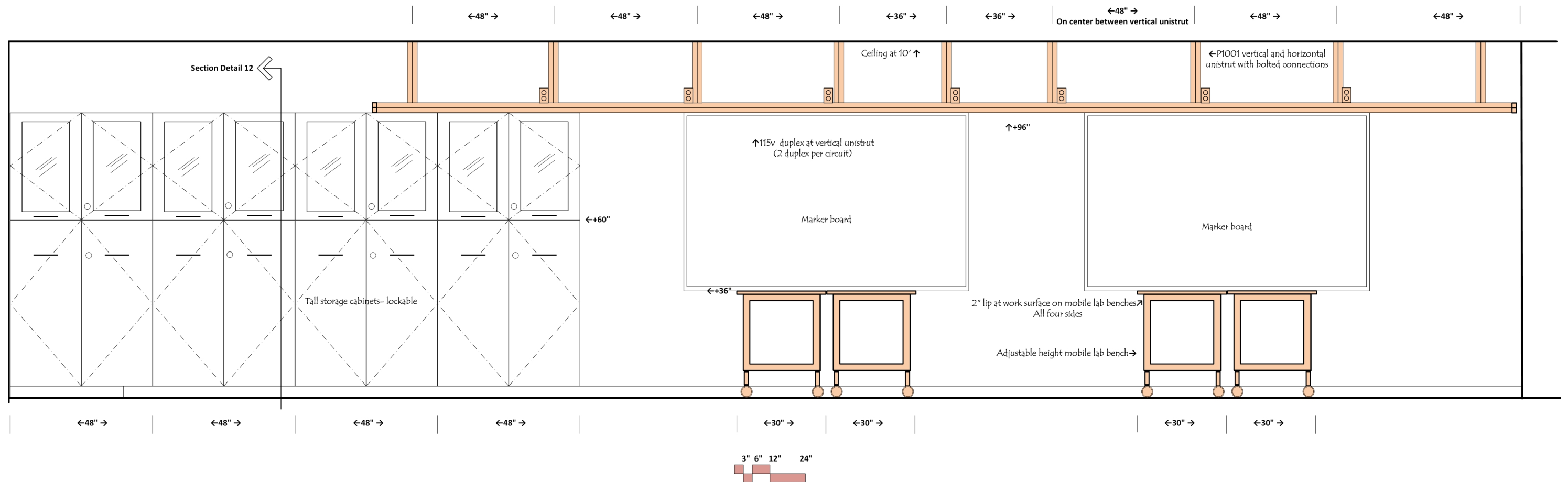
Elevation AG

Physics Lab



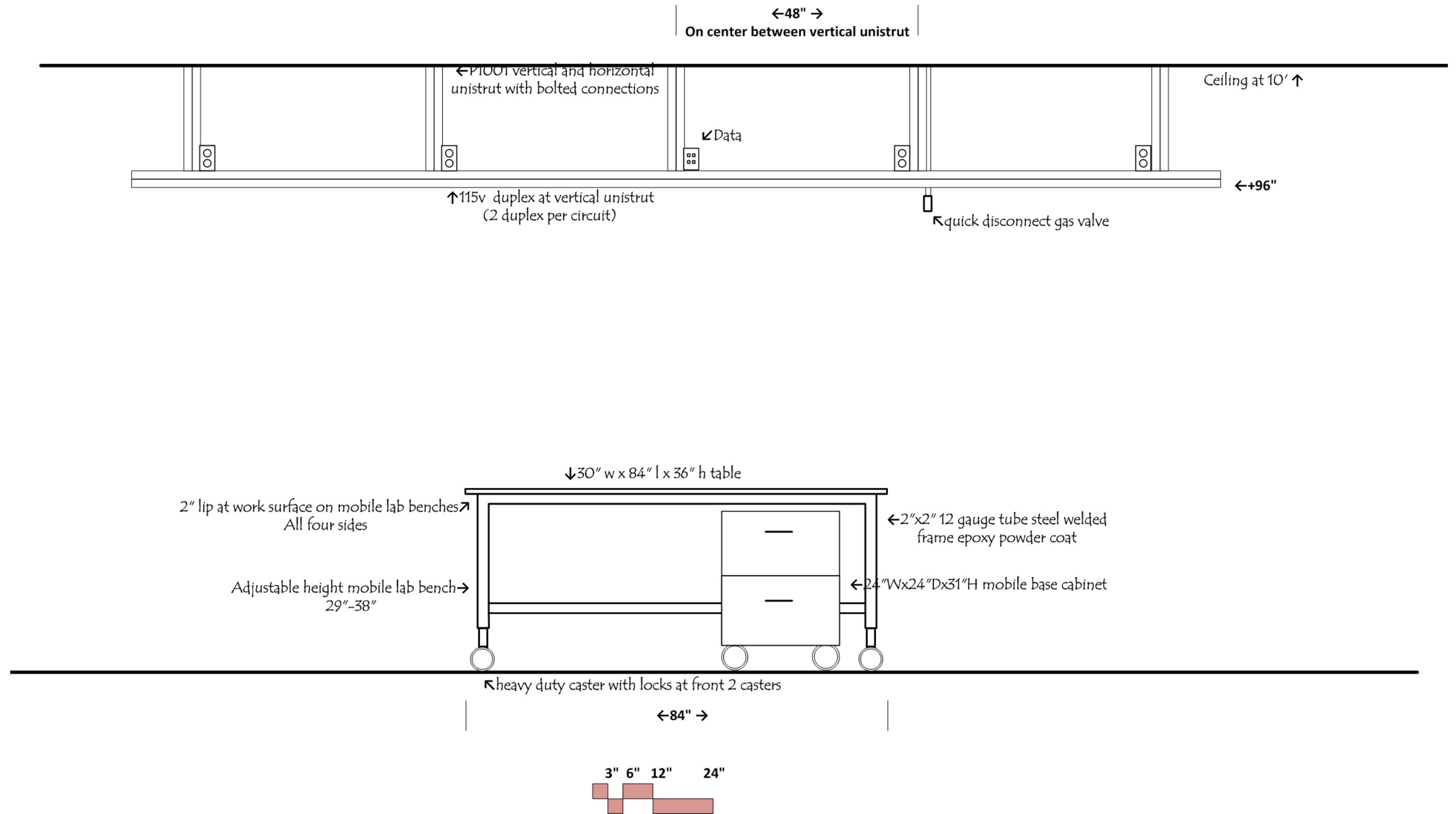
Elevation AH

Physics Lab



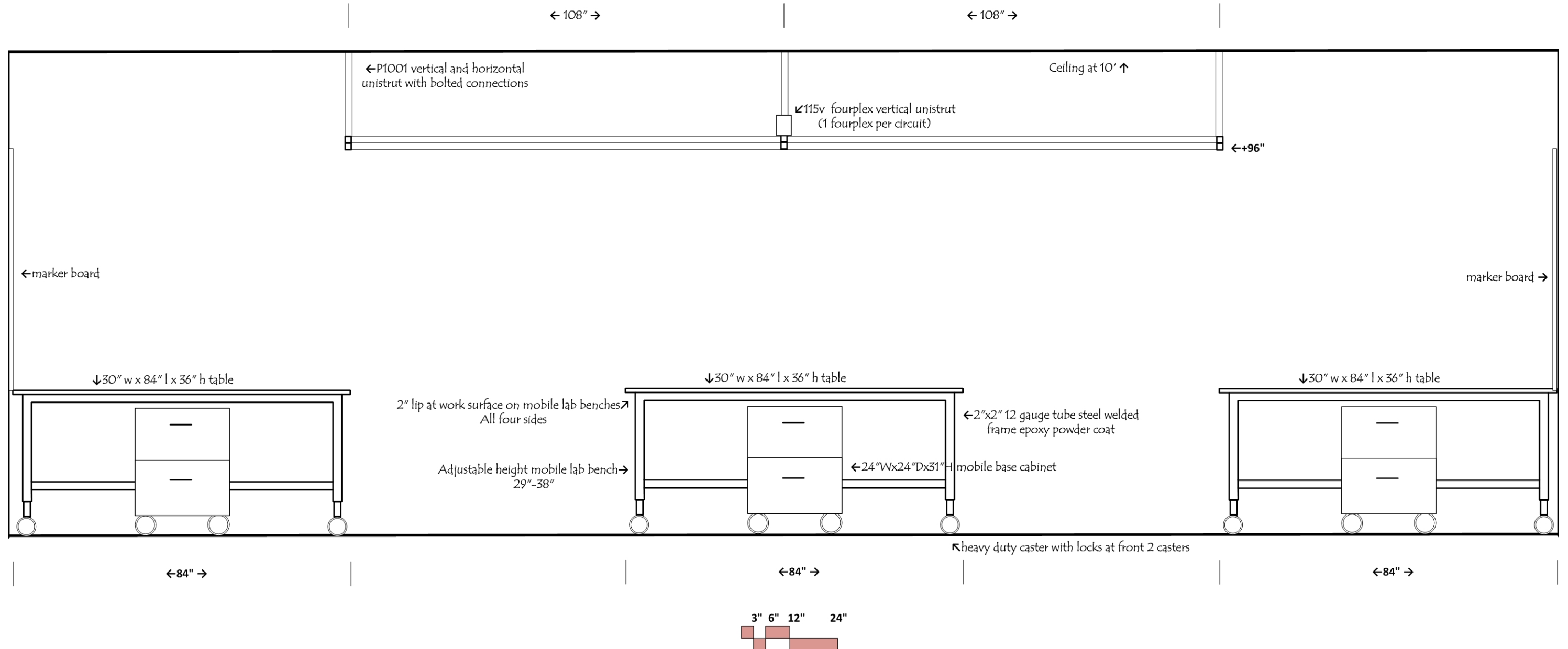
Elevation A1

Physics Lab



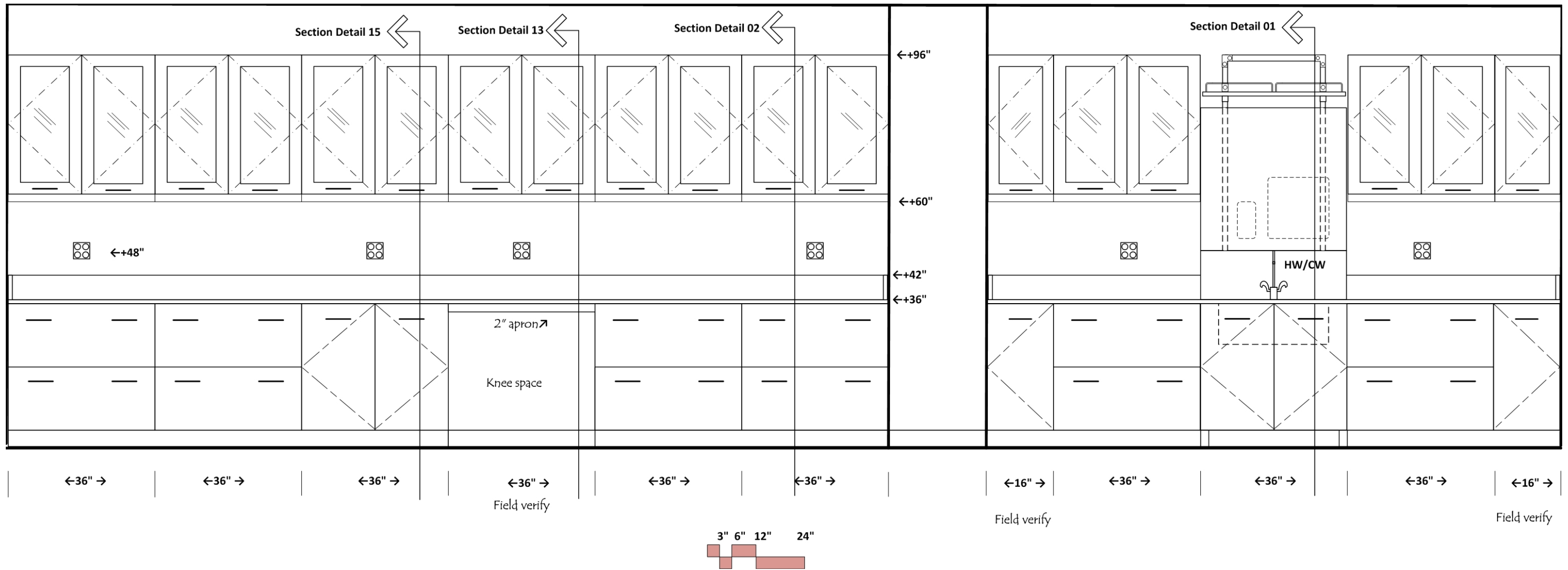
Elevation AJ

Physics Lab



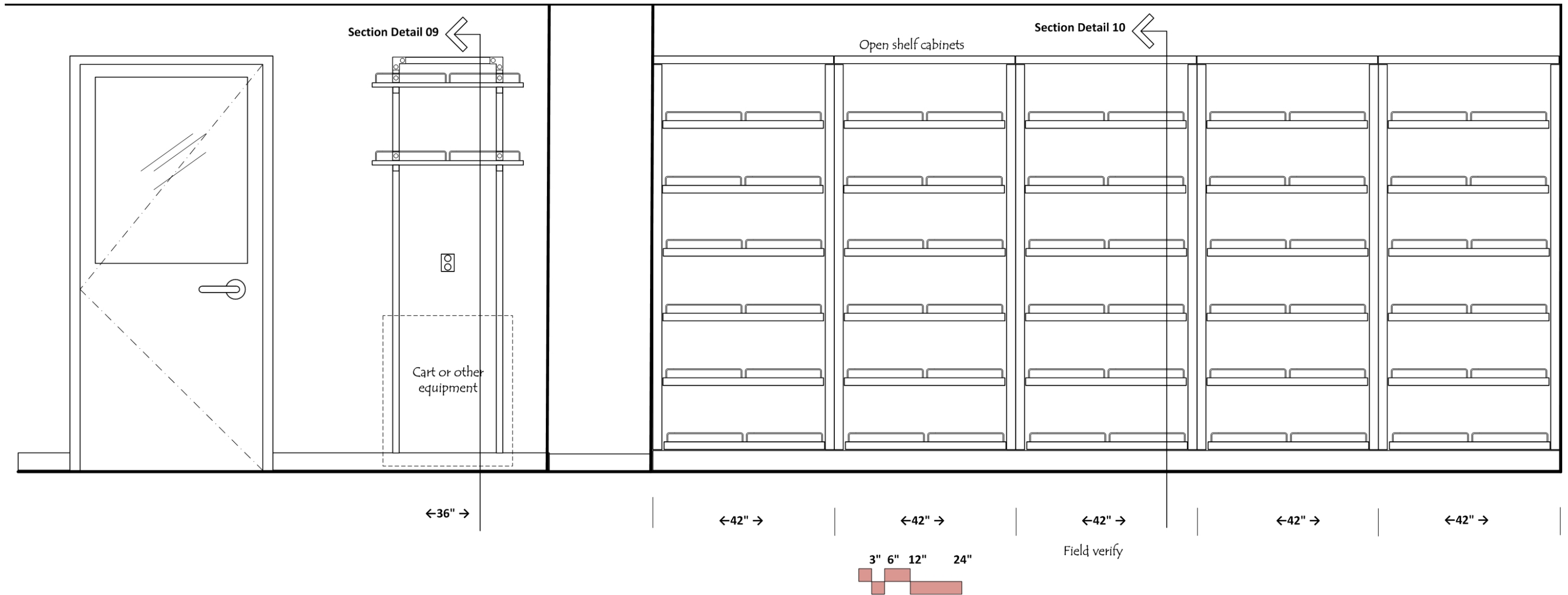
Elevation AK

Physics Prep



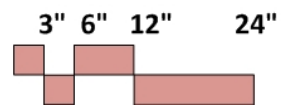
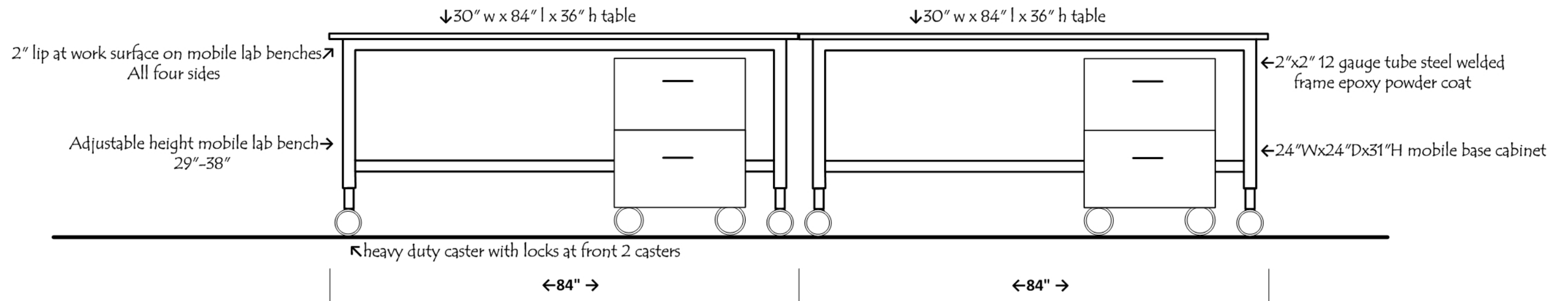
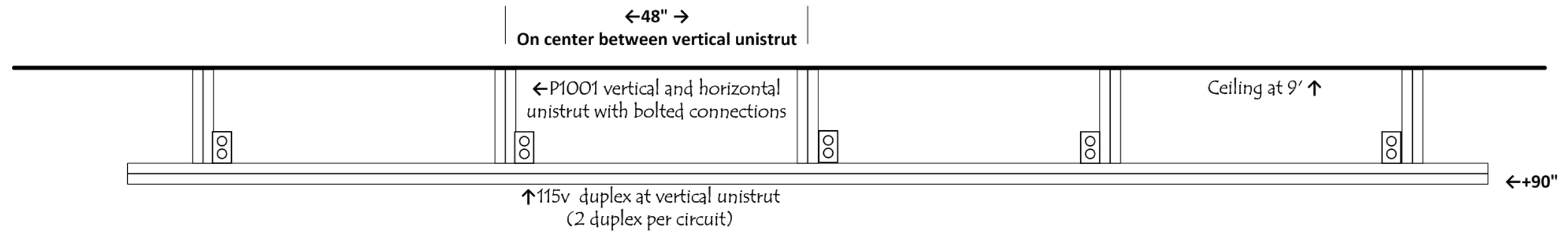
Elevation AL

