

Richmond Pacific & Cal-P in N Scale

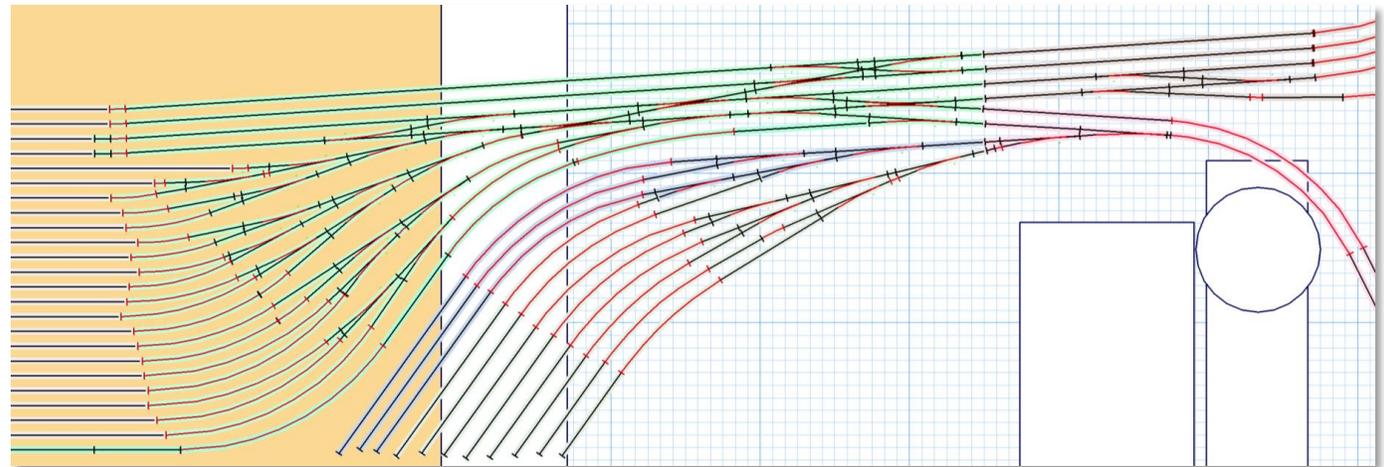
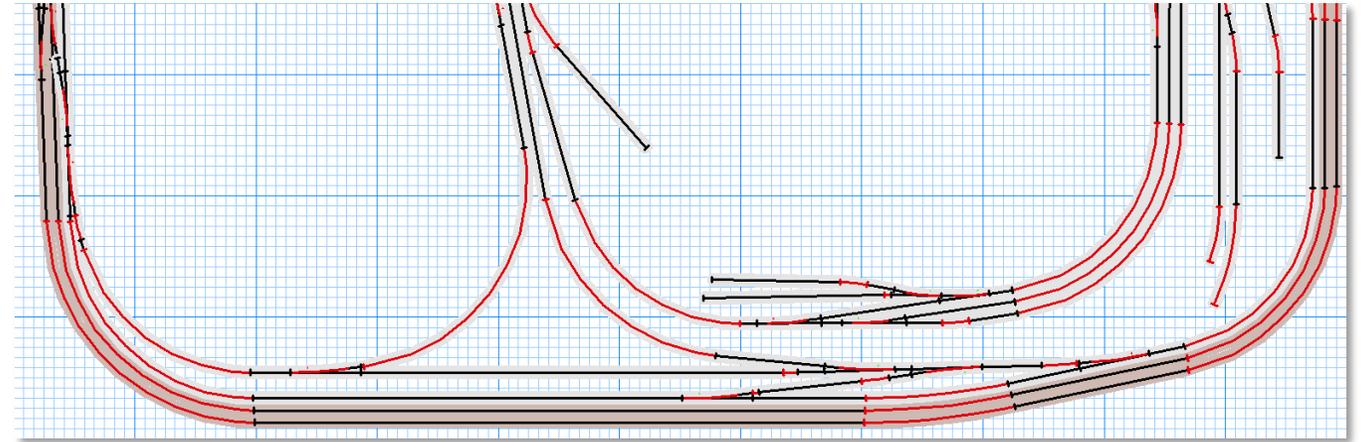
Planning - What is possible?

Steven Cox

SigMeet

February 5, 2022

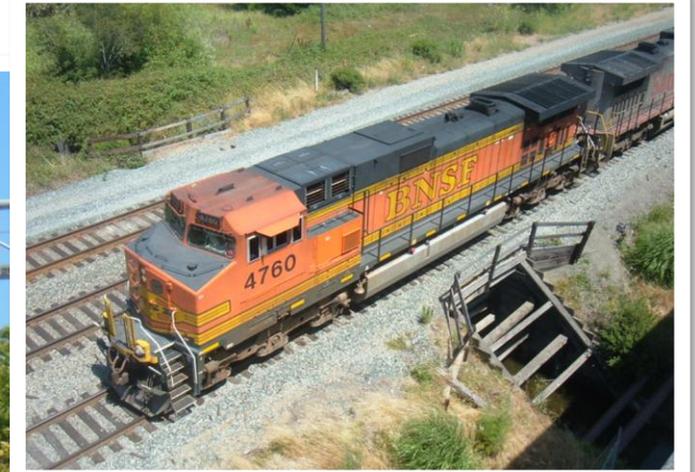
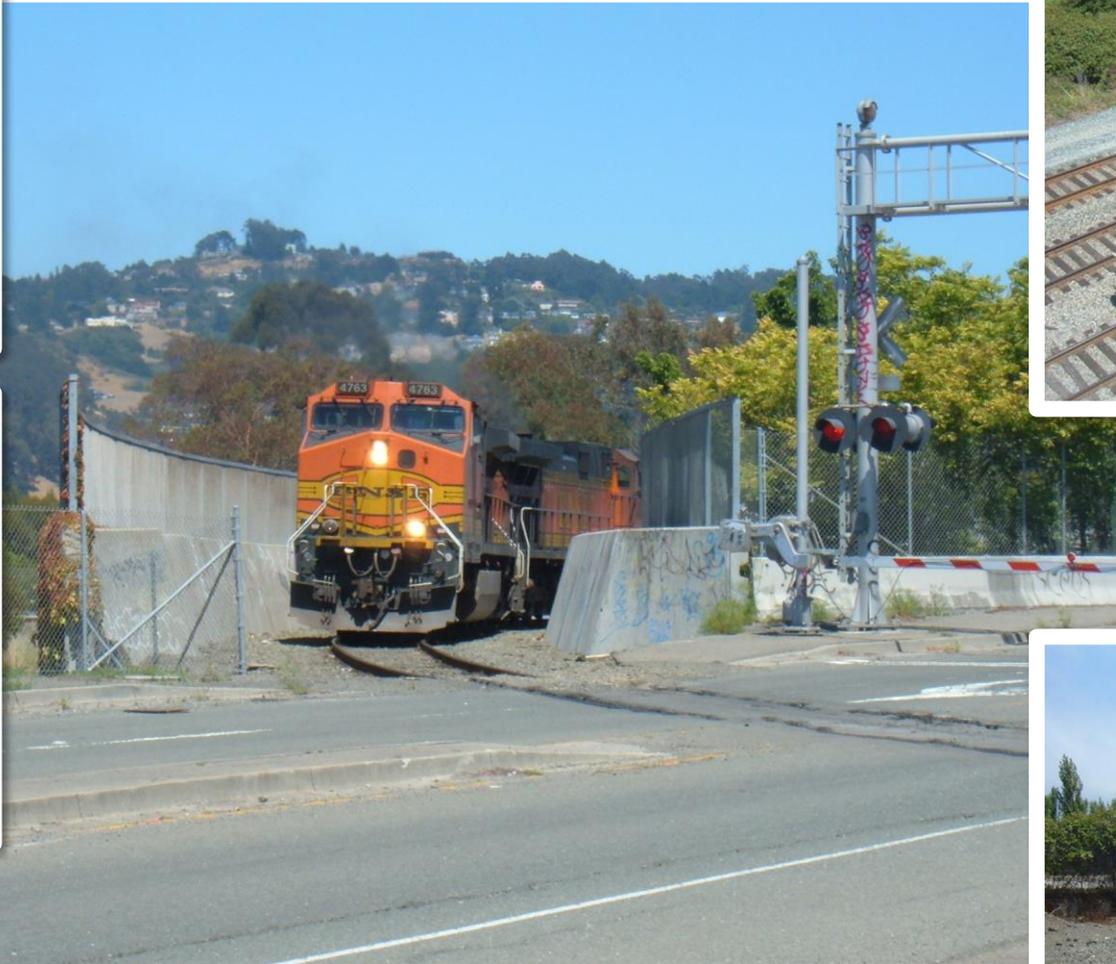
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First half: Prototype

Second half: Track Plan

Richmond – The perfect home for me!