Physics Prep



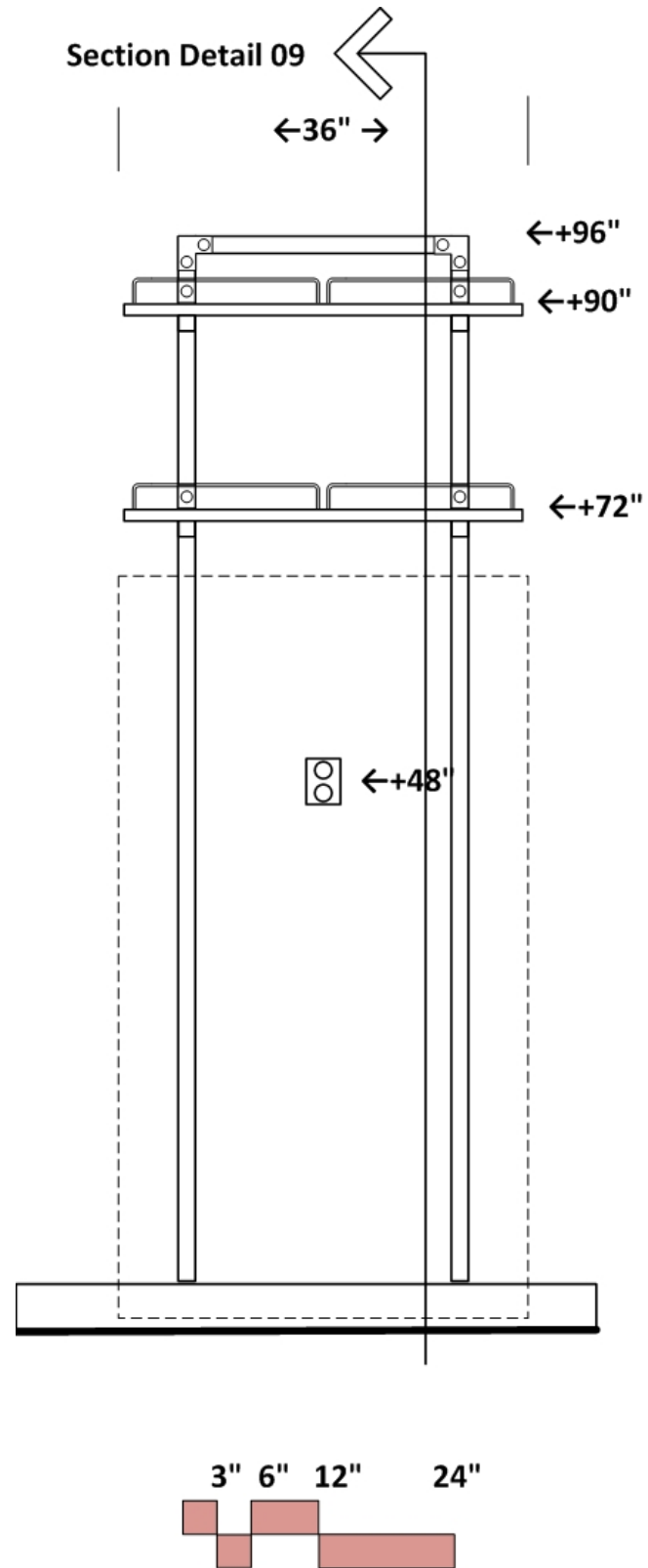
Elevation AM

Physics Prep



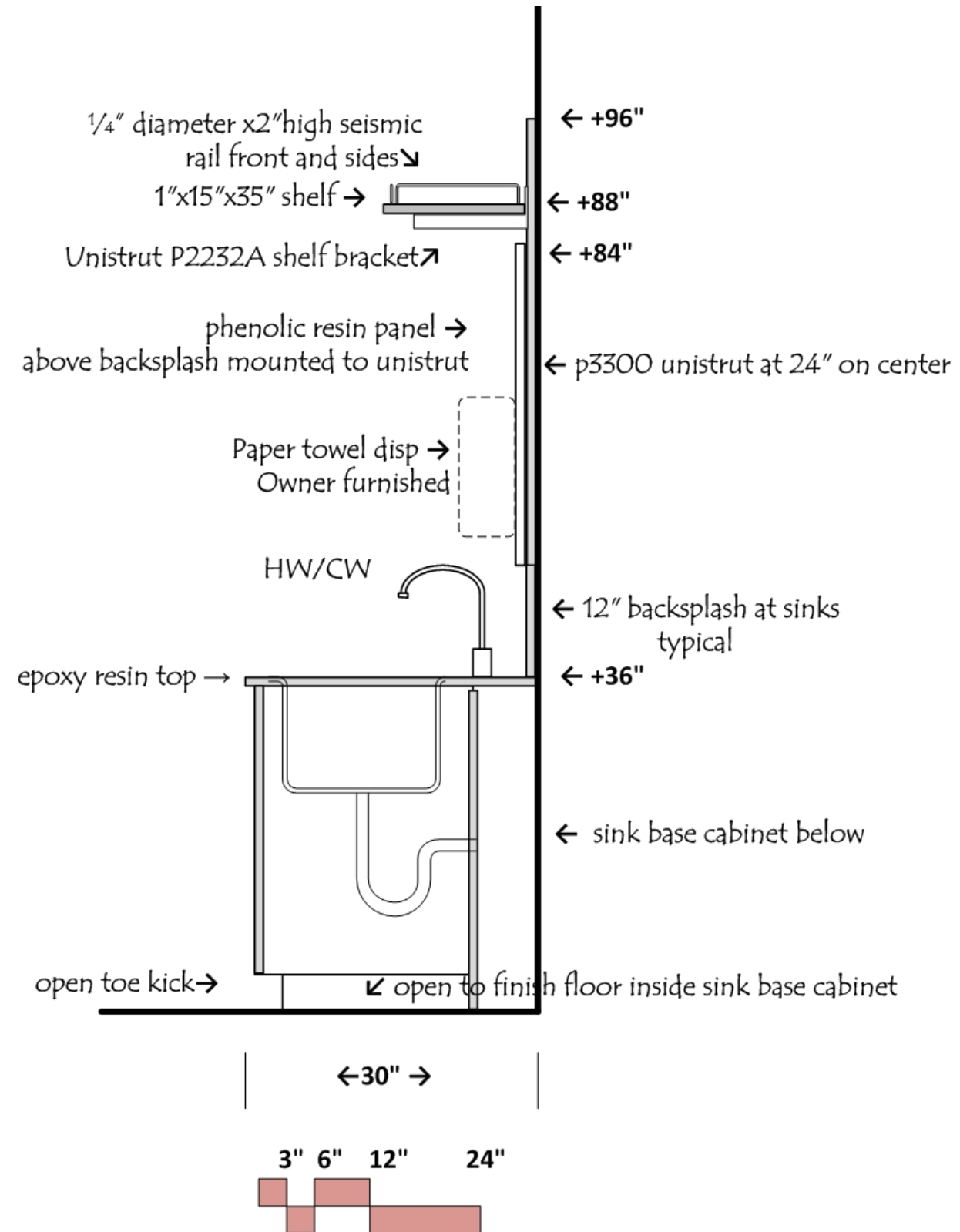
Elevation AN

Physics Prep



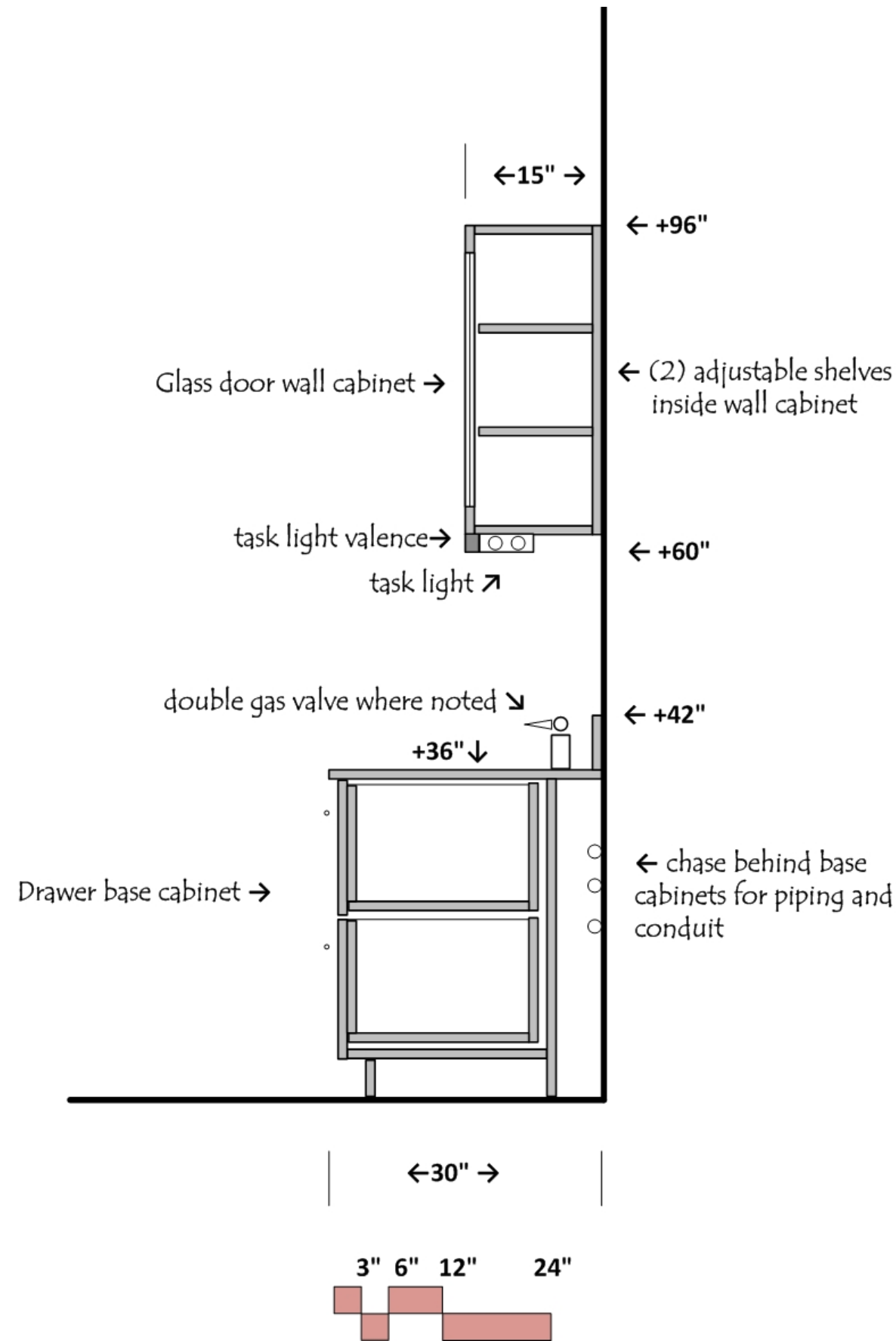
Section Detail 01

wall sink with shelf above



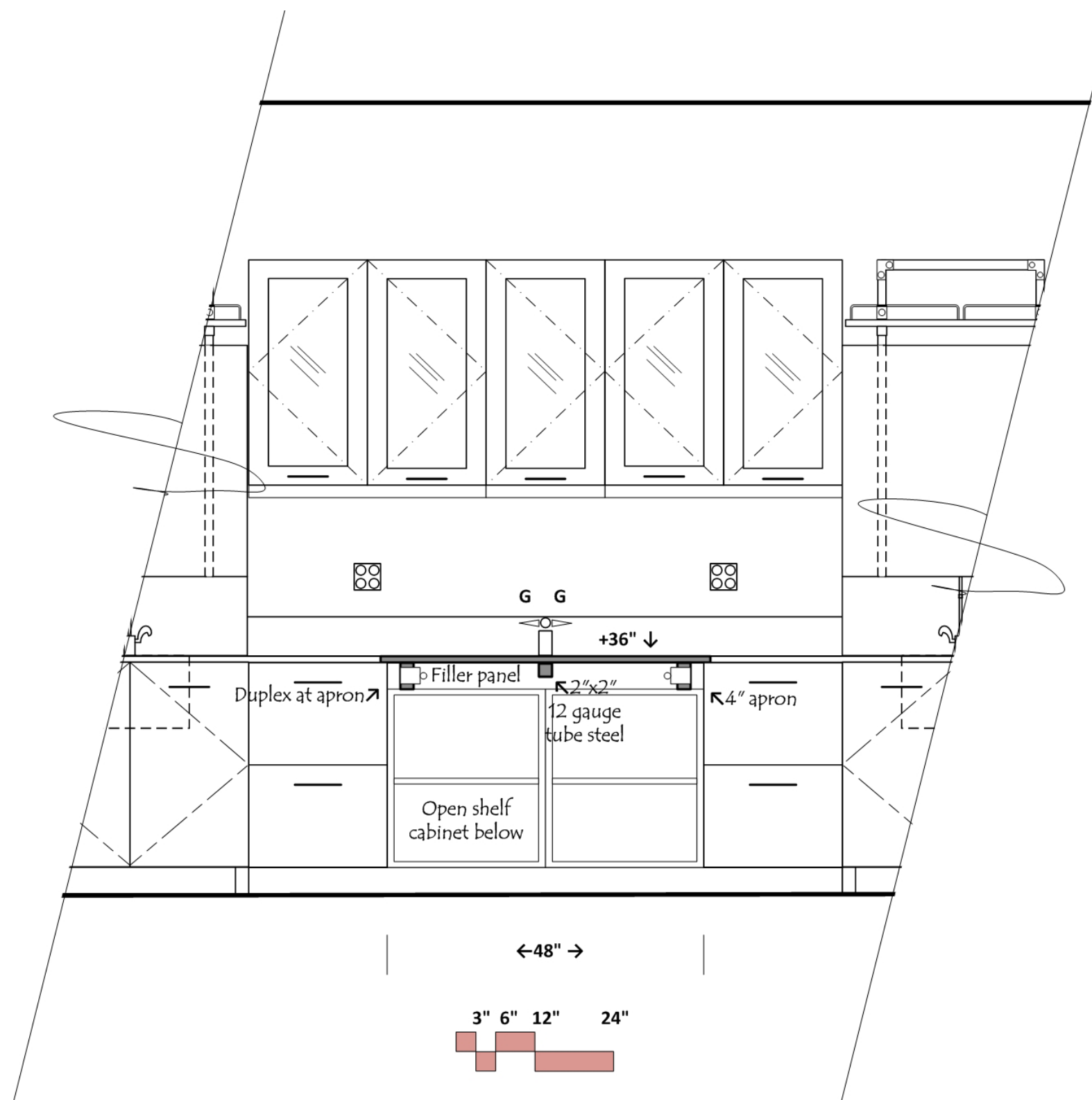
Section Detail 02

wall cabinet with drawer cabinet below