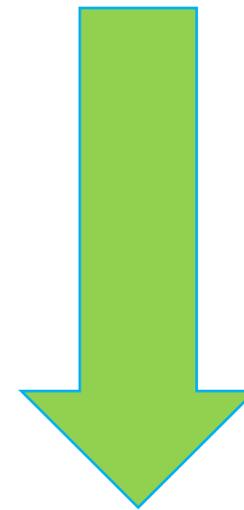
About Steven Cox



HO British & Australian freight trains

Sold my HO, switched to N

1975: First issue of Model Railroader



15 challenging years!

No Kato units
No Microtrains

1989: First USA Railfan trip...

...and everything changed!!! 4



1995 moved to Richmond CA



1999-2002 Videos
(American Railroad Media)



2005-2011 Railfan trips



2011 Toronto Canada



2020 Empty-nesters! Kitchener ON

My backyard: Richmond Pacific (RPRC)



Industries	Car types
Meat packing	Mechanical reefers
Aggregates	Covered hoppers
Scrap Metal	Gondolas
Cement	2-Bay hoppers
Industrial gasses	CO2 tankcars
Oils	Tankcars
Ethanol	Tankcars
Lumber	Centerbeams, boxcars
Acid	Tankcars
Metallurgical Coal	Steel & Aluminum hoppers
Florida St Team Tracks	Covered hoppers, tankcars, gondolas
Car storage	Covered hoppers, tankcars

Interchange - BNSF



BNSF Trackage Rights trains



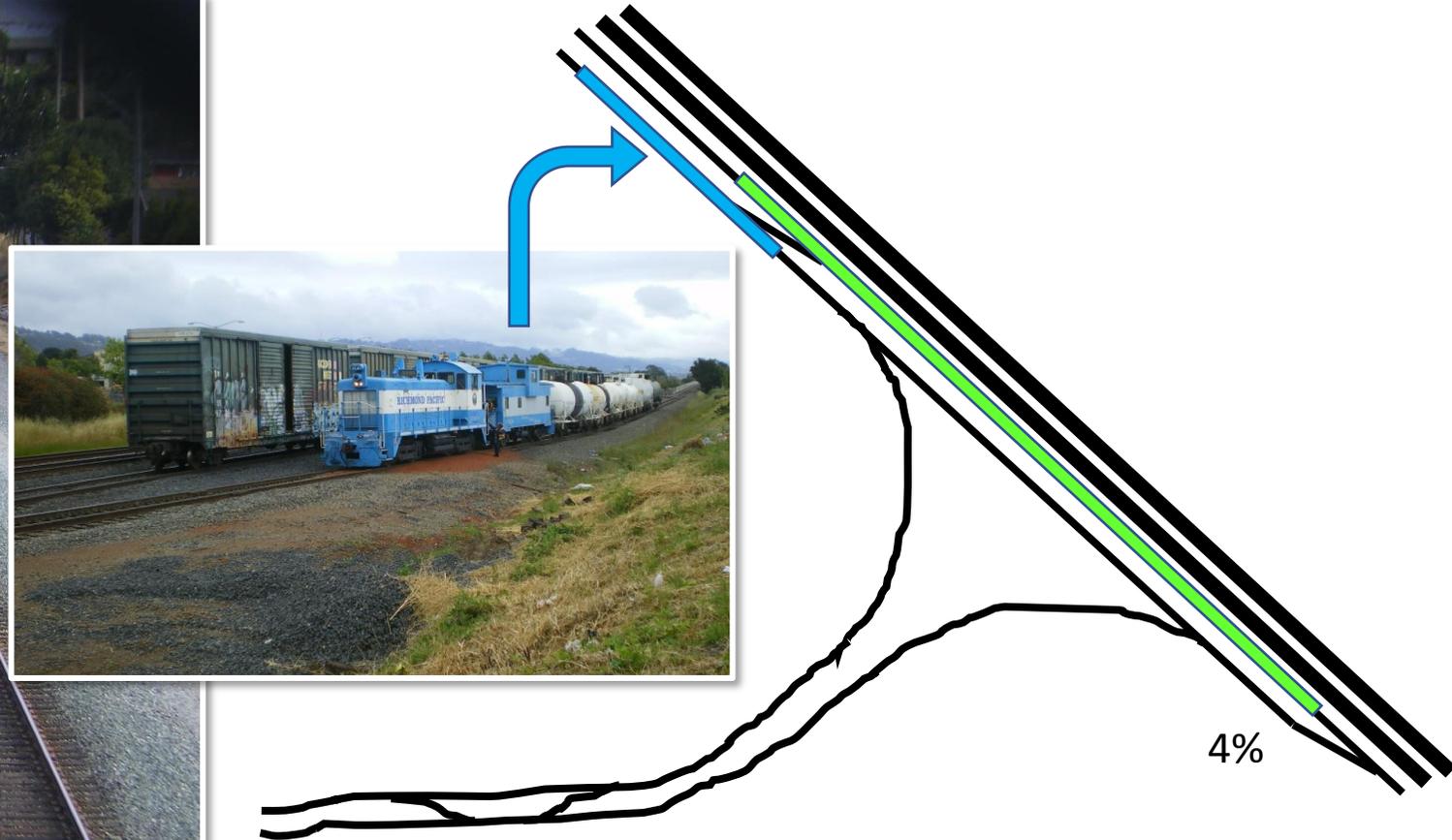
BNSF Oakland Local

Interchange - UP

RPRC Setouts for UP at Stege (Central Avenue)



UP setouts for RPRC at Stege Wye



Waterside Drill

Main 1

Main 2

RPRC - Railfan Friendly



My Railroading Interests vs. Richmond Pacific

- Operations
 - Mainline, Trackage rights, Interchange, Short line, Mountain grades, Yard
- Railroads
 - SP, WP, D&RGW, AT&SF/BNSF, Shortlines (RPRC, CNFR, AZ&CA, CORP), UP
- Modeling interests
 - Track
 - Signals, CTC, Interlocking plants, computer control
 - Weathering
 - Bridges/Tunnels
 - Desert scenery
 - Dramatic mountain scenery

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Terminology

- Alternate Names
 - Richmond Pacific ... RPRC, Parr Terminal Railroad
 - BNSF ... Santa Fe
 - Union Pacific ... UP, Southern Pacific, SP
 - UP Martinez Sub ... Cal-P (California Pacific RR)

Region of Interest



Richmond & Connections



Trains (1995-2010)

RPRC

Inner Crew

Outer Crew

BNSF Interchange

UP Interchange

UP/SP

Manifests (MOARV/MRVOA)