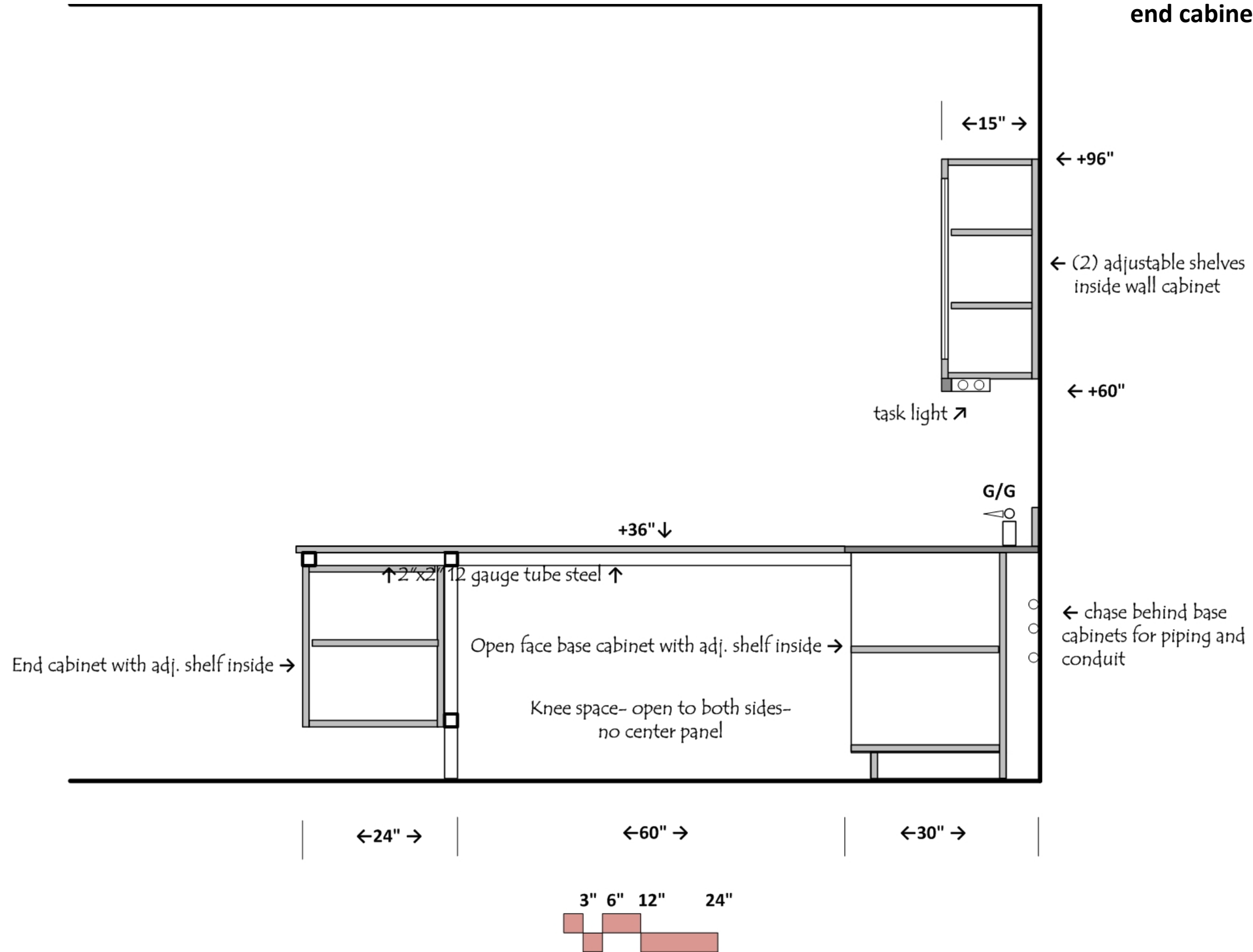
Section Detail 03

peninsula bench



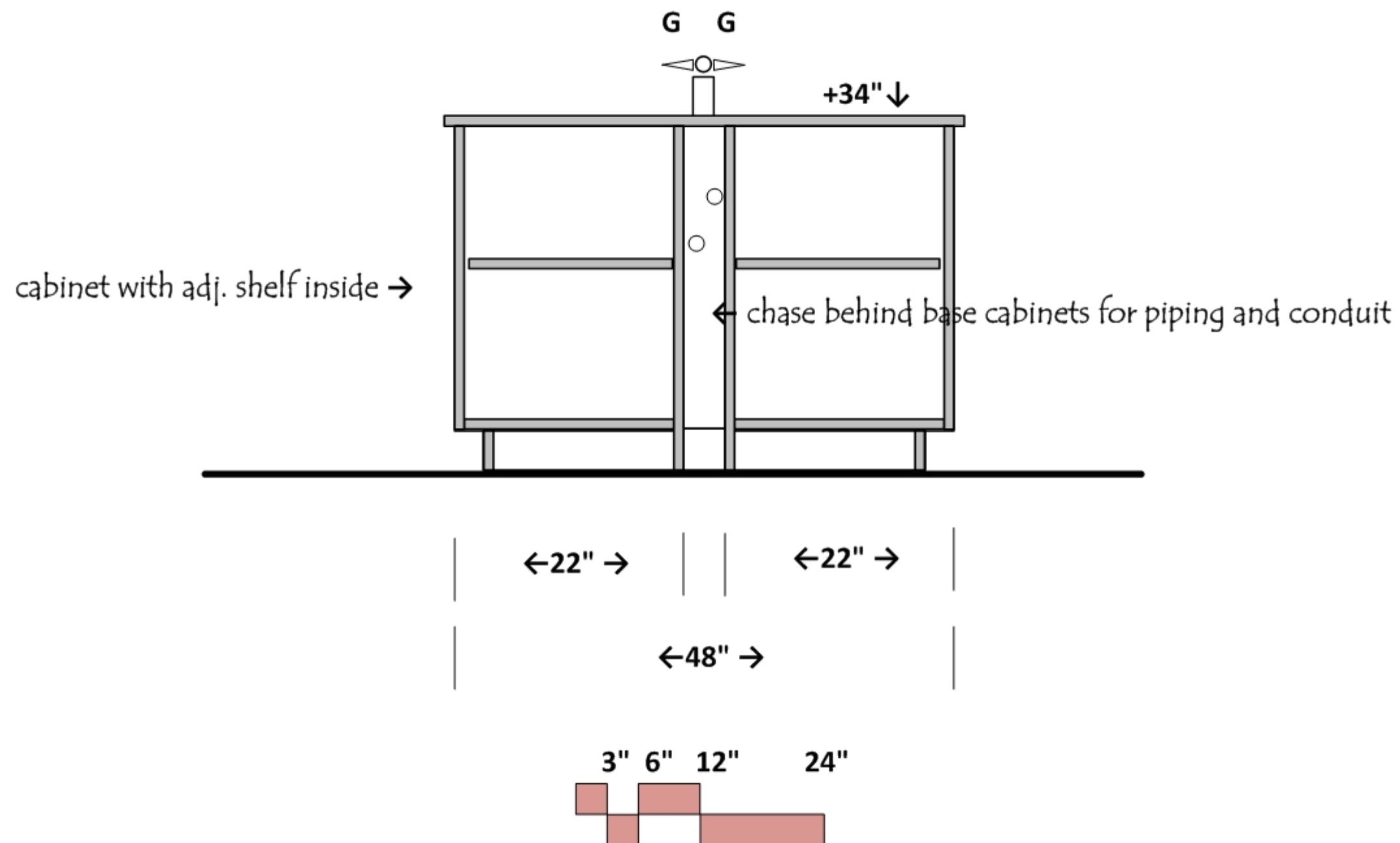
Section Detail 04

end cabinet at peninsula bench



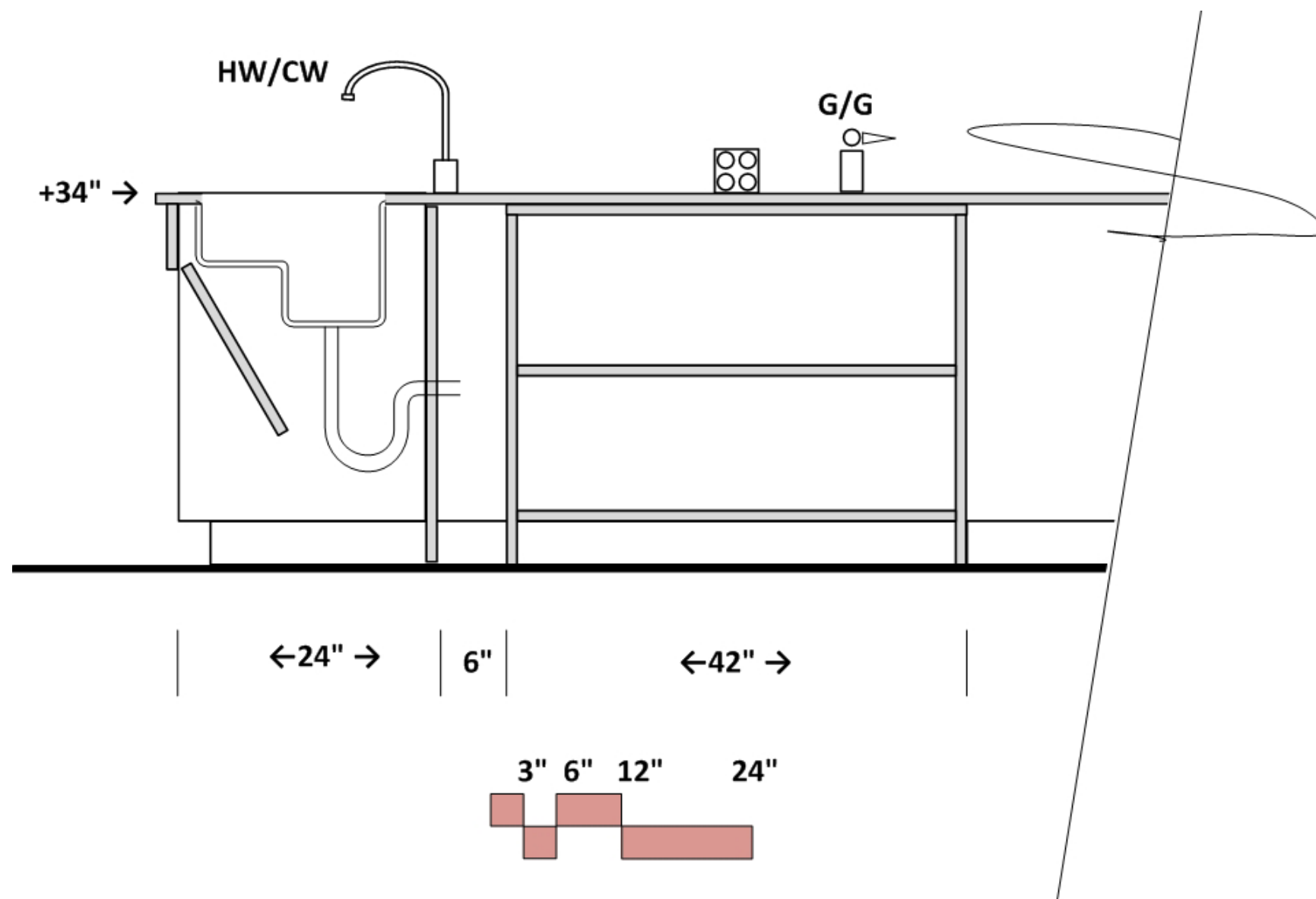
Section Detail 05

island bench

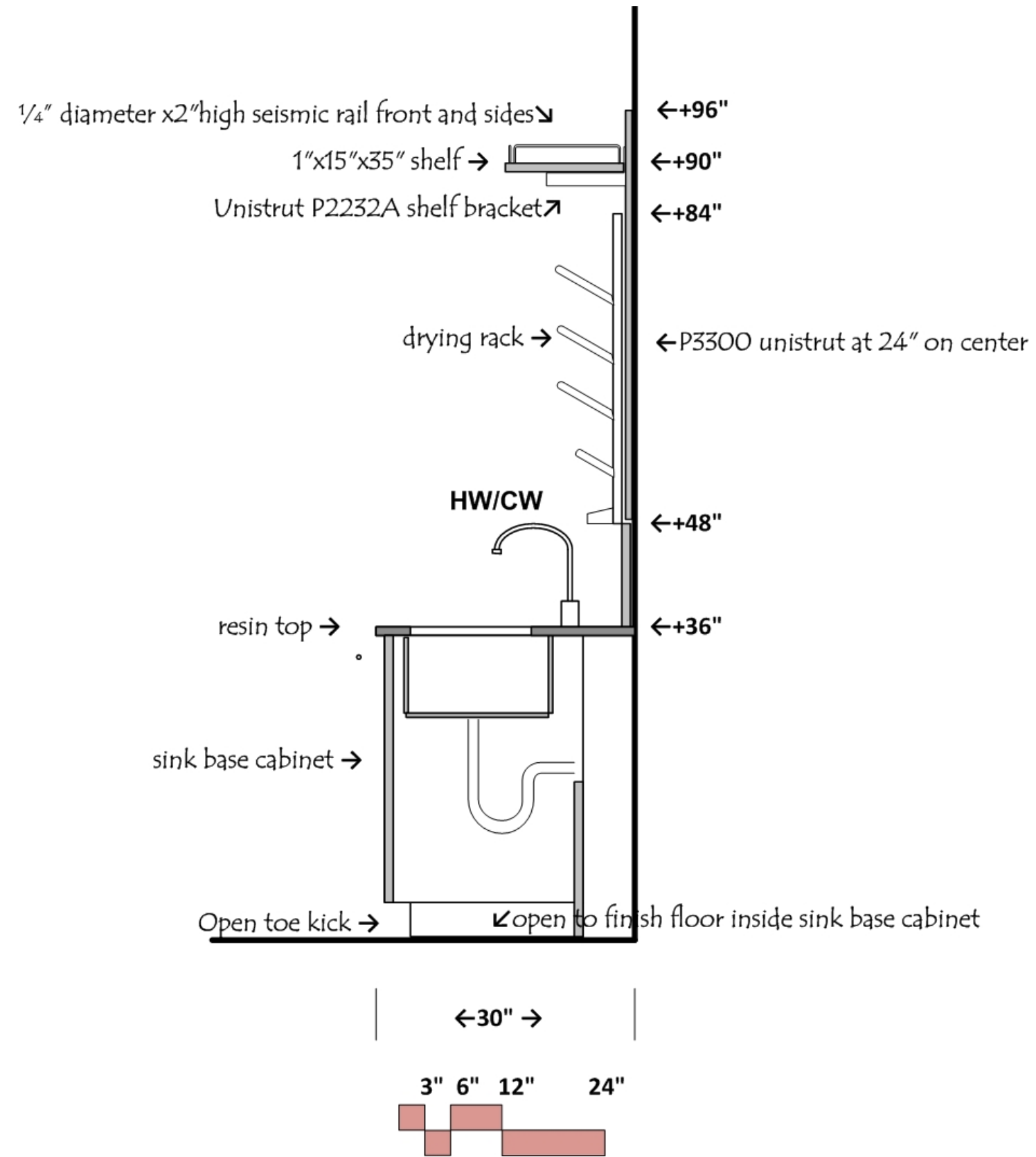


Section Detail 06

accessible sink at island bench