Intermodals

Ethanol

Coal to RPRC

Crockett local

BNSF/AT&SF

Turns: Oakland, Warm Springs

Stacks, Baretables

Light Power moves

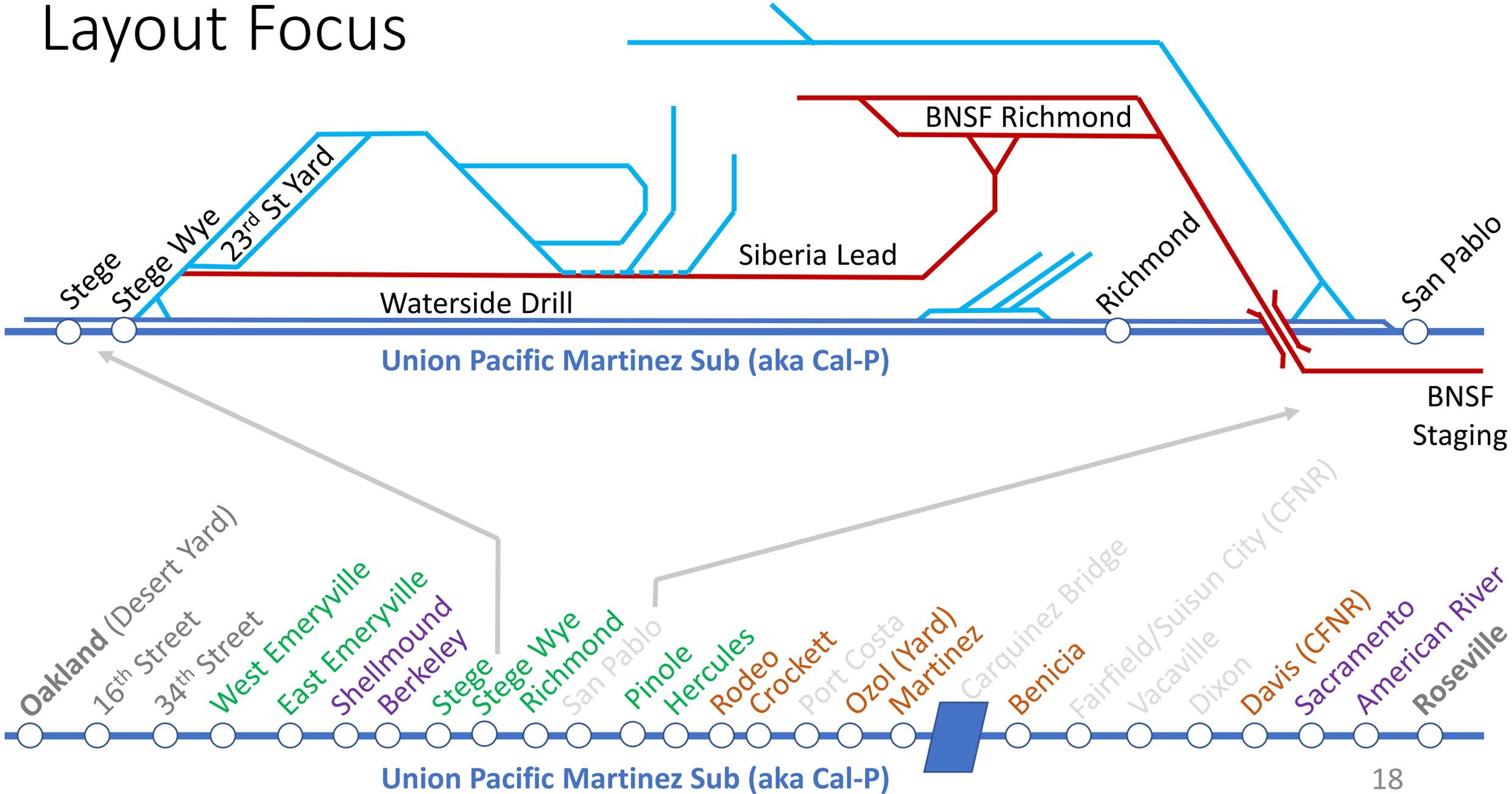
Pittsburg steel

Amtrak/Amtrak California

Coast Starlights, Zephyrs

Capitols, San Joaquin

Layout Focus





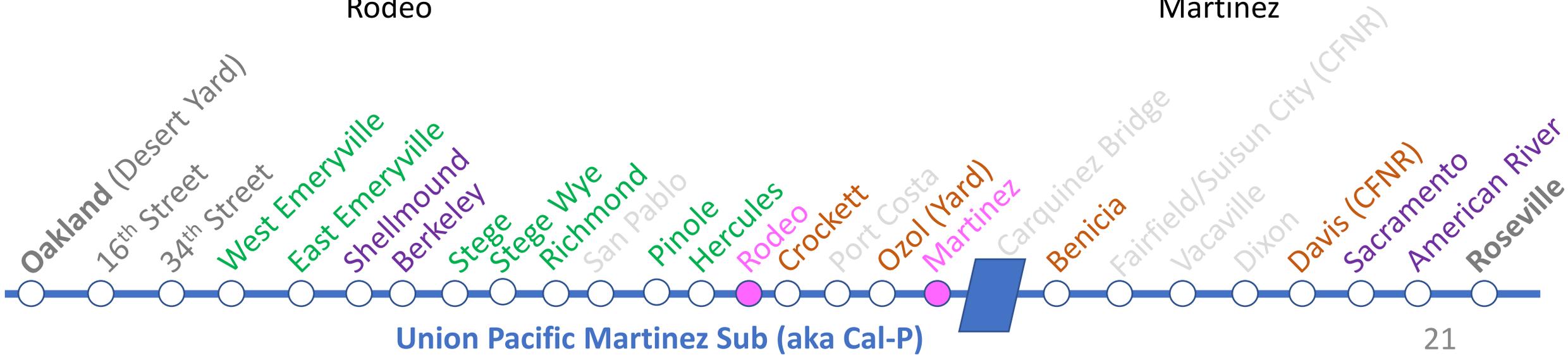




Rodeo



Martinez

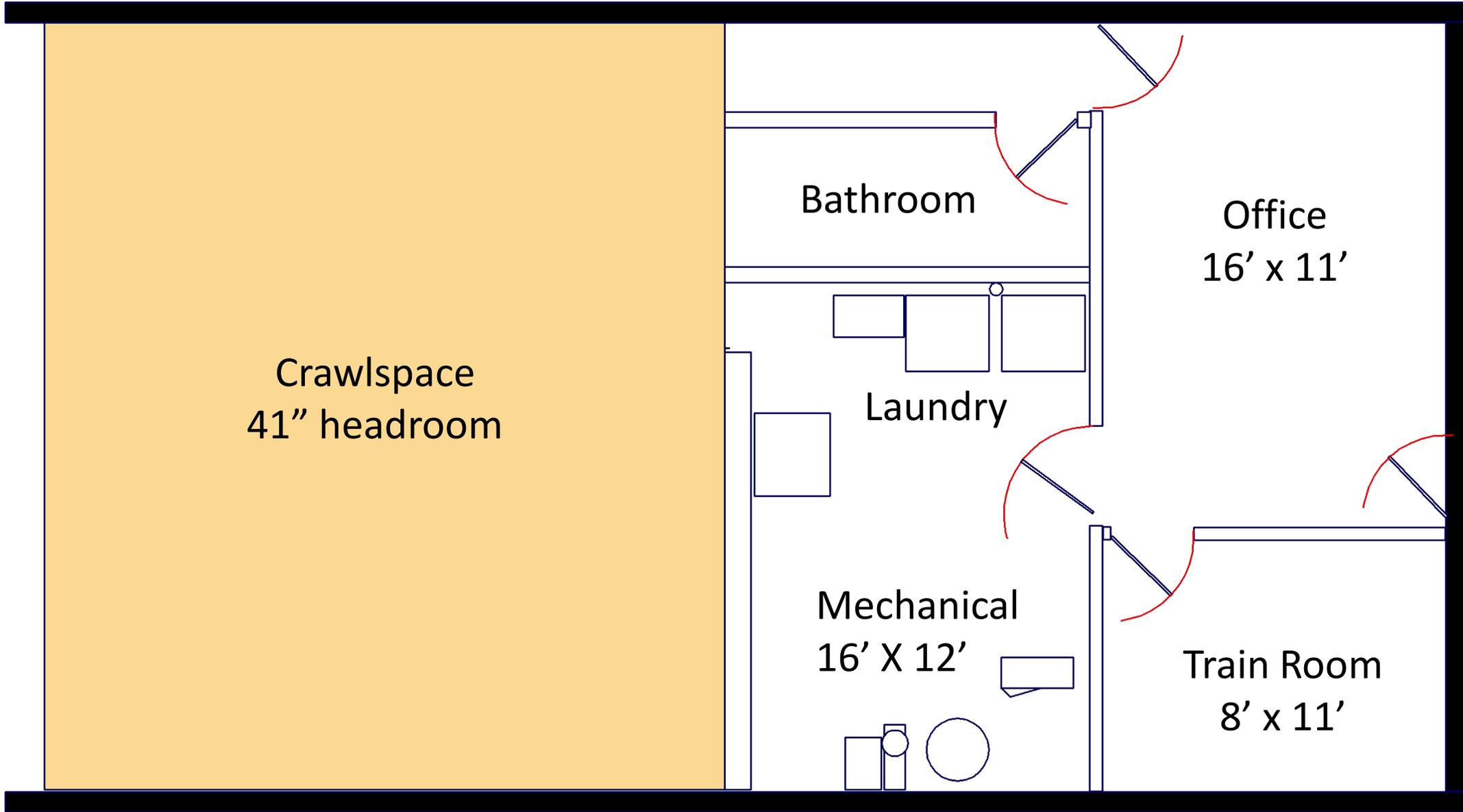


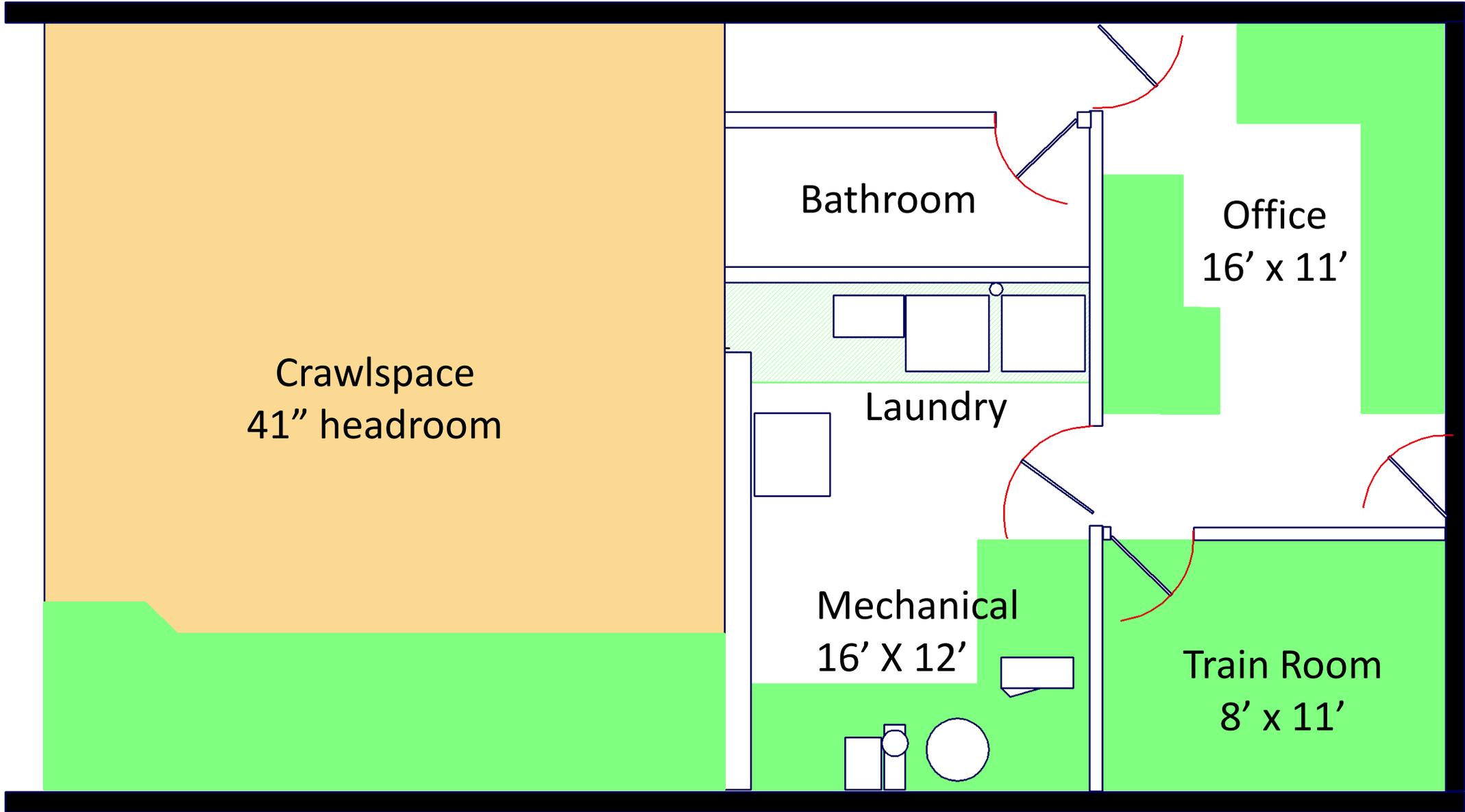
Exploratory Track plan

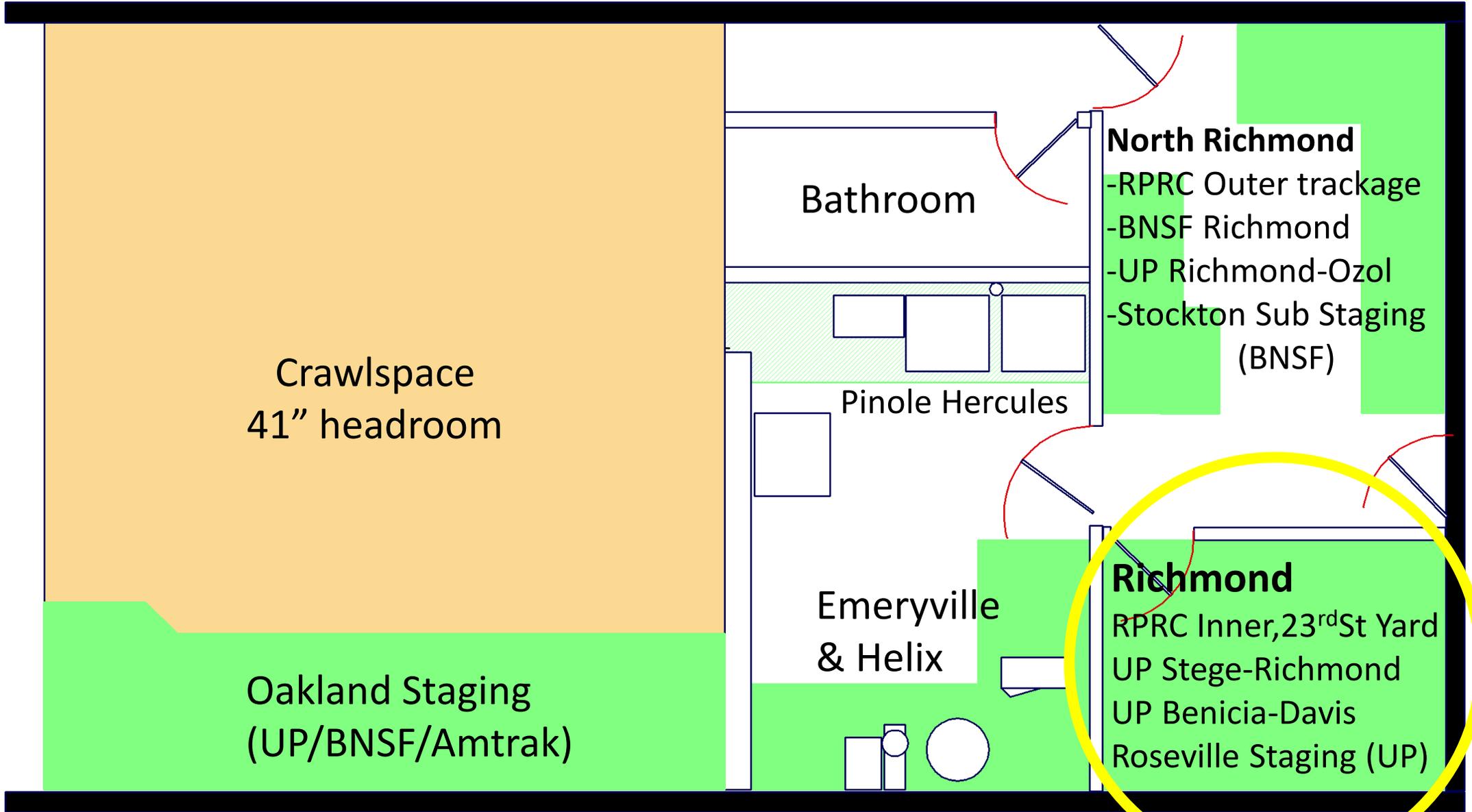
- Exploratory
 - Key locations & operations
 - What will fit
 - Complexity & obstacles
- NOT a build plan!!
- More analysis to come

Preliminary Layout Specs

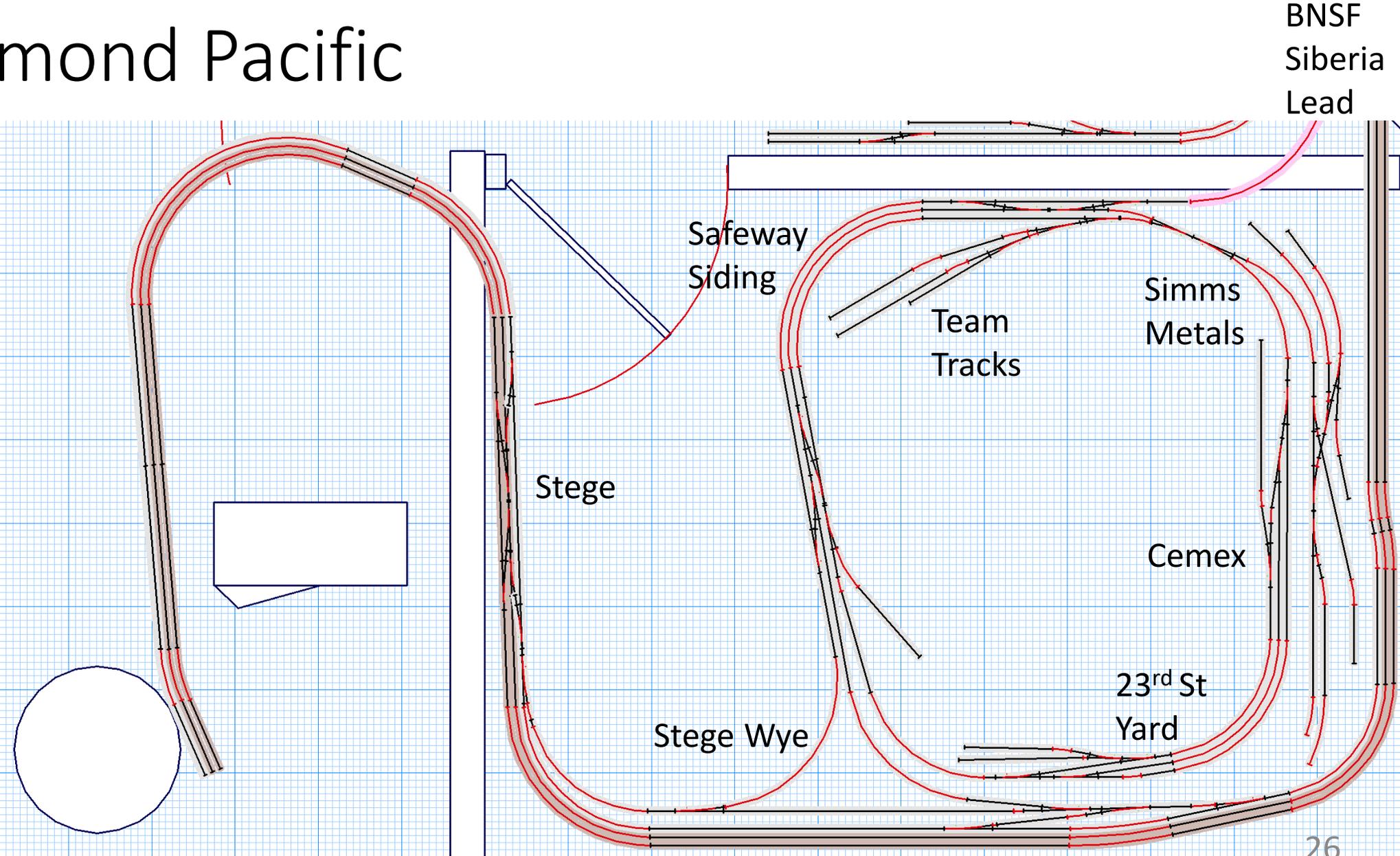
- **N Scale 1:160**
- **Min Radius** - 20" main, 16" industrial
- **Min Turnout** - #9 Main, #7 Industry & Staging
- **Decks** - Staging 32", Main 46", Upper 58"
- **Era** 1995-2011
- **Control** - Digitrax, JMRI, computer control, custom electronics
- **Operators** – Solo, 4-6