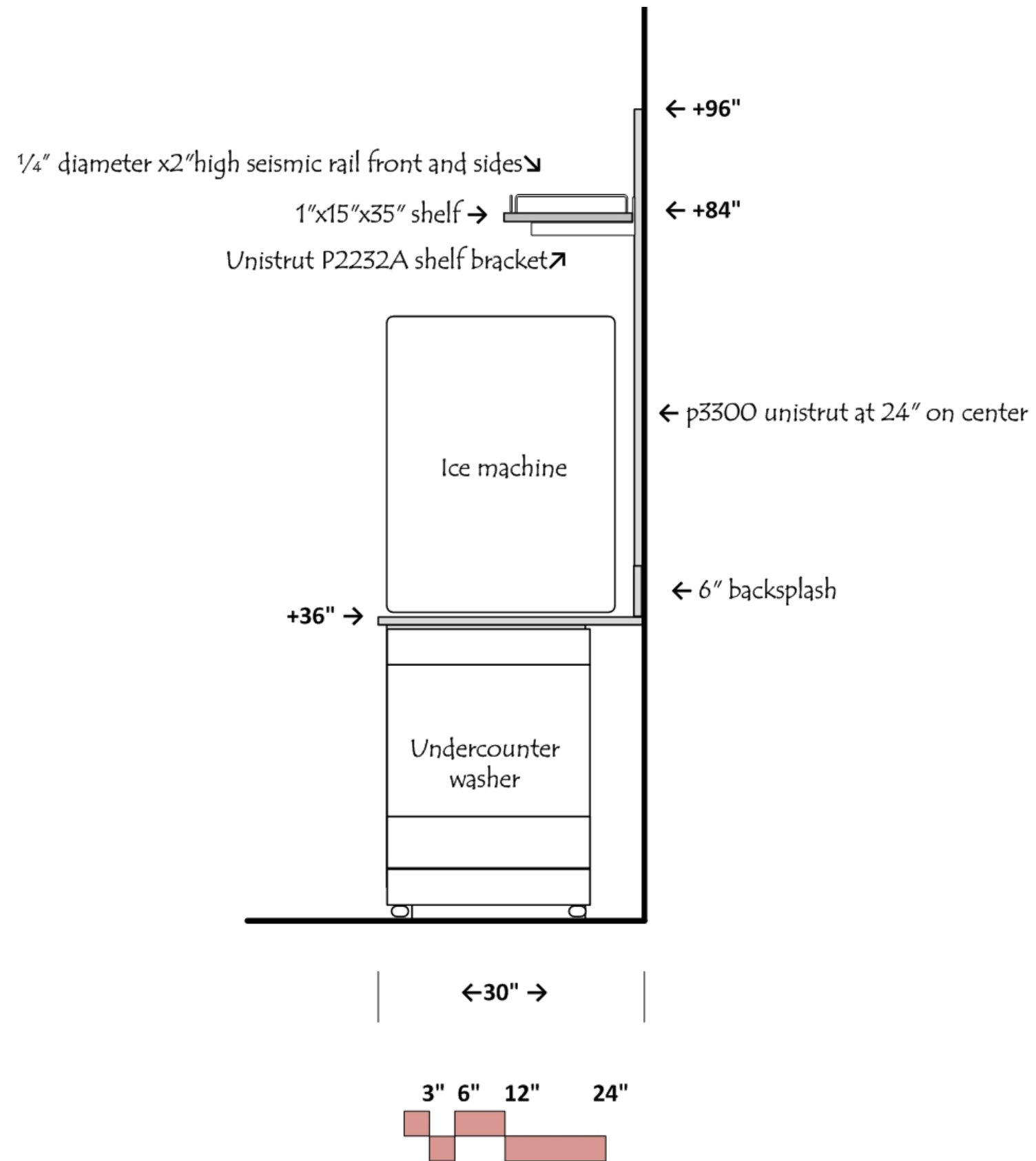


Section Detail 07 prep sink



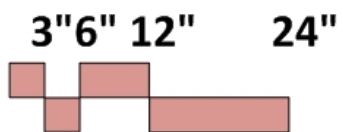
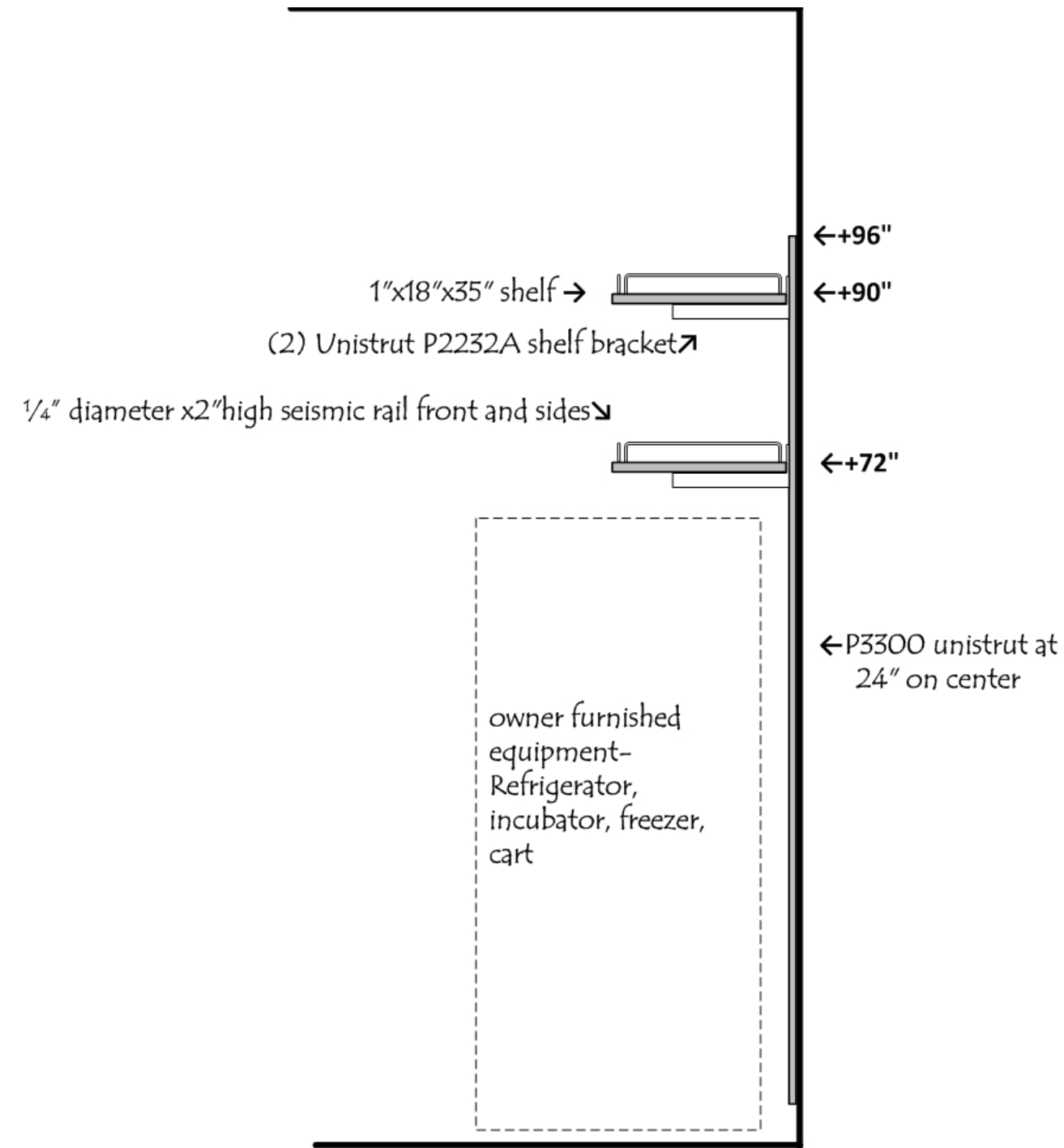
Section Detail 08

wall bench with washer below
open shelf above



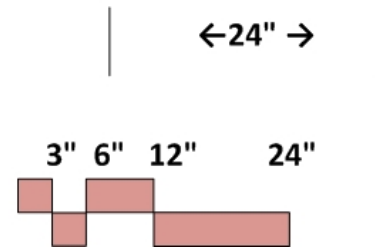
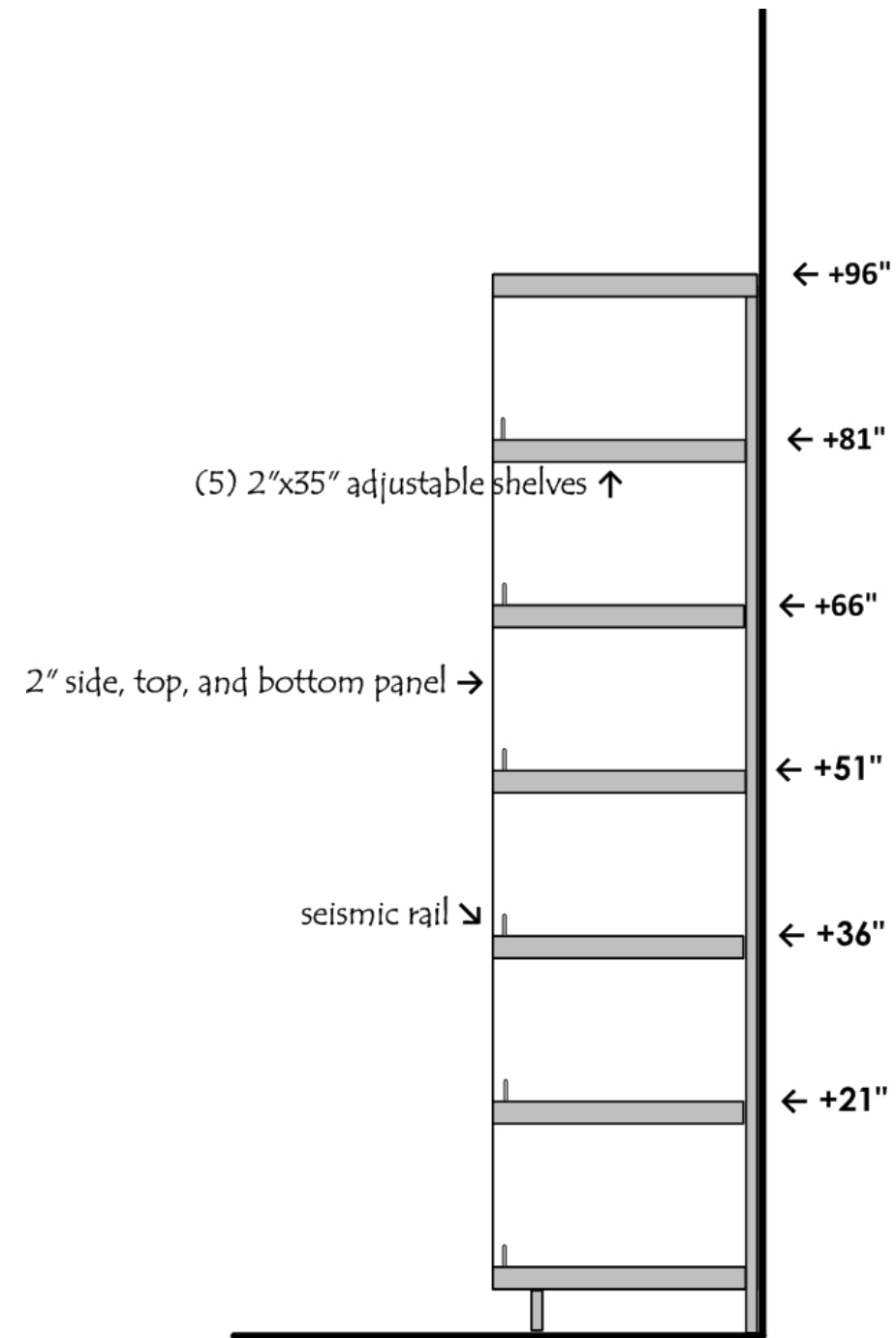
Section Detail 09