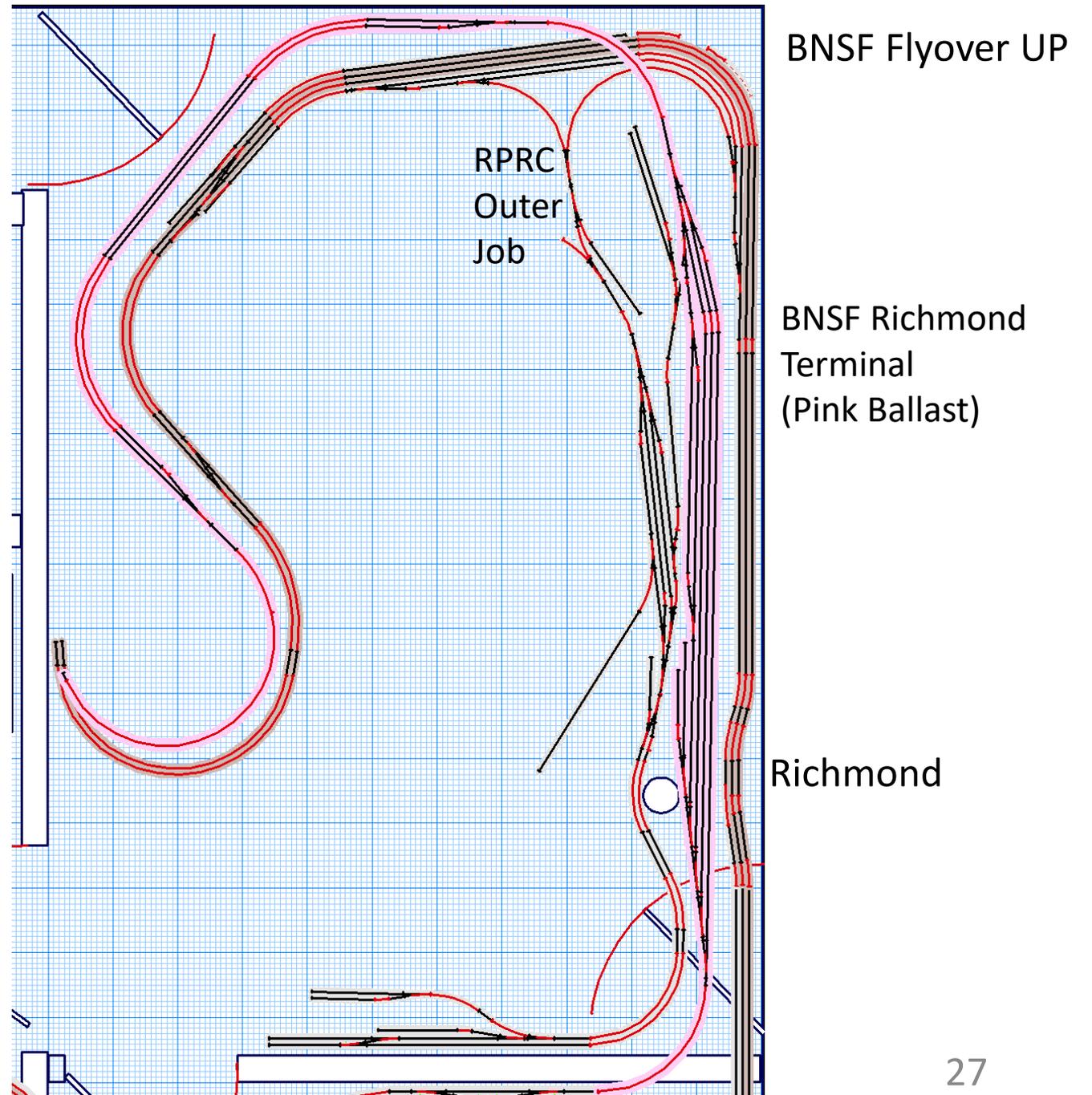




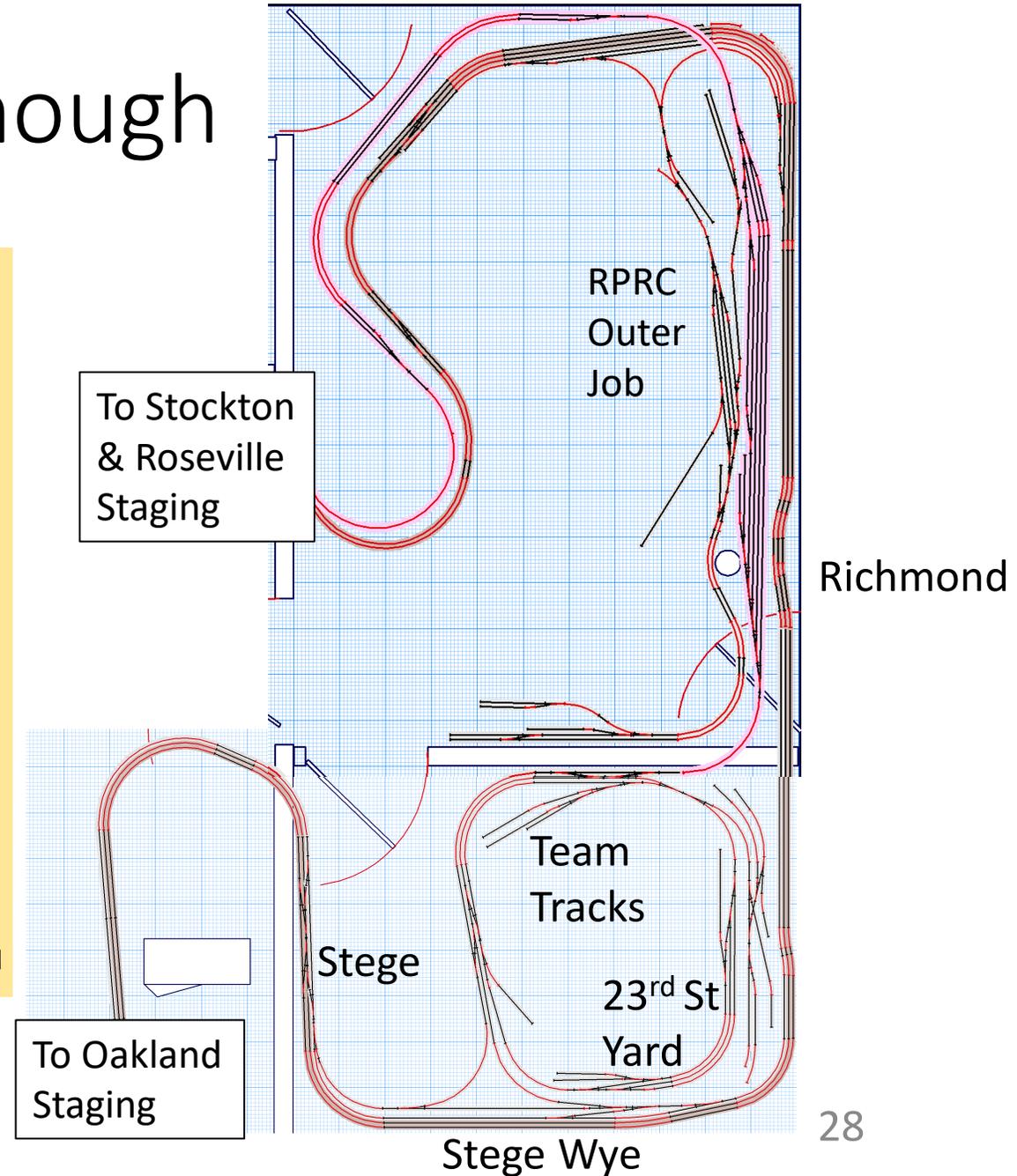
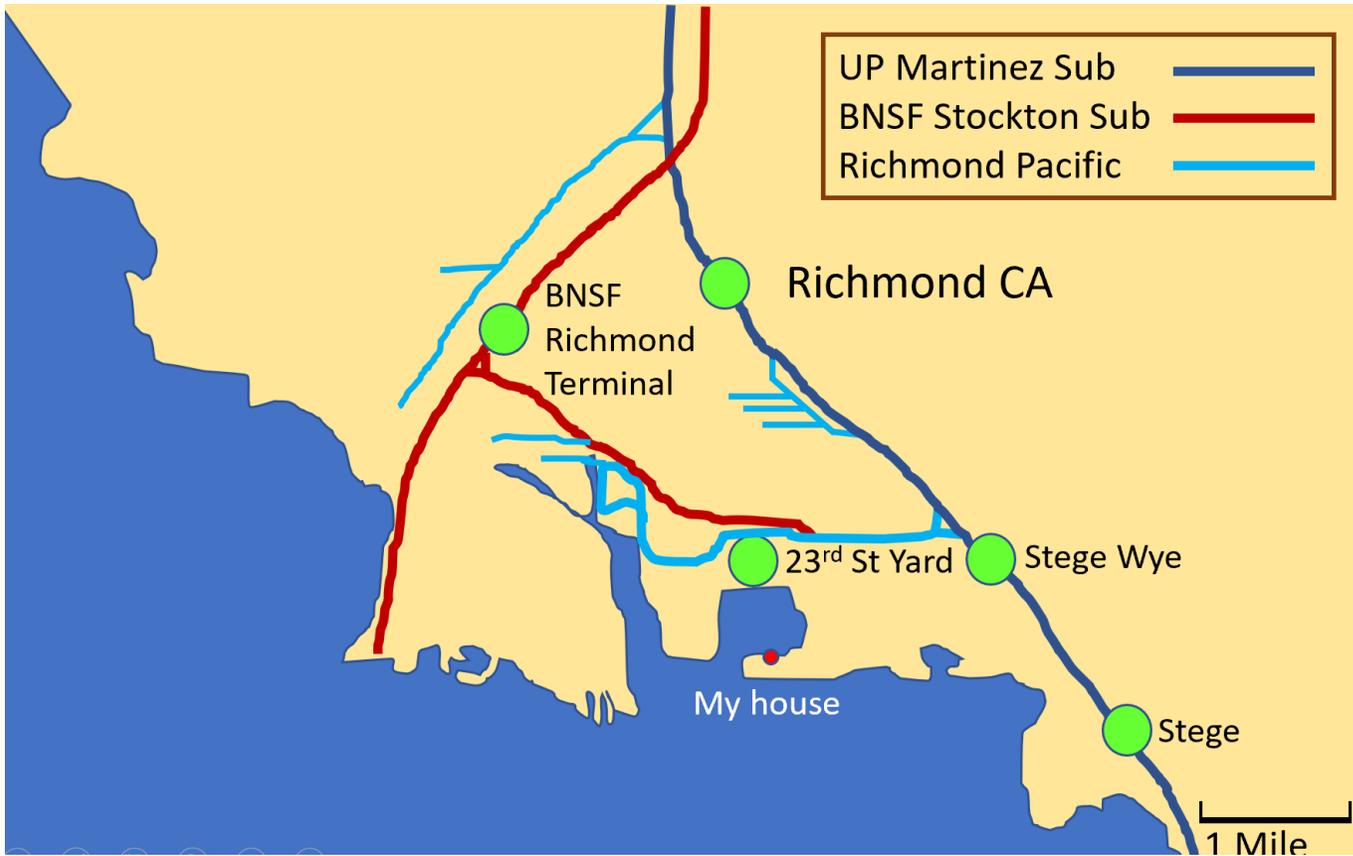
Richmond Pacific



North Richmond



This plan may be good enough



Staging

Oakland
UP/BNSF
4 approach tracks
20 staging tracks

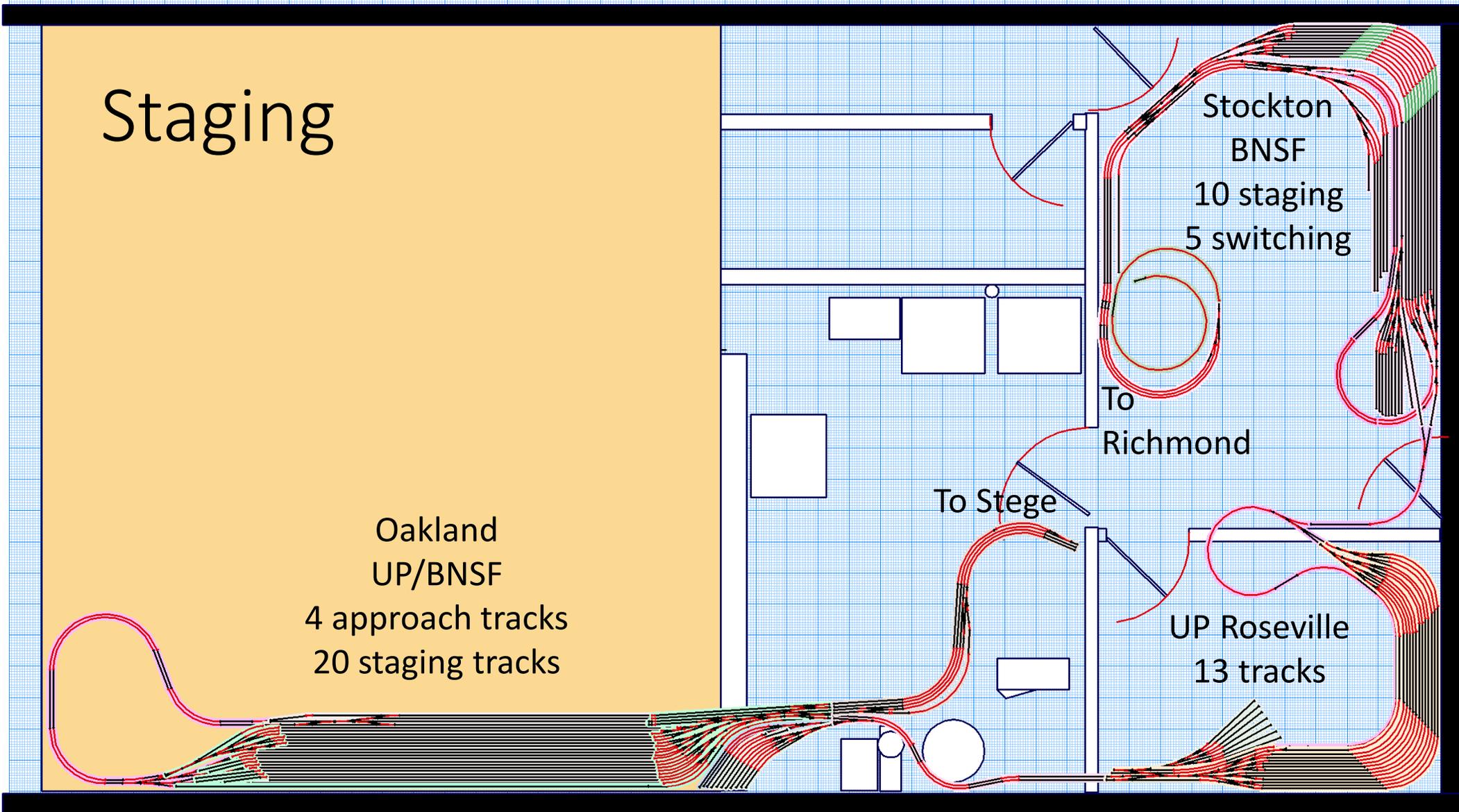
Stockton
BNSF
10 staging
5 switching

To
Richmond

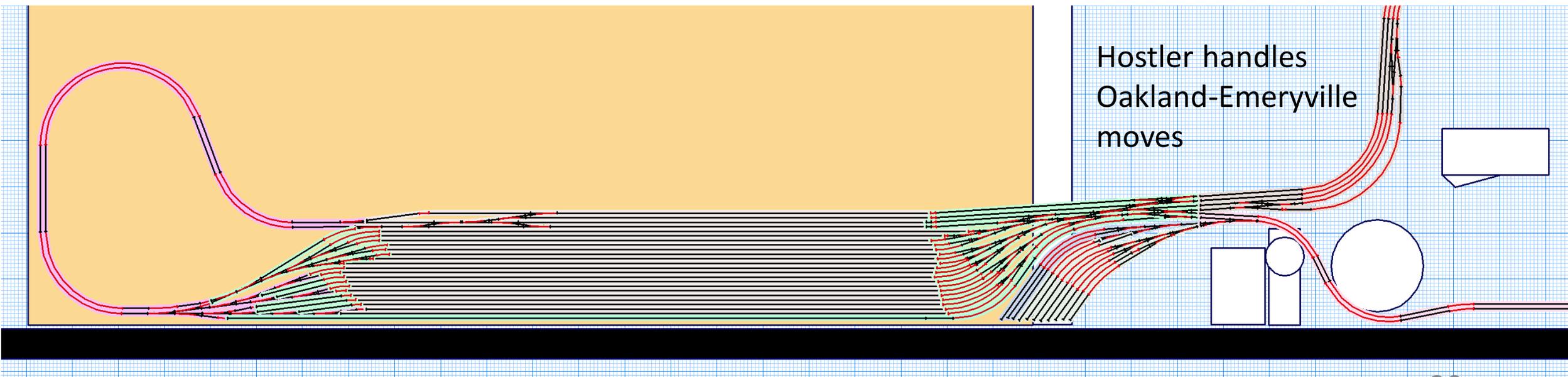
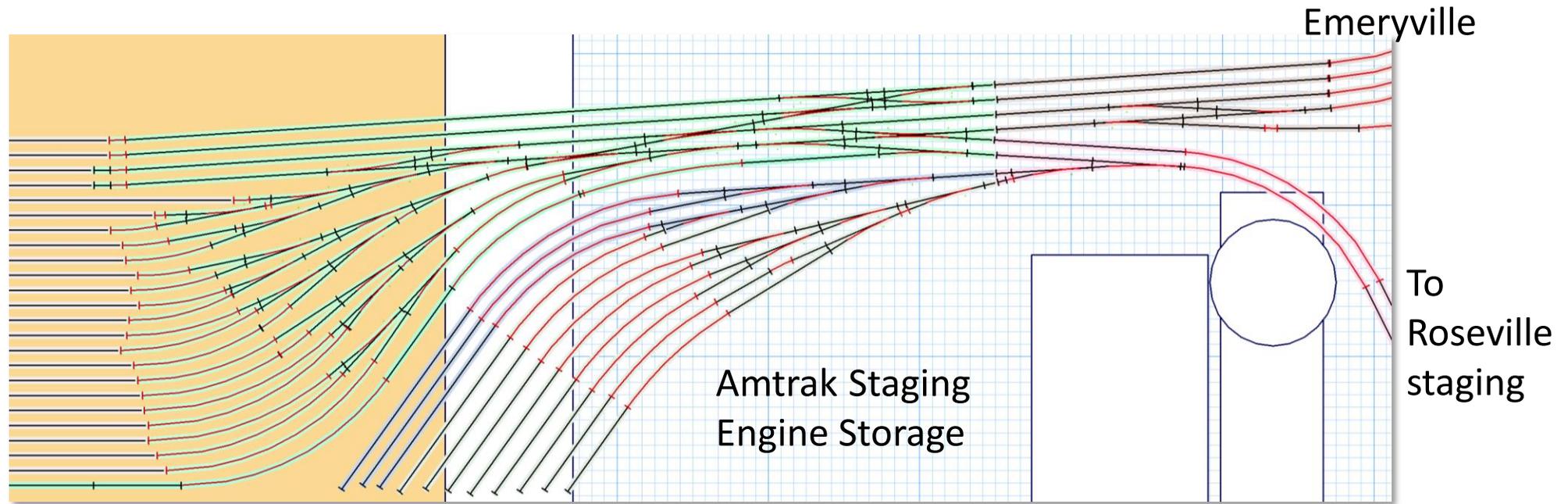
To Stege