equipment space at wall



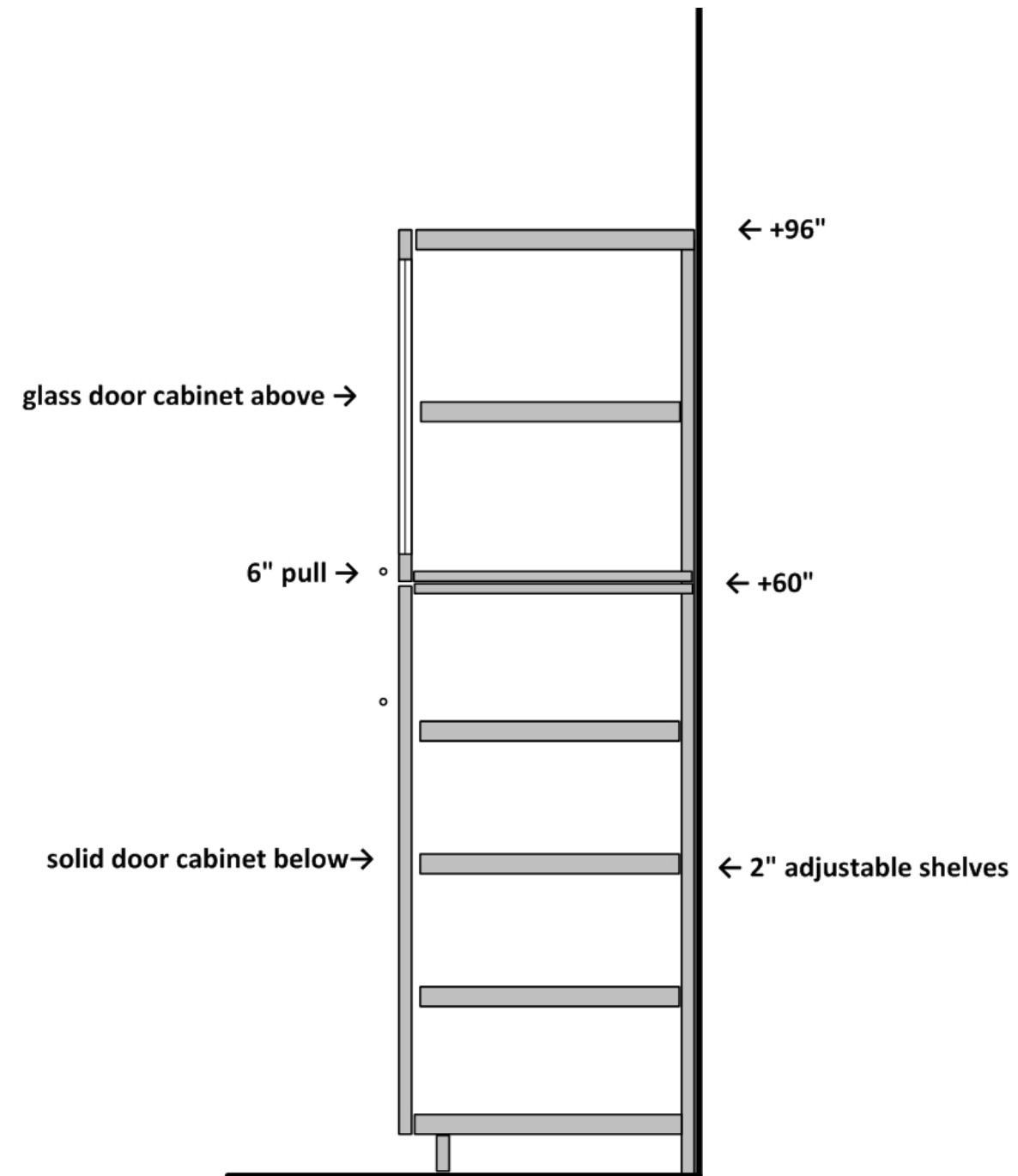
Section Detail 10

open shelf tall cabinet
24" deep

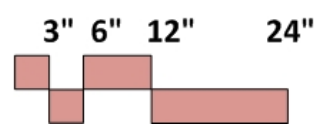


Section Detail 11

tall storage cabinet- biology prep

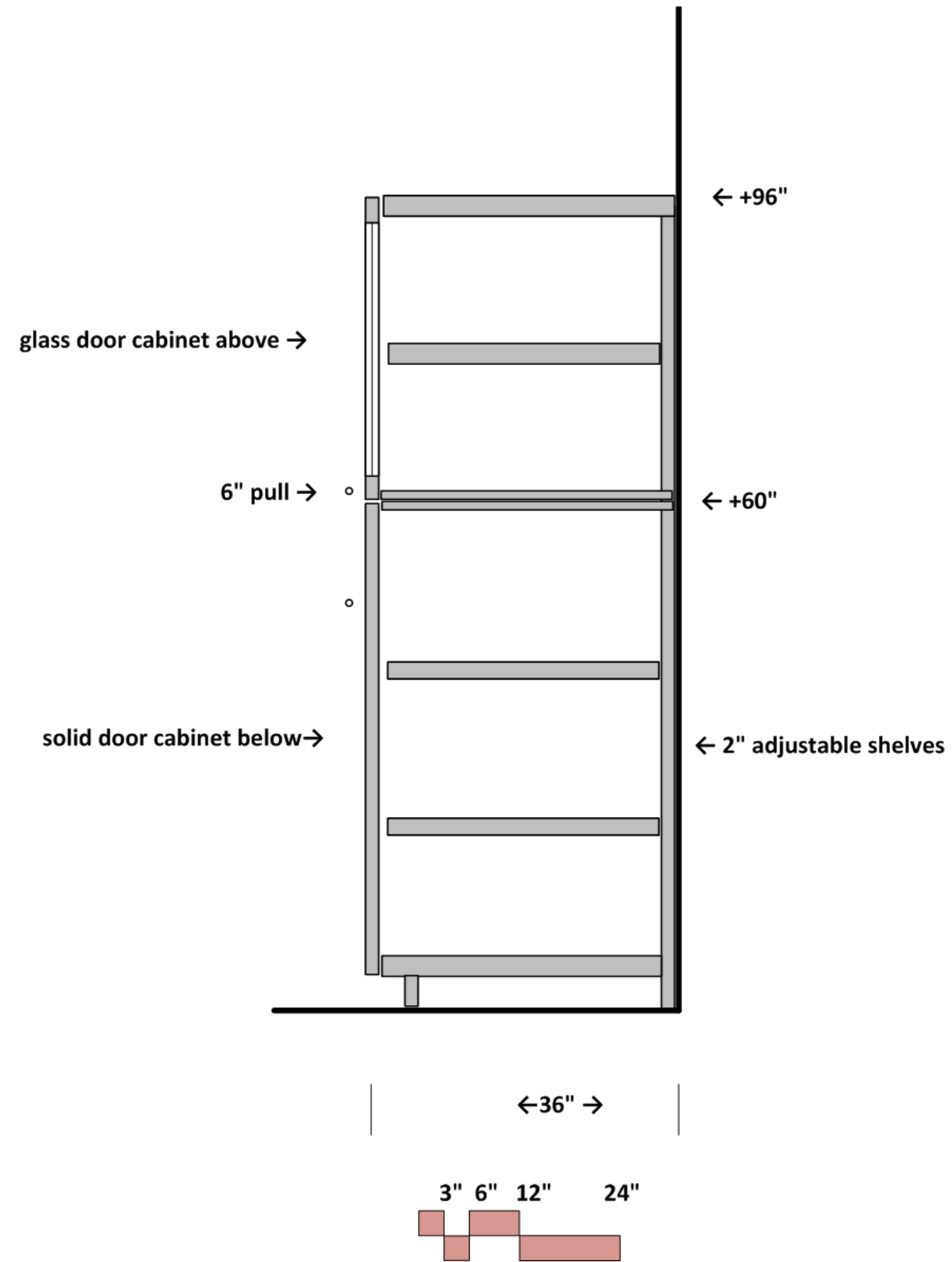


←30" →



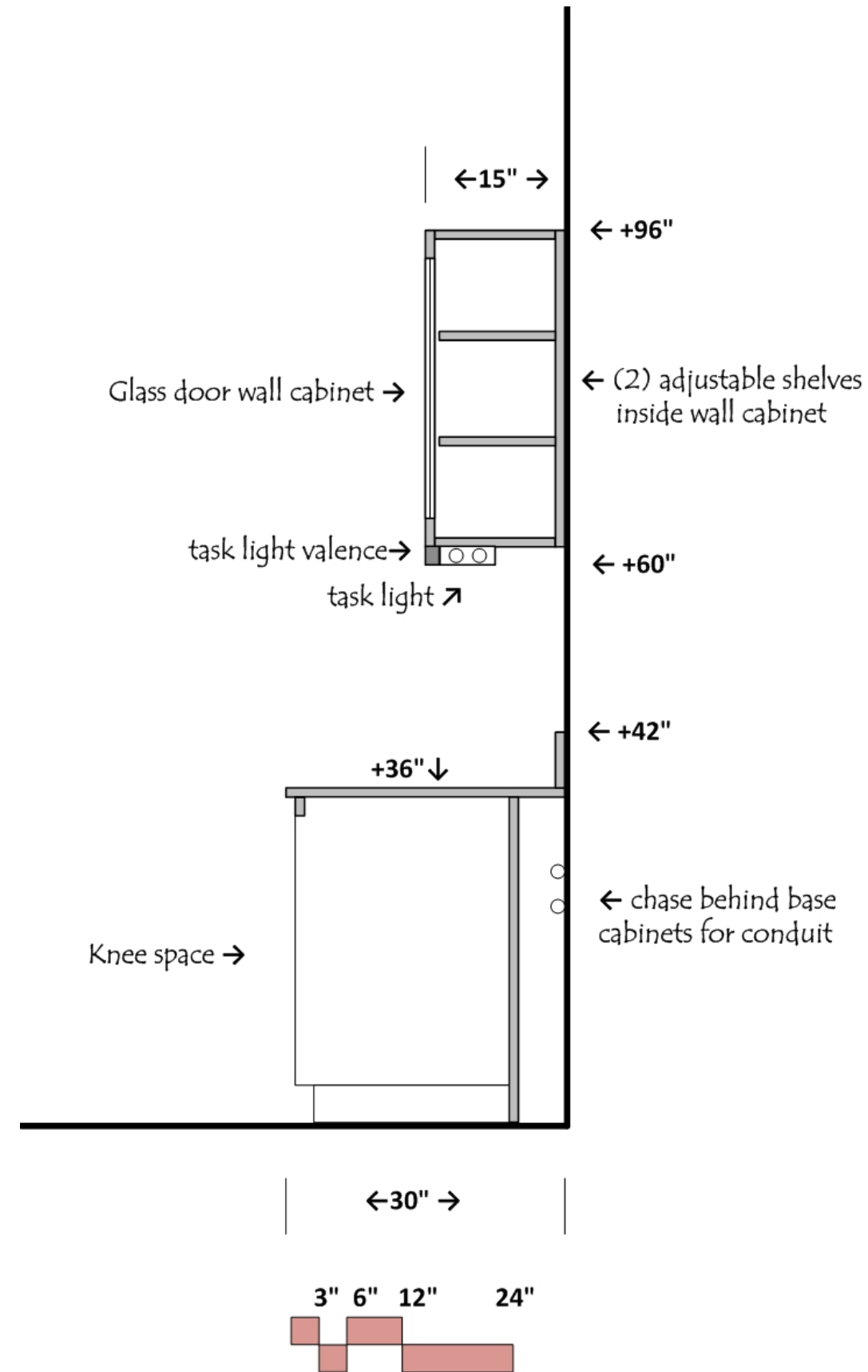
Section Detail 12

tall storage cabinet-
robotics lab, physics labs



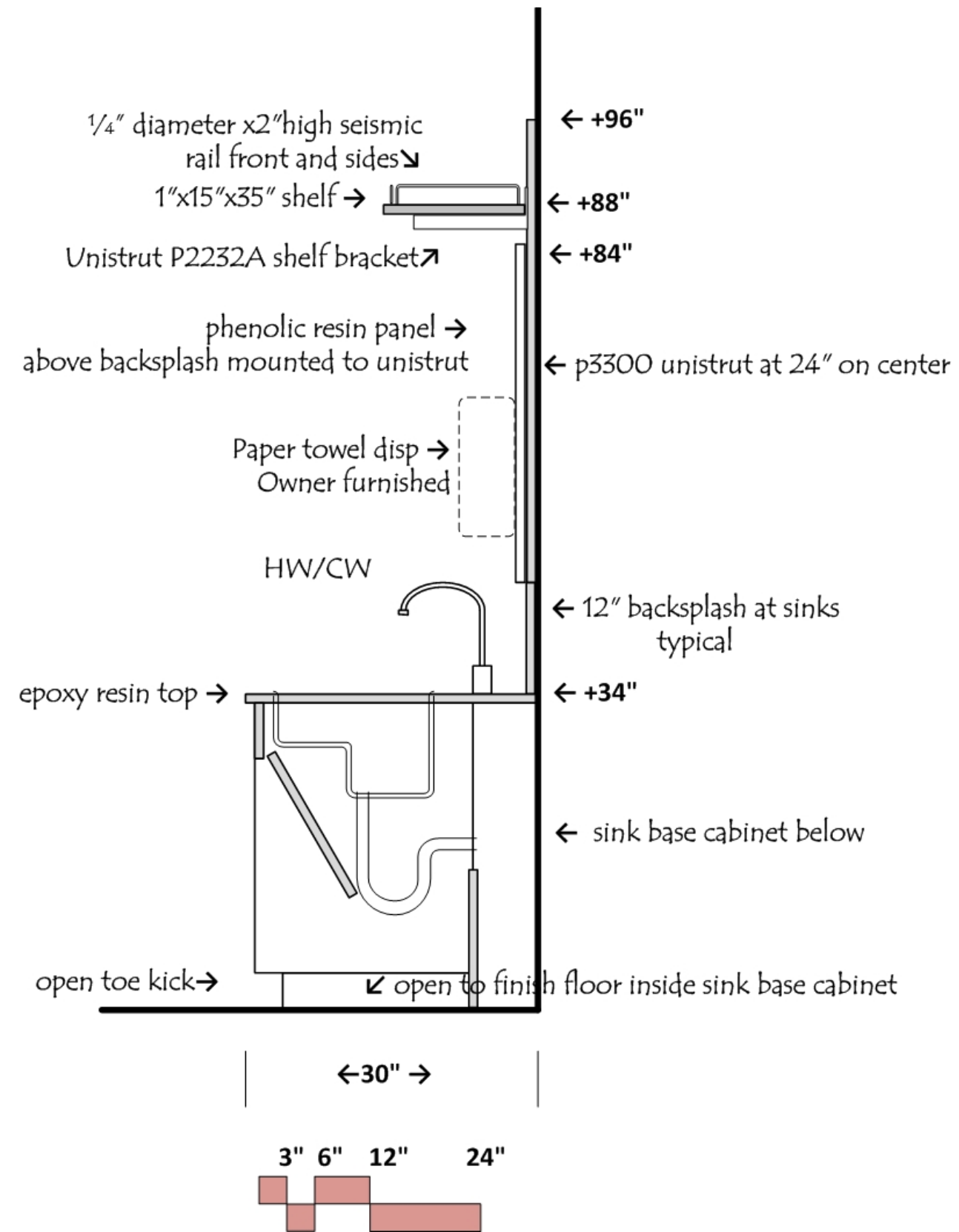
Section Detail 13

wall bench with cabinet above
knee space below

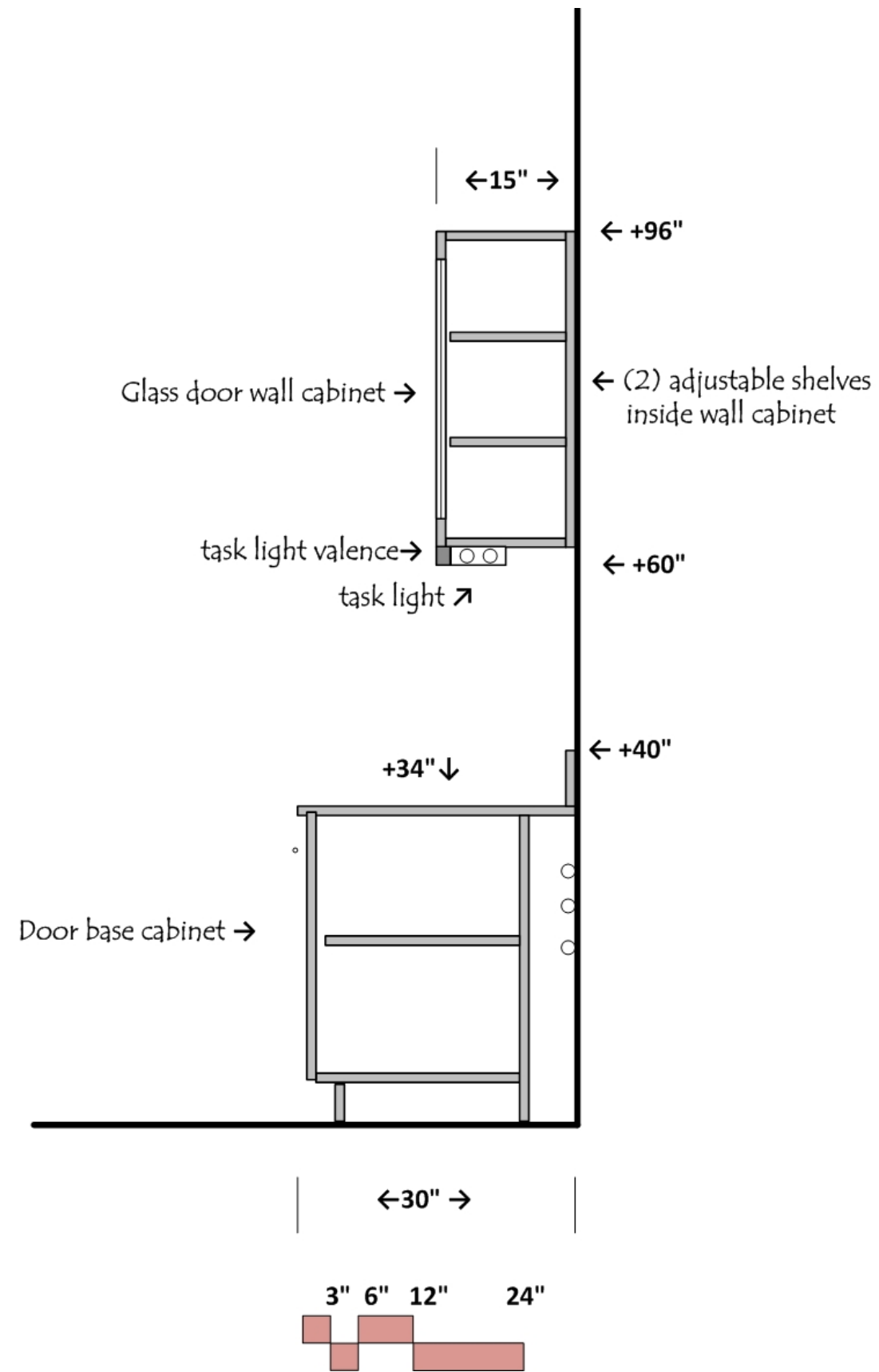


Section Detail 14

wall bench with accessible sink

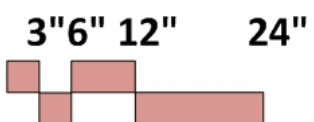
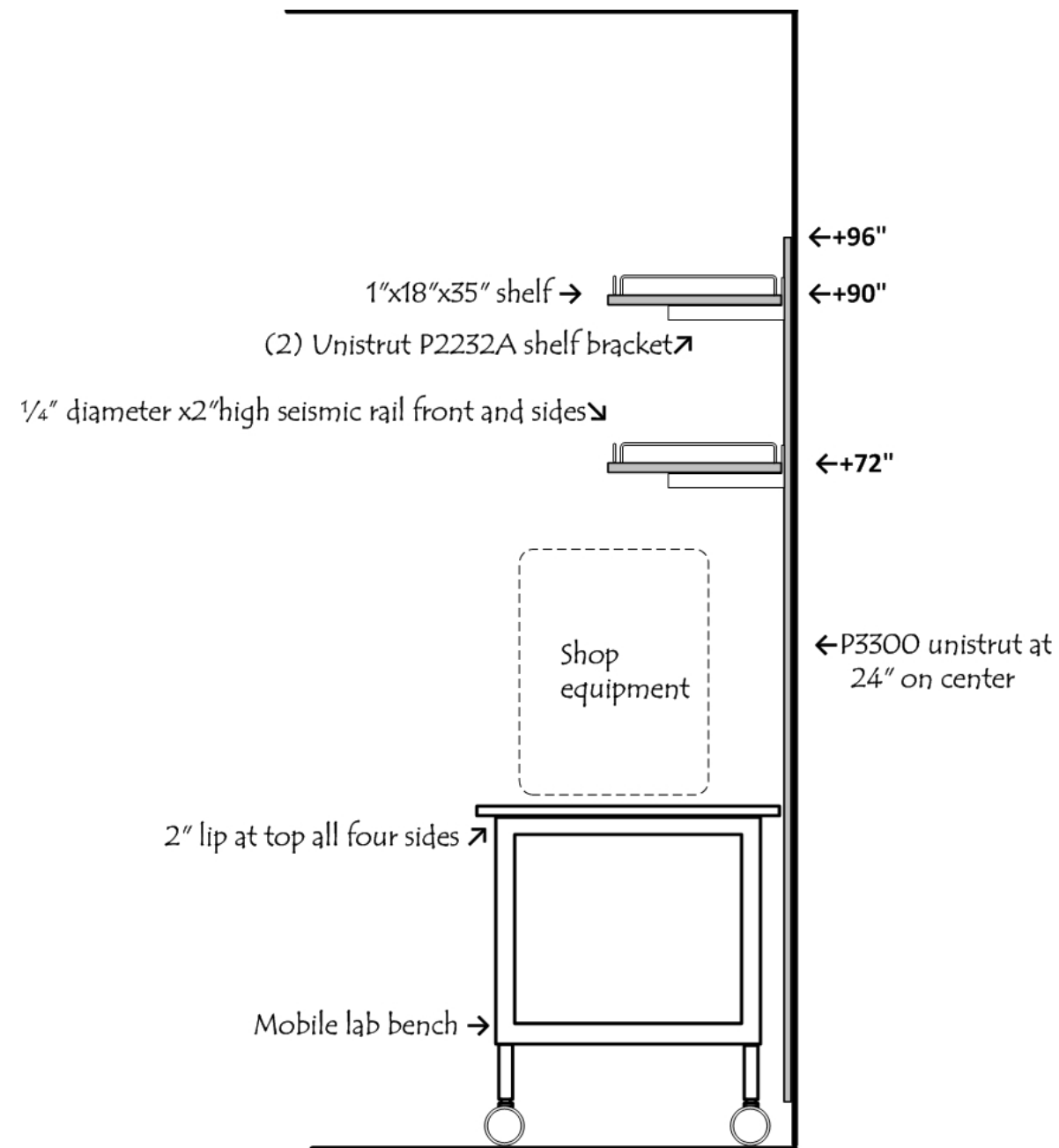


Section Detail 15
 wall bench with wall cabinet
 above; base cabinet below

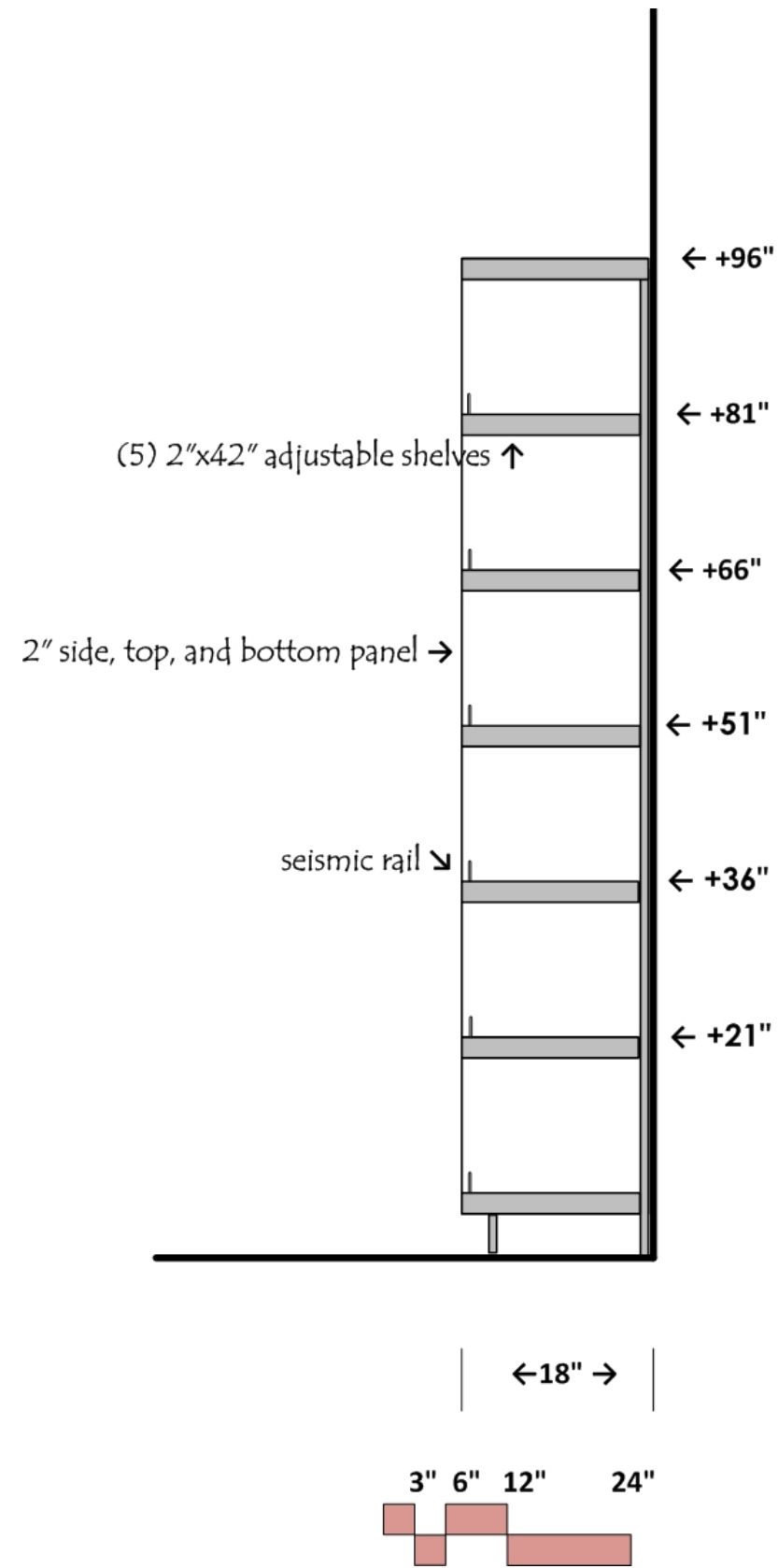


Section Detail 16

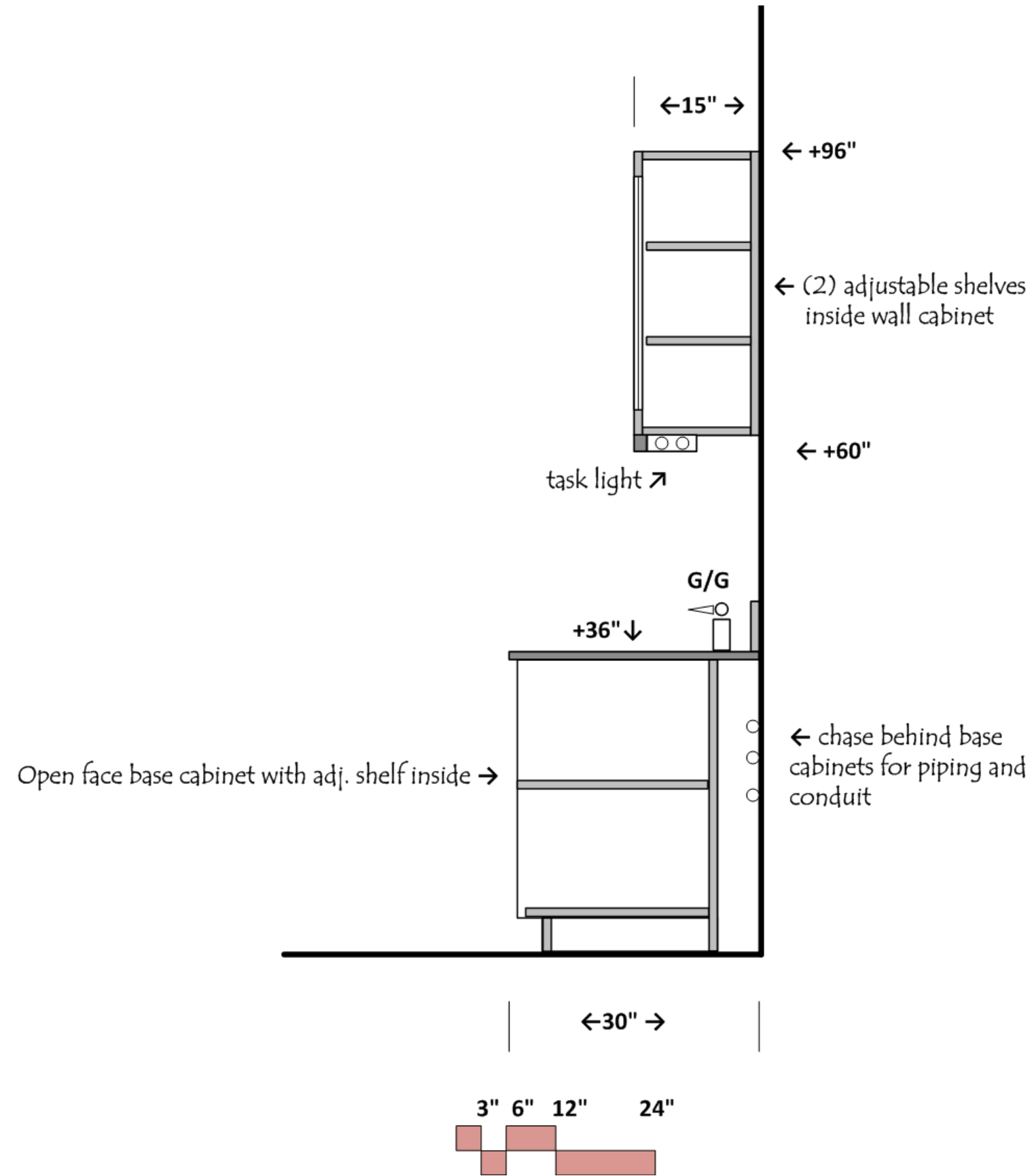
mobile bench at wall
adjustable shelves above



Section Detail 17
open shelf tall cabinet
18" deep



Section Detail 18
 wall bench with wall cabinet
 above; open shelf cabinet below



FUME HOOD CUT SHEET

Fume hoods to be constant volume with on/off control

Ordering Information

Protector® ClassMate™ Laboratory Hoods



- Tissue screen located directly below exhaust outlet
- Interior cover plates
- 8" nominal diameter epoxy-coated steel belled exhaust connection
- ETL and ETL-C listed

All models conform to the following regulations and standards:

- SEFA—#1 (Laboratory Fume Hoods)
- NFPA—#45 (Fire Protection for Laboratories Using Chemicals 2000) section 6-1 through 6-14
- ASTM-E-84—Surface Burning Characteristics of Building Materials
- ASHRAE—110-95 (Method of Testing Performance of Laboratory Fume Hoods)
- ANSI—Standard Z9.5 (Laboratory Ventilation)
- ADA—Americans with Disabilities Act
- UL 3101-1 (Electrical Safety of Test, Measurement and Laboratory Use Equipment)

Fixed models feature:

- Four pre-plumbed, ADA-compliant service fixtures with forged brass valves: three with 0.25" copper tubing and one with 0.25" brass tubing for use with gas
- Two pre-wired 115 volt, 15 amp electrical duplex receptacles

All models require (not included):

- Remote blower. Contact Labconco for recommendations.
- Ductwork. Contact Labconco for recommendations.
- Work Surface. See page 8.
- Base cabinet. Contact Labconco for ordering information.

Optional accessories (see page 8):

- Distillation Grid Kits.
- Rear Finish Panels.

Contact Labconco at **800-821-5525** or **816-333-8811** for blower sizing assistance.

All models feature:

- By-pass airflow design
- Pivoting air foil with Clean-Sweep airflow slots
- Low profile spill trough that requires no cabinet overhang
- Dry-powder, glacier white epoxy-coated steel and aluminum frame
- Clear, 0.25" thick, tempered safety glass sides, back and baffle, all removable for cleaning
- 5° angled, tempered safety glass, 0.25" thick viewing window and 0.1875" thick sash with anti-racking shaft that provides 39" high visibility. Sash rises from closed to 18" high at the sash stop and 29" full open.
- Pre-wired fluorescent lighting and ADA-compliant light and blower switches for 115 volt, 60 Hz, 15 amp operation
- Interior working depth of 26" and height of 48"

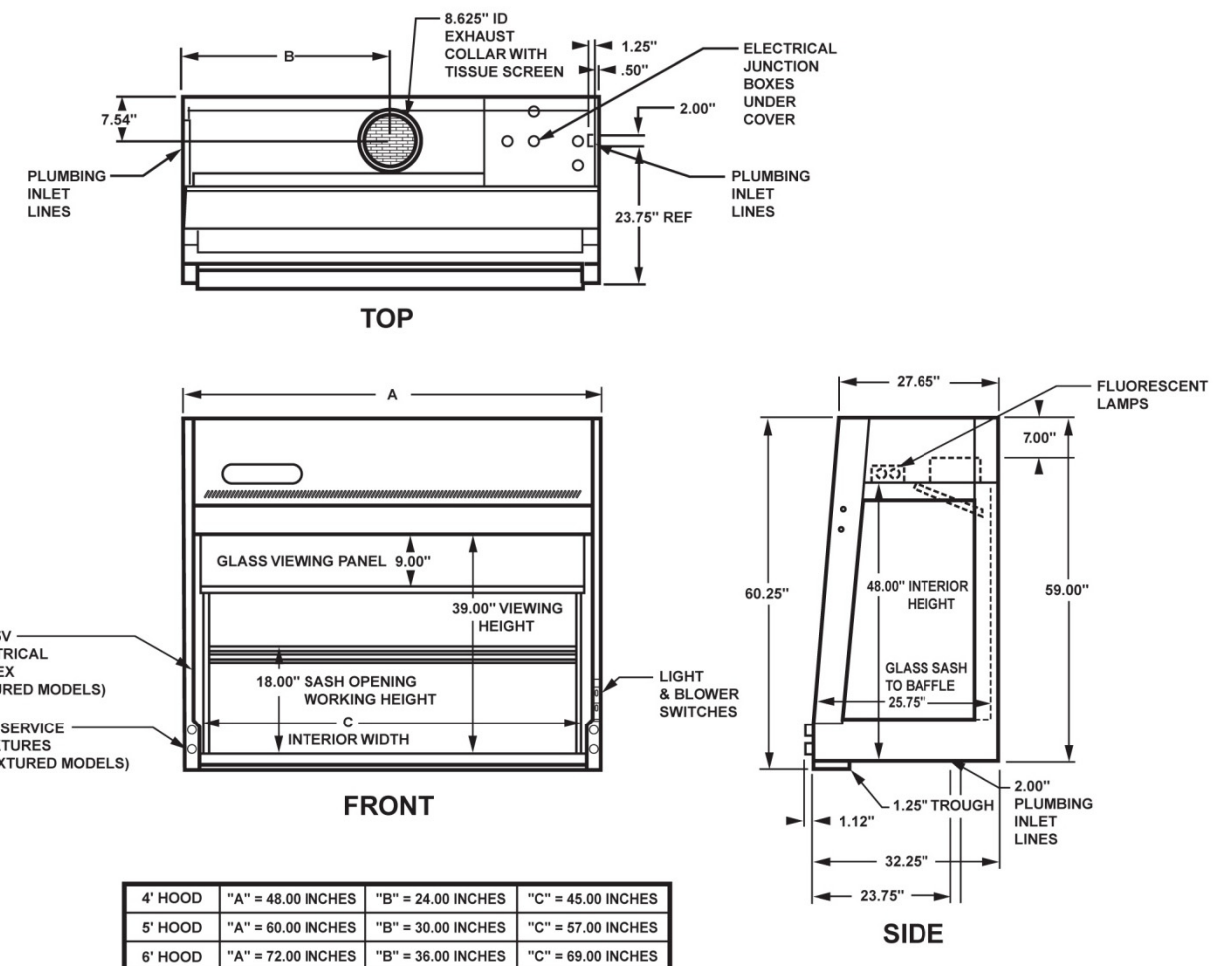
Ordering Information & Dimensional Data

Protector® ClassMate™ Laboratory Hoods

Nominal Width	Total Exhaust CFM and Static Pressure at 18" sash opening height (60% open)*					
	100 fpm	S.P.	80 fpm	S.P.	60 fpm	S.P.
4 Feet	570	0.24"	460	0.16"	340	0.09"
5 Feet	730	0.39"	590	0.26"	440	0.14"
6 Feet	890	0.51"	710	0.33"	540	0.19"

*Contact Labconco for other sash opening height data.