UP Roseville
13 tracks

Amtrak California
Oakland Staging

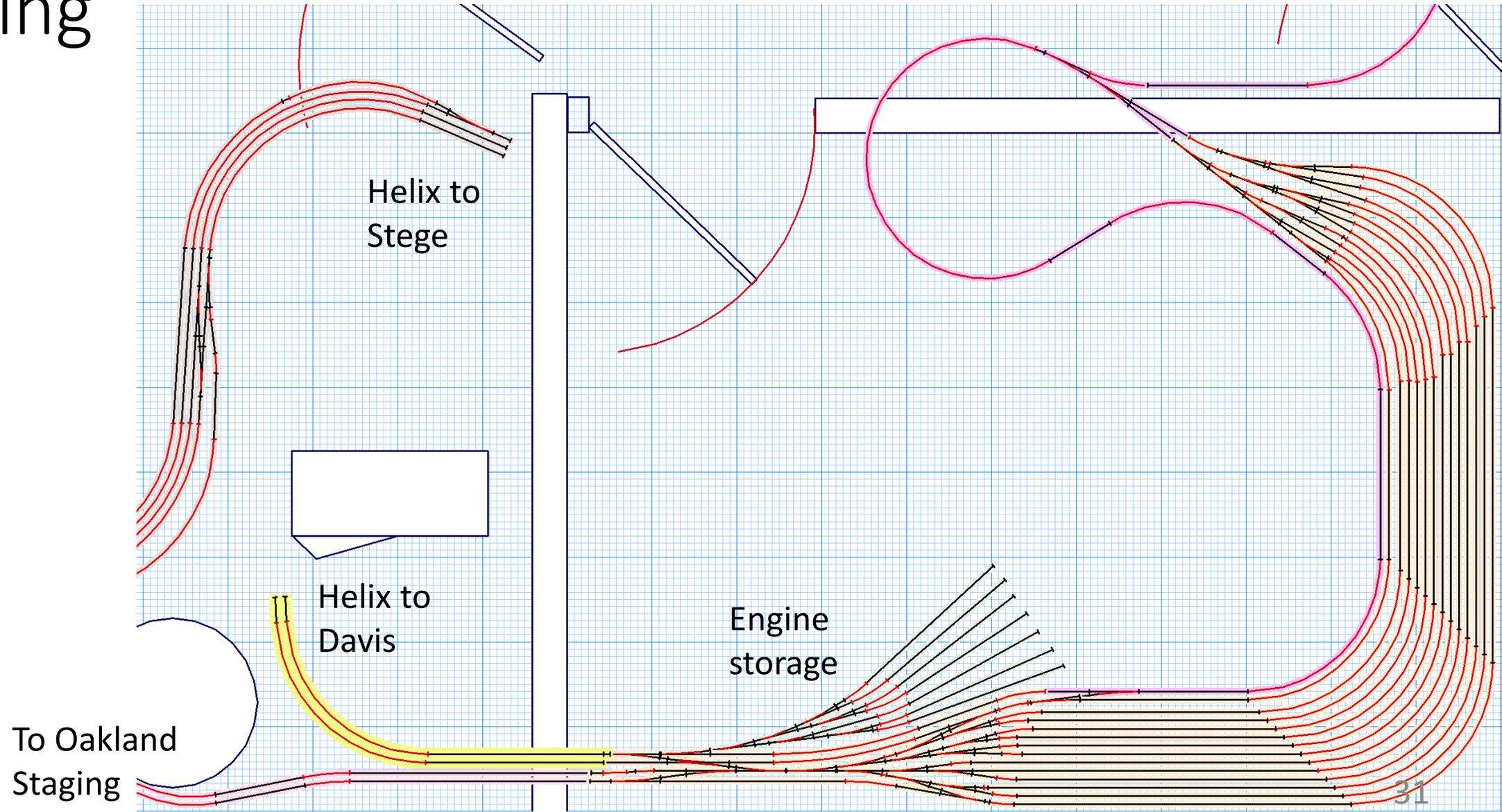


Oakland Staging

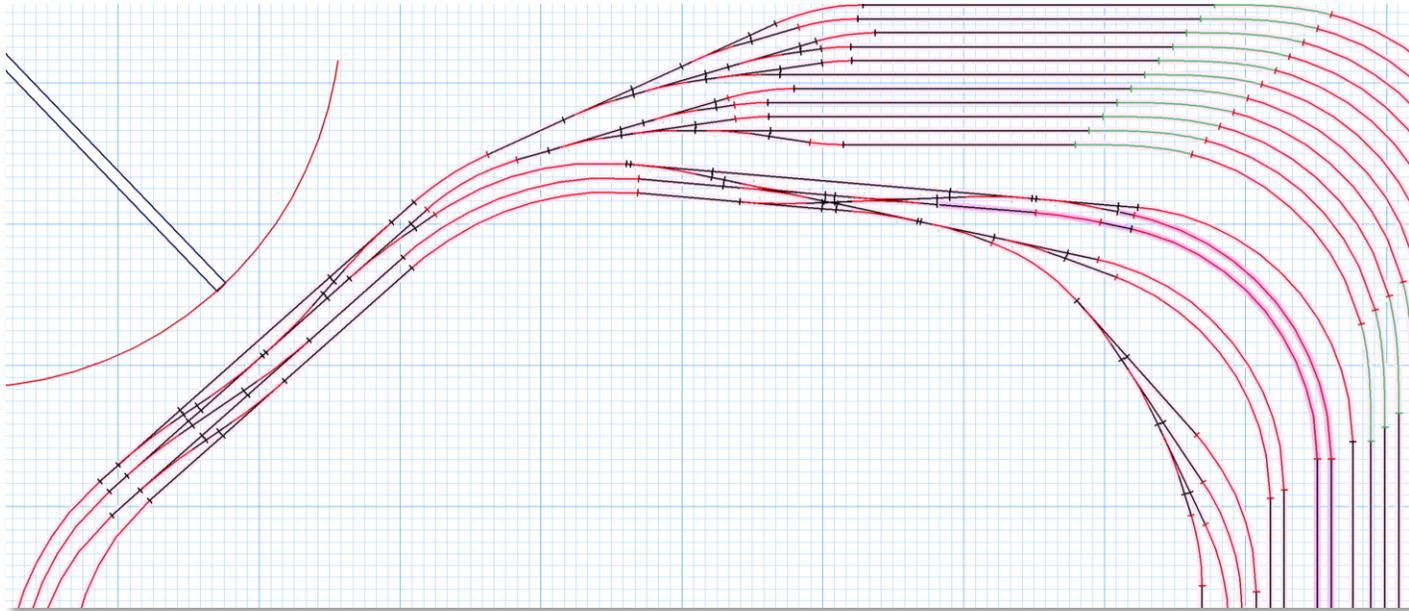


Roseville Staging

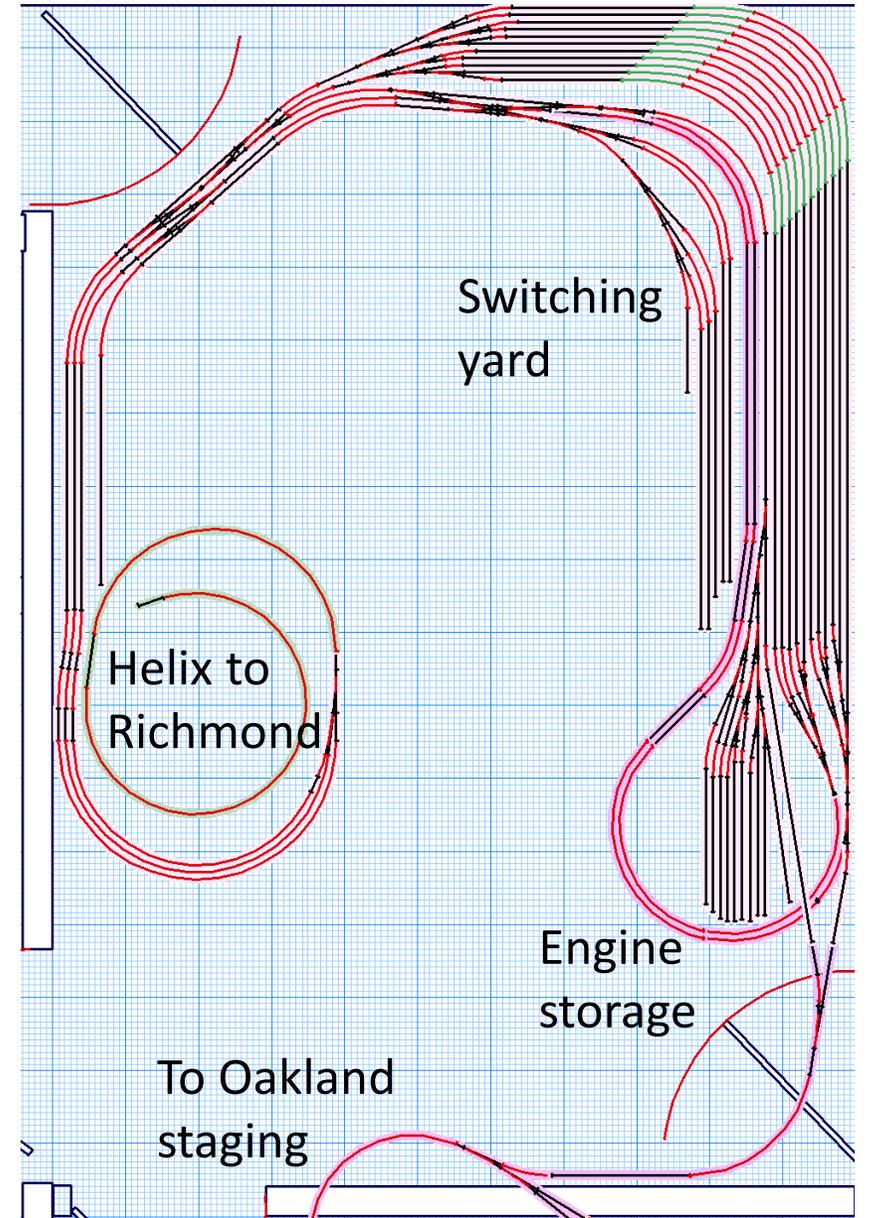