Nominal Width	Catalog Number	Fluorescent Lamps	Service Fixtures	Electrical Duplexes	Shipping Weight lbs./kg
4 Feet	6970400	2 ea. 30 watt	None	None	400/181
4 Feet	6970401	2 ea. 30 watt	4	2	400/181
5 Feet	6970500	2 ea. 40 watt	None	None	460/209
5 Feet	6970501	2 ea. 40 watt	4	2	460/209
6 Feet	6970600	2 ea. 40 watt	None	None	550/249
6 Feet	6970601	2 ea. 40 watt	4	2	550/249



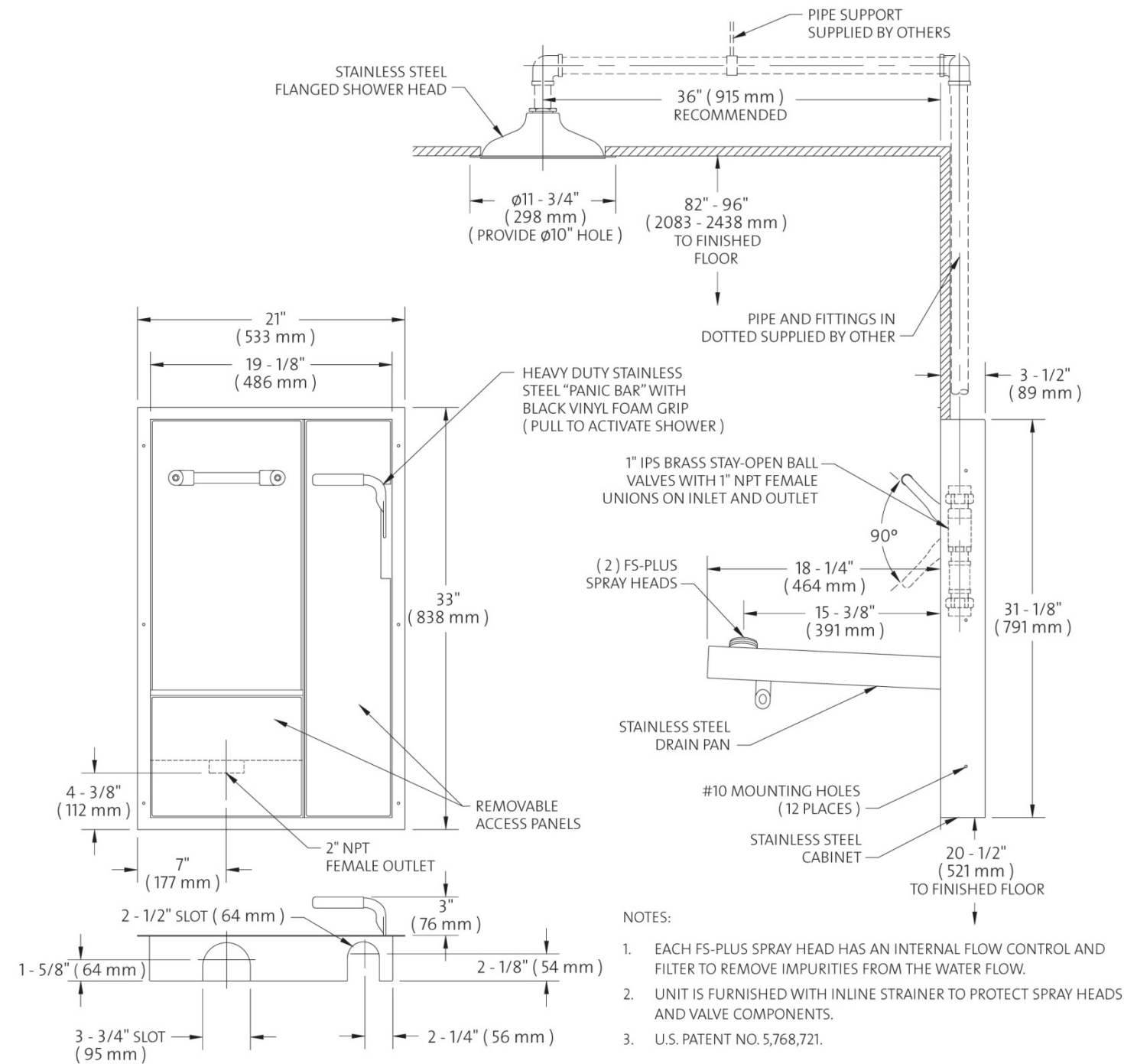
SAFETY SHOWER/EYEWASH CUT SHEET

Model SSBF2160

Requires drain connection at eyewash

Provide floor drain below each eyewash

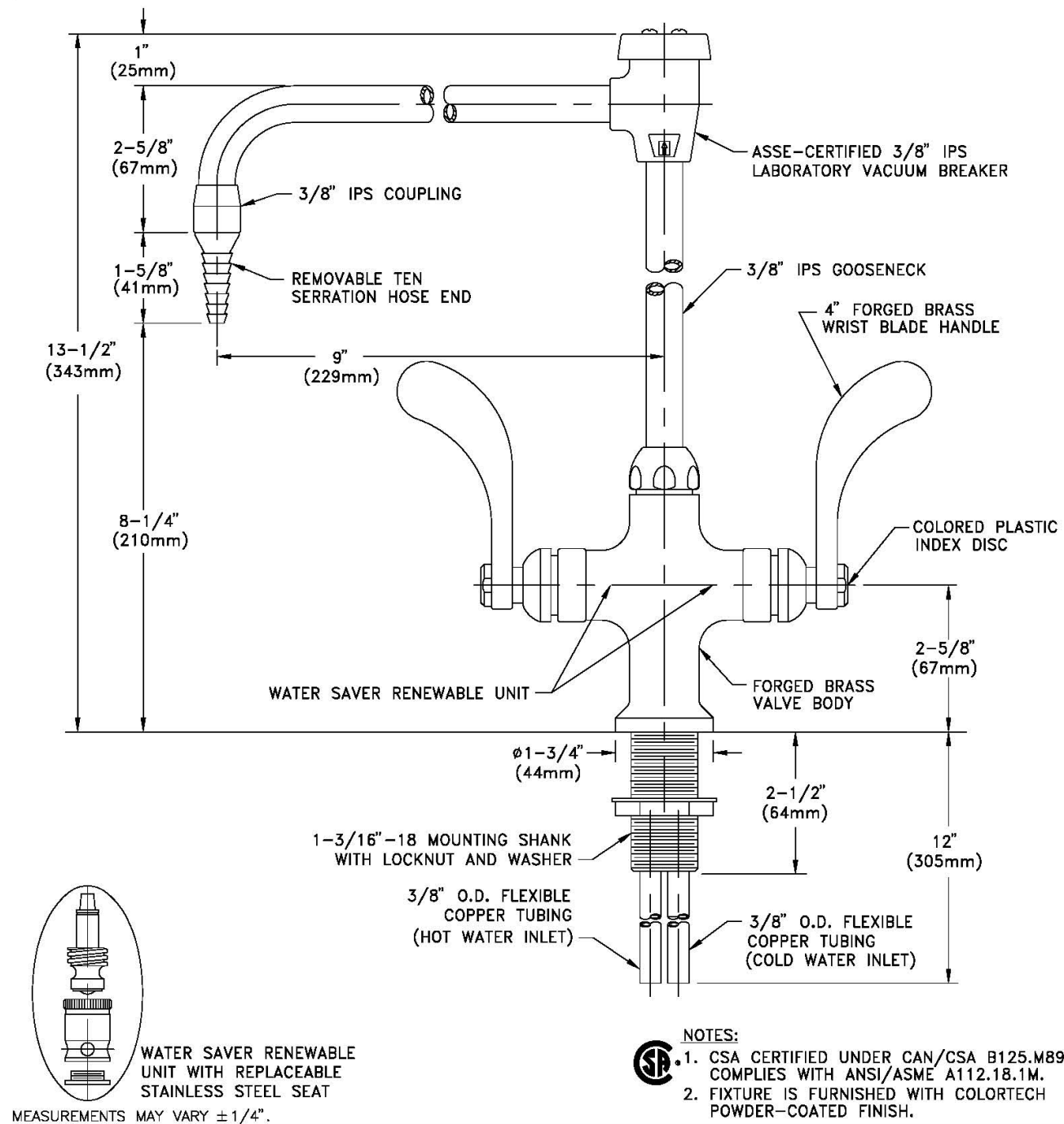
- **SSBF2160** Recessed Safety Station with Drain Pan, Stainless Steel Shower Head
- **SSBF2162** Recessed Safety Station with Drain Pan and Daylight Drain, Stainless Steel Shower Head



Laboratory Service Fixtures by
WaterSaver Faucet Co.

CT414-9VB-BH

LABORATORY MIXING FAUCET, DECK MOUNTED, 9" RIGID/SWING VACUUM BREAKER GOOSENECK, WRIST BLADE HANDLES



Drawing Number: _____

Revision Number: 031803-KJS



PRODUCT DIMENSIONS

DOMESTIC SIZES

Standard Dropln® Sinks

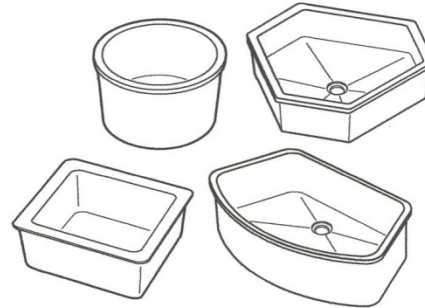
Sink No.	Outlet	Wgt (lb)	Dimensions (in)				
			Inside Bowl			Outlet Location	
			Length	Width	Depth	X	Y
D01C	Center	9	9.0	6.0	5.8	4.5	3.0
D03C	Center	16	12.0	8.0	5.8	6.0	4.0
A05	Corner	18	14.0	10.0	5.0	3.5	3.5
D05	Corner	22	14.0	10.0	6.2	3.5	3.5
D05C	Center	24	14.0	10.0	6.2	7.0	5.0
D10	End	20	16.0	8.0	6.8	4.5	4.0
D10C	Center	22	16.0	8.0	6.8	8.0	4.0
D15	Corner	30	16.0	12.0	8.0	3.5	3.5
D15C	Center	31	16.0	12.0	8.0	8.0	6.0
D19	Corner	42	16.0	16.0	9.6	3.5	3.5
D20	Corner	32	16.0	16.0	7.5	3.5	3.5
D22C	Center	30	18.0	6.5	6.8	9.0	3.3
D24(C)	Center	30	18.0	14.0	10.5	9.0	6.8
A25	Corner	35	18.0	15.0	5.0	3.5	3.5
D25	Corner	39	18.0	15.0	7.9	3.5	3.5
D30	Corner	53	18.0	15.0	11.0	3.5	3.5
D30C	Center	50	18.0	15.0	10.8	9.0	7.5
D33E	End	59	21.0	17.0	9.8	4.5	8.5
D45	Corner	64	21.5	15.5	11.0	3.5	3.5
D50C	Center	48	24.0	16.0	8.0	12.0	8.0
D52	Corner	77	24.0	18.0	11.0	3.5	3.5
A55	Corner	47	25.0	15.0	4.8	3.5	3.5
D55	Corner	61	25.0	15.0	10.0	3.5	3.5
D59	Corner	61	28.0	15.0	11.8	3.5	3.5
DRS12	Center	18	12.0	Round	7.8	Center	

Special Order Dropln® Sinks

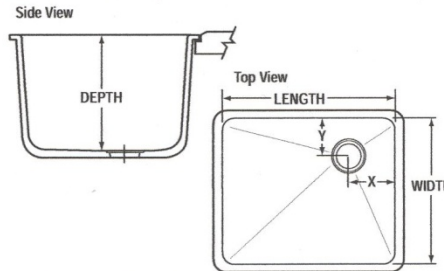
Sink No.	Outlet	Wgt (lb)	Dimensions (in)				
			Inside Bowl			Outlet Location	
			Length	Width	Depth	X	Y
D06*	Center	34	12.0	12.0	12.0	6.0	6.0
A07*	Corner	24	14.0	14.0	5.0	3.5	3.5
D08*	Corner	25	15.0	8.0	6.0	3.5	3.5
D09*	Corner	25	15.0	8.0	10.8	3.5	3.5
D21*	Corner	58	16.0	16.0	15.0	3.5	3.5
A26*	Corner	39	18.0	15.0	5/11	4.5	5.5
D32	Corner	49	18.0	15.0	15.8	3.5	3.5
D51*	Corner	60	24.0	16.0	9.6	3.5	3.5
D54*	Corner	45	25.0	15.0	8.0	3.5	3.5
D57*	Corner	71	25.0	15.0	13.6	3.5	3.5
D58*	Corner	79	25.0	15.0	17.8	3.5	3.5
D61	End	94	30.0	16.0	17.8	4.5	7.5
D65C*	Center	98	35.5	19.5	9.8	17.8	9.8
D68**	End	70	30.0	16.0	10.0	4.75	8.0
D70C*	Center	95	24.0	16.0	15.5	8.0	12.0
D100**	Center	29	22.5	Hexagon	5.0	Center	
D200**	End	64	30.9	Hexagon	7.0	15.5	8.0
DRS10*	Center	14	10.0	Round	7.8	Center	
DHC20*	End	82	30.0	Hexagon	7.0	Center	
D99*	End	56	32.0	Semi-Circle	10.0	11.5	4.5

All sinks are available at both plants unless they are Special Order Sinks, available as noted:
 * Available only from Taylor, TX, plant (colors: Black Onyx, Gray, Graphite, Tan, Forest Green and Steel Blue).
 ** Available only from Canton, MI, plant (colors: Black Onyx, Gray and Alpine White)
 ♿ ADA compliant sinks are designated by this symbol.
 All Dimensions are nominal. Exterior dimensions vary by MFG location. Cutsheets available upon request.

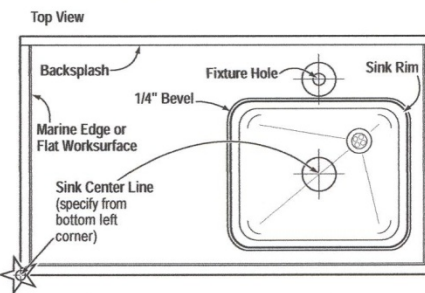
Dropln® Sink Styles



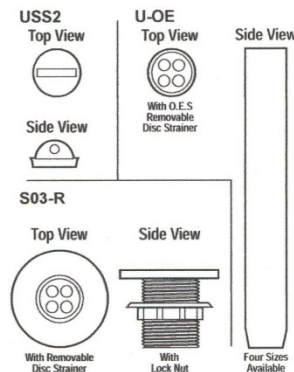
Dimensions Key



Installation Detail



Outlets & Accessories



SINK CUT SHEET

Standard lab sink:

D30- 18"L x 15"W x 11"D

Prep sink:

D52: 24"Lx18"Wx11"D

Accessible lab sinks:

A26- 18"L x 15"W x 5/11"D

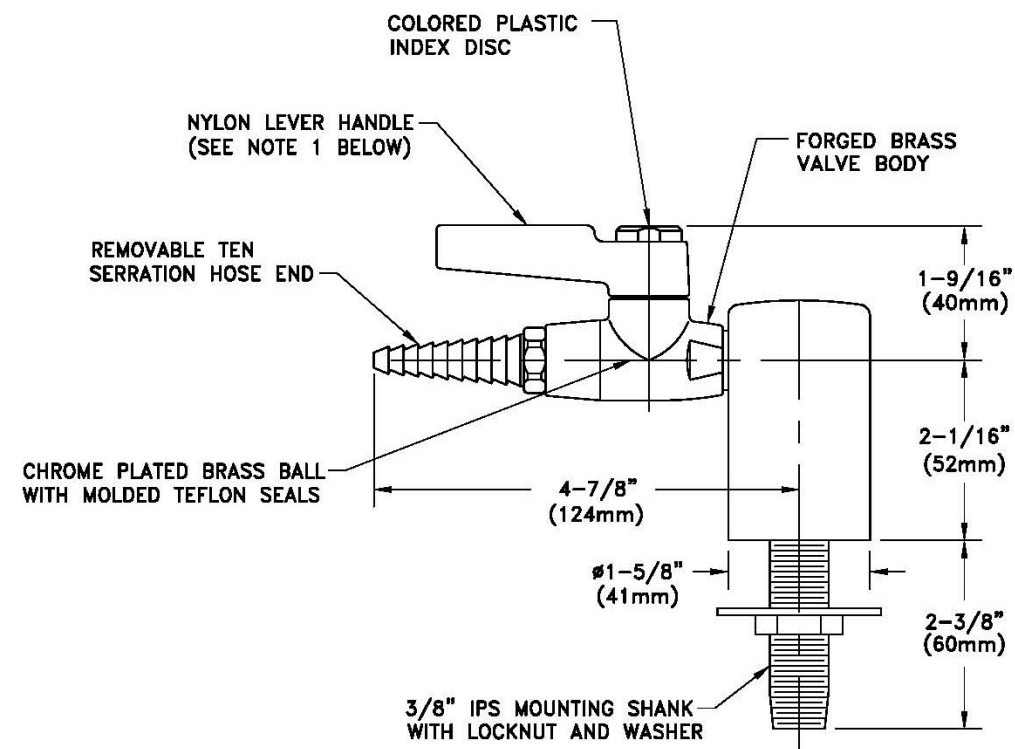
WWW.DURCON.COM

206 Allison Drive • Taylor, TX 76574 • Phone: 512.595.8000 • Fax: 512.595.8400 • E-mail: sales@durcon.com

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Rev. 02/08

L4200-131WSA
SINLGE LABORAYE BALL VALVE FITTING, DECK MOUNTED



NOTES:

1. VALVE IS FURNISHED WITH A BLACK NYLON LEVER HANDLE AS STANDARD. A COLORED NYLON HANDLE AND A CHROME PLATED FORGED BRASS HANDLE ARE ALSO AVAILABLE.
2. VALVE IS FACTORY ASSEMBLED AND TESTED AT 125 PSI. MAXIMUM WORKING PRESSURE IS 75 PSI.
3. VALVE IS CERTIFIED FOR GAS SERVICE BY CANADIAN STANDARDS ASSOCIATION UNDER STANDARD ANSI Z21.15-1997/CGA9.1-M97.

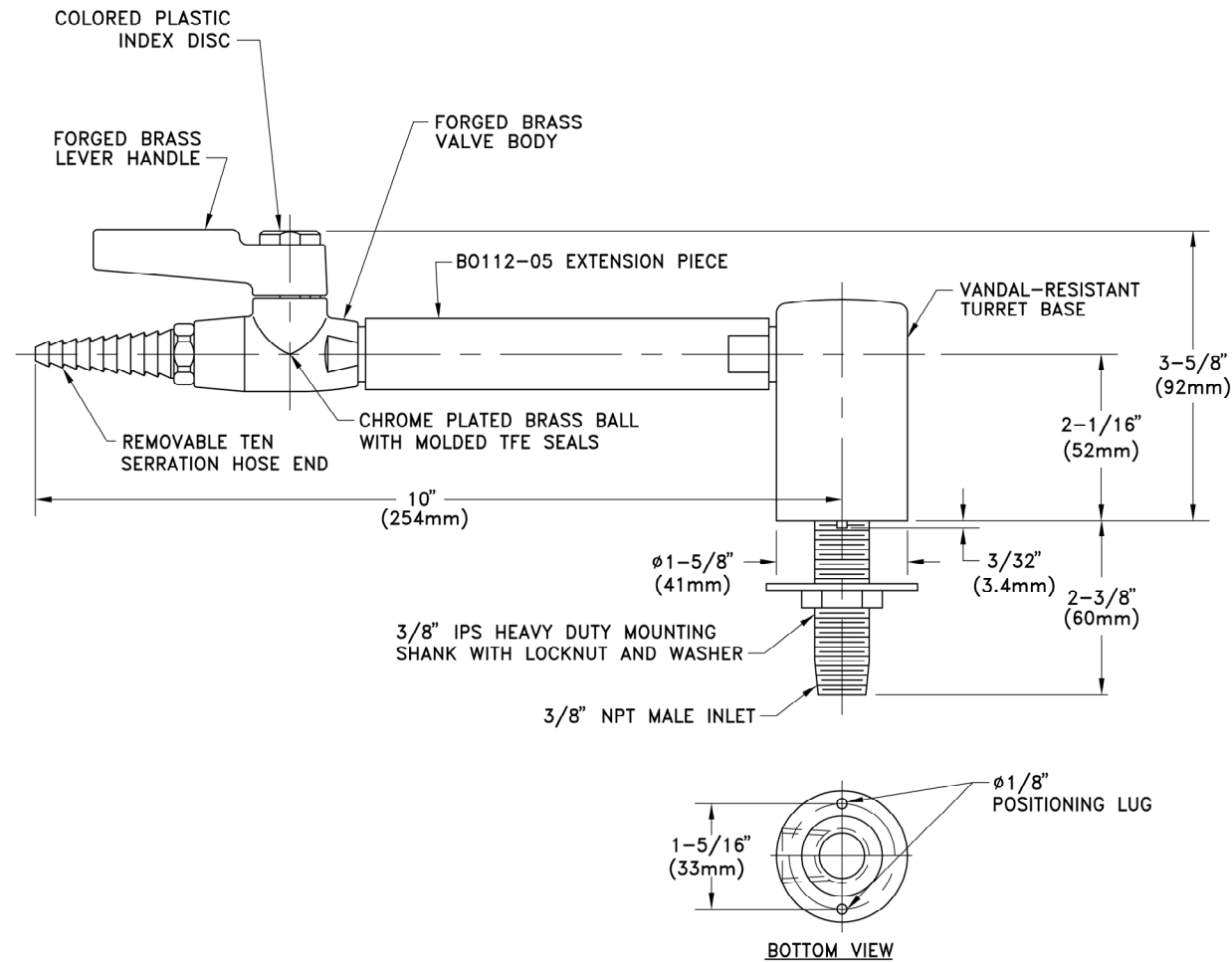


MEASUREMENTS MAY VARY ±1/4".

GAS VALVE CUT SHEET
accessible valve- locate at accessible
workstations at 30" deep bench

L4200-131WSA-MOD
LABORATORY BALL VALVE ASSEMBLY, DECK MOUNTED SINGLE

MOD=FURNISHED WITH B0112-05 EXTENSION PIECE, VANDAL-RESISTANT TURRET BASE AND HEAVY DUTY MOUNTING SHANK



NOTES:

1. LABORATORY BALL VALVE IS CERTIFIED BY CSA INTERNATIONAL TO COMPLY WITH ANSI Z21.15 AND CGA 9.1.
2. FIXTURE IS FULLY ASSEMBLED AND FACTORY TESTED AT 125 PSI AIR PRESSURE. MAXIMUM WORKING PRESSURE IS 75 PSI.

MEASUREMENTS MAY VARY ±1/4" (6mm).

Drawing Number: _____

Revision Number: 062209-KJS

SteamScrubber® Laboratory Glassware Washers

SPECIFICATIONS & ORDERING INFORMATION



SteamScrubber Laboratory Glassware Washer 4400330 is shown with 48-Pin Insert 4591601, Petri Dish Insert 4589701, Bulk Tube Insert 4542100, Utensil Holder 4542500 and BOD Bottle Insert 4589201.



All models feature:

- Upper and lower standard open racks of Type 304 stainless steel
- LCD information center, Display button, Run/Cancel button, scroll buttons and selection buttons to program and monitor cycles
- Pump to recirculate 96 gal/min (363 liters) when operated on 115 Volts, 60 Hz and 230 Volts, 50 Hz and 112 gal/min (424 liters/min) on 230 Volts, 60 Hz
- Drain pump to evacuate over 7 gal/min (26 liters/min)
- Purified water pump to bring non-pressurized or pressurized purified water into the tank for up to six pure water rinses
- Steam generator that produces hot vapor before the WASH 2 cycle (RINSE ONLY and PLASTIC programs excluded)
- Aluminum-backed insulation and fiberglass blanket for thermal and sound insulation
- Operation at 58 decibels
- Manual-fill detergent dispenser for powder or liquid detergent
- Manual-fill rinse aid solution dispenser
- Forced air drying programmable up to 99 minutes and from 38-70°C (100-158° F)
- Seven factory-set cycle programs: RINSE ONLY, PLASTIC, GLASS, GLASS PLUS, SCIENCE, SCIENCE PLUS, and DRY ONLY. All 208/230 Volt models have three additional programs for a total of ten: INTENSE, INTENSE PLUS and EXTREME.
- Two user-set cycle programs
- Alarms with display for HOT GLASS, PLEASE WAIT, WATER LOW, WATER HIGH, OVERFLOW, LIQ DETER, RINSE AID DRAIN FAIL and LOW TEMP. Audible alarms self cancel after one minute.
- User-set delayed start (up to 8 hours)

- Type 304 stainless steel top, door, tank, upper, middle and lower wash arms. Freestanding models also have stainless steel exterior sides and top.
- One-piece, stainless steel, fine mesh particle drain filter
- Four leveling feet
- 3/8" Female NPT inlet fitting for hot tap water connection
- Factory-installed drain hose and band clamp
- Two year warranty on parts and labor
- Made in the U.S.A.
- IQ/OQ available. Visit www.labconco.com or call 800-821-5525.

All models conform to:

- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010-1
- CE Conformity Marking (208/230 Volt models only)

All models require:

- Minimum inlet water temperature 49° C (120° F)
- Recommended inlet water temperature 60° C (140° F)
- Minimum purified water pressure 0 psi
- Water consumption per fill 3.4 gallons (13 liters)
- Hot tap water pressure at the washer 20-120 psi (138-827 KPa)
- Hot tap water flow rate 1.25 gallons (4.7 liters) per minute
- 3/8" OD copper tubing for connection to the water inlet valve
- Purified water with supply piping minimum 3/8" ID to permit at least 0.9 gallon (3.4 liters) per minute flow

Options include:

- Freestanding and undercounter styles
- Water temperature to 82° C (180° F) on 115 Volt models and 93° C (199° F) on 230 Volt models
- Clear tempered safety glass viewing window and 25-watt interior light that illuminates when door is latched

Optional accessories and companion products on pages 18 - 22 include:

- Base Stand
- Upper and Lower Spindle Racks
- Baskets and Inserts
- Freestanding-to-Mobile Conversion Kits
- Drain Water Cooling Kit
- LabSolutions Detergents and Rinse
- ScrubberMate Cart, Glassware Carts and Carboy Caddy
- WaterPro RO Stations and accessories

Catalog #	Style	Electrical Requirements	Maximum Internal Water Temperature	Viewing Window and Light	Overall Dimensions with Door Closed	Shipping Weight
4400320	Undercounter	115 Volts, 60 Hz, 16 Amps	82° C (180° F)	No	24.1" w x 27.4" d x 34.1-36.1" h	206 lbs. (93 kg)
4400321	Undercounter	208/230 Volts, 50/60 Hz, 12 Amps	93° C (199° F)	No	24.1" w x 27.4" d x 34.1-36.1" h	206 lbs. (93 kg)
4400330	Undercounter	115 Volts, 60 Hz, 16 Amps	82° C (180° F)	Yes	24.1" w x 27.4" d x 34.1-36.1" h	206 lbs. (93 kg)
4400331	Undercounter	208/230 Volts, 50/60 Hz, 12 Amps	93° C (199° F)	Yes	24.1" w x 27.4" d x 34.1-36.1" h	206 lbs. (93 kg)
4400420	Freestanding	115 Volts, 60 Hz, 16 Amps	82° C (180° F)	No	24.2" w x 27.5" d x 34.2-36.2" h	235 lbs. (107 kg)
4400421	Freestanding	208/230 Volts, 50/60 Hz, 12 Amps	93° C (199° F)	No	24.2" w x 27.5" d x 34.2-36.2" h	235 lbs. (107 kg)
4400430	Freestanding	115 Volts, 60 Hz, 16 Amps	82° C (180° F)	Yes	24.2" w x 27.5" d x 34.2-36.2" h	235 lbs. (107 kg)
4400431	Freestanding	208/230 Volts, 50/60 Hz, 12 Amps	93° C (199° F)	Yes	24.2" w x 27.5" d x 34.2-36.2" h	235 lbs. (107 kg)

Exclusive Labconco feature

UNDERCOUNTER WASHER CUT SHEET

Model 4400331- 208v

Provide softened feed water

SteamScrubber® Laboratory Glassware Washers

FEATURES & BENEFITS

For washing and drying primarily beakers and other wide-mouth or specialized glassware.

Steam generator.

Produces hot vapor to penetrate and soften dried contaminants for more effective cleaning.

Forced air drying system.

Hot air is blown into the tank to dry glassware. No separate dryer or oven is needed.

Dual pumps,

one for washing and one for draining, reduce the potential for cross contamination.

Powerful pump recirculates water at a high rate

to dislodge dried contaminants for thorough cleaning. Water recirculates at 96 gal/min (363 liters/min) on 115 Volt, 60 Hz and 230 Volt, 50 Hz models and 112 gal/min (424 liters/min) on 230 Volt, 60 Hz models.

Versatile rack options.

The standard open racks are interchangeable with optional upper and lower spindle racks. Additional racks are sold separately. See page 18.

User-set delayed start (up to 8 hours)

may be programmed so that the washer operates during off-peak hours when electricity may be less expensive and more plentiful.

Up to 6 pure water rinses may be programmed.

A built-in purified water pump draws from a storage tank or pressurized source for final rinses.

360° rotating upper, middle and lower wash arms

distribute water and detergent.

Full two year warranty.

Is provided against defects in materials and workmanship.

Attractive and durable Type 304 stainless steel door and tank.

Free-standing models also have stainless steel sides and top.

Detergent dispenser for powder or liquid detergent.

Releases a manually premeasured amount ensuring clean labware.

Quiet, energy-efficient operation at 58 decibels.

Aluminum-backed, sound-deadening insulation and fiberglass blanket absorb noise and optimize internal tank temperature to conserve energy.

Rinse solution dispenser.

Allows manual addition of mildly acidic rinse to alter pH and eliminate alkaline detergent carry-over. The dispenser holds approximately 170 milliliters, enough for 40 or more cycles.

Alarms sound and/or display on the LCD

to alert the user to abnormal or unsafe events such as HOT GLASS and OVERFLOW.

Optional clear tempered safety glass viewing window with 25-watt interior light

allows observation of the cycle in progress. Available standard on some models.

ETL-listed.

Washers carry the ETL mark signifying they are certified to UL Standard 3101-1/61010-1 and CAN/CSA C22.2 No. 1010.1.



CE Mark. Washers conform to the CE (European Community) requirements for electrical safety and electromagnetic compatibility.



INCLUDES Upper and lower stainless steel standard open racks.

Accommodate a variety of accessory inserts holding the broadest range of glassware. Inserts are sold separately. See pages 18 and 19.

Sanitizing high heat.

Water temperature reaches 93° C (199° F) on 230 Volt models to sanitize glassware and for enhanced washing, rinsing and faster drying.



Made in U.S.A.

Exclusive Labconco feature

MDT2C12 TOUCHFREE® CUBELET ICE MACHINE AND DISPENSER



The enhanced MDT2C12 TouchFree dispenser makes and dispenses harder, slow-melting cubelet ice that allows for more reliable, easier dispensing. The MDT2C12 offers sleek European styling and a 25 percent reduction in fan noise, perfect for the quietest hallway or the busiest cafeteria.

A favorite for patient care, foodservice and laboratories, TouchFree dispensers eliminate the use of levers and buttons with a unique infrared sensor design that determines when to dispense ice or water, minimizing the possibility of cross-contamination.

The dispensing area accommodates a greater variety of containers and, as an added measure of precaution, is equipped with a plastic ice-dispensing chute that is easily removed for cleaning and sterilization. The bigger sink allows more clearance for larger containers

FEATURES

- **Performance and convenience** – Up to 273 lbs. of ice production in 24 hours and with storage capacity of 12 lbs.
- **NSF compliant** – As the first dispensers to provide true non-mechanical, one-hand operation, TouchFree dispensers comply with the most stringent requirements of the National Sanitation Foundation and the spirit of the Americans with Disabilities Act.
- **Outstanding reliability and long life** – Fewer internal and external parts, a stronger drive system design, stronger construction and increased dispensing power greatly increase the life of these ice dispensers.
- **Outstanding warranty** – Two-year parts on all components. Two-year labor on all components. Five-year parts on compressor.

[LOCATE DISTRIBUTOR](#)

[WARRANTY REGISTRATION](#)

[LOCATE SERVICE DEALER](#)

TECHNICAL SPECS	LIBRARY	RELATED PRODUCTS
<p>Summary 24 hr Production: 273 lb @ 70/50, 198 lb @ 90/70 Dimensions: 15.28" W x 26.11" D x 34.41" H Shipping Carton: 18" W x 28" D x 36" H Shipping Weight: 140 lb Available Condenser Options: Air Storage Capacity: 12 lb</p> <p>Energy & Water Usage Energy: 7.0 kWh/100 lb Water: 12 gallons/100 lb</p>	<p>Electrical Base Electrical, Volts/Hz/Phase: 115/60/1 Max. Fuse Size: 15 amps Circuit Wires: 2 Total Load Amps: 6.0</p>	

CORROSIVE STORAGE CABINET CUT SHEET

Provide exhaust connection per
Division 23 at top and bottom cabinets



POLY ACID-CORROSIVE SAFETY STORAGE CABINET



EAGLE Poly Acid/Corrosive Safety Cabinet

Eagle's new non-metallic "Poly Acid Cabinets" are constructed of 100% polyethylene for excellent resistance to harmful acid vapors and spills, making these cabinets suitable for storing aggressive chemicals such as sulphuric, hydrochloric and nitric acids.

Independent upper and lower compartments allow for segregation of reactive chemicals. Includes two 3/8" threaded inserts on top sides for wall anchors. The base of the cabinet is flush to floor and sides. Bottom shelves remove for easy cleaning of sump areas. Available in blue, shown here, or [white](#).

CRAP-44 Poly Acid Safety Cabinet

EAGLE Poly Acid/Corrosive Cabinet					
Model	Capacity	Door Specs	Shelves	Size (WxDxH)	Weight
CRA-P44	44 gal.	4 Manual Closing	8	35" x 22" x 65"	130 lbs.
CRA-P44W	44 gal.	4 Manual Closing	8	35" x 22" x 65"	130 lbs.

EAGLE **MODEL 4510**
SAFETY CABINET



EAGLE Model 4510 Safety Cabinet

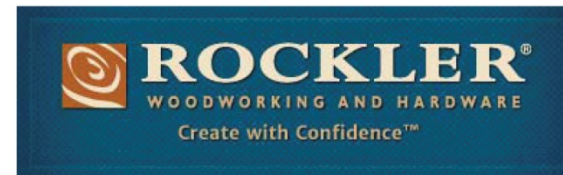
Constructed of 18-gauge steel, sides, top, bottom, and doors are double-walled with a 1 1/2" air space between walls. Both vents, with 2" threaded fittings, have fire baffle and cap. Cabinets come in yellow high gloss powder finish with red warning, plus grounding attachment, 3-point key lock, and 2" raised, leakproof door sill. Each shelf is adjustable, supported by 4 brackets, and can support 350 pounds. Features 2 self-closing doors. FM approved.

SPECIFICATIONS

CAPACITY: 45 gallons
SHELF DEPTH: 14.75"
SHELVES: 2
DIMENSIONS: 43" x 18" x 65"
WEIGHT: 353 lbs.



Model 4510 Safety Cabinet



12-Gauge Retractable Extension Cord Reel

Item #: 20323

\$98.99

12-gauge cord for heavier tools and motors gives you all the power your shop requires.

Easily mount to a wall with attached bracket or hang from the ceiling to add convenience to your shop. Features a 30 foot extension cord that retracts and locks at any length.

- Heavy duty industrial grade reel housing
- Quick release mounting bracket
- 36" power cord
- Three receptacles.
- 15 Amps / 125 Volts