To Stockton Staging



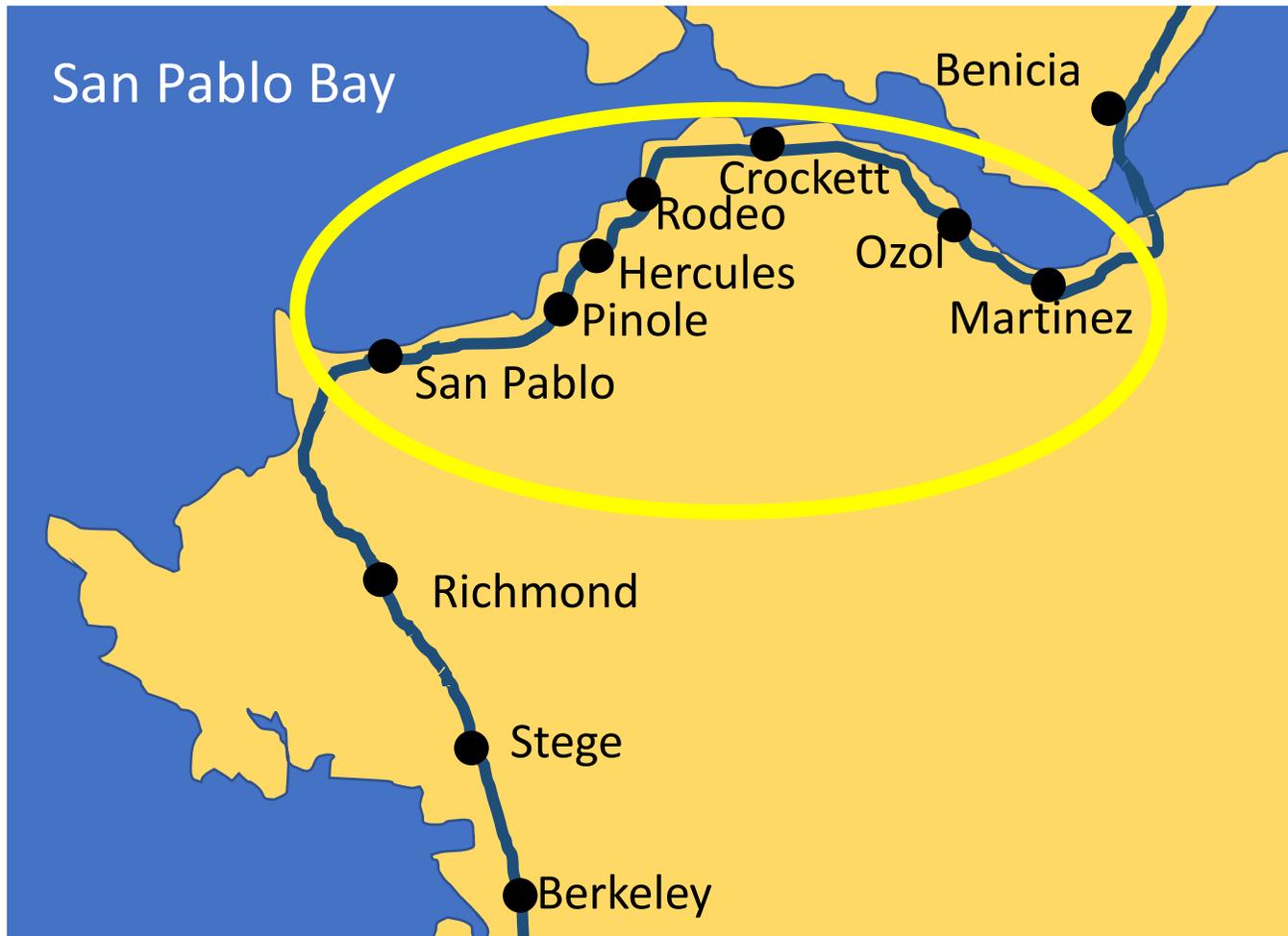
Stockton Staging



Any approach track to any staging track



Upper level – San Pablo to Martinez



Pinole & Hercules

- Shoreline running

Rodeo, Martinez

- Refinery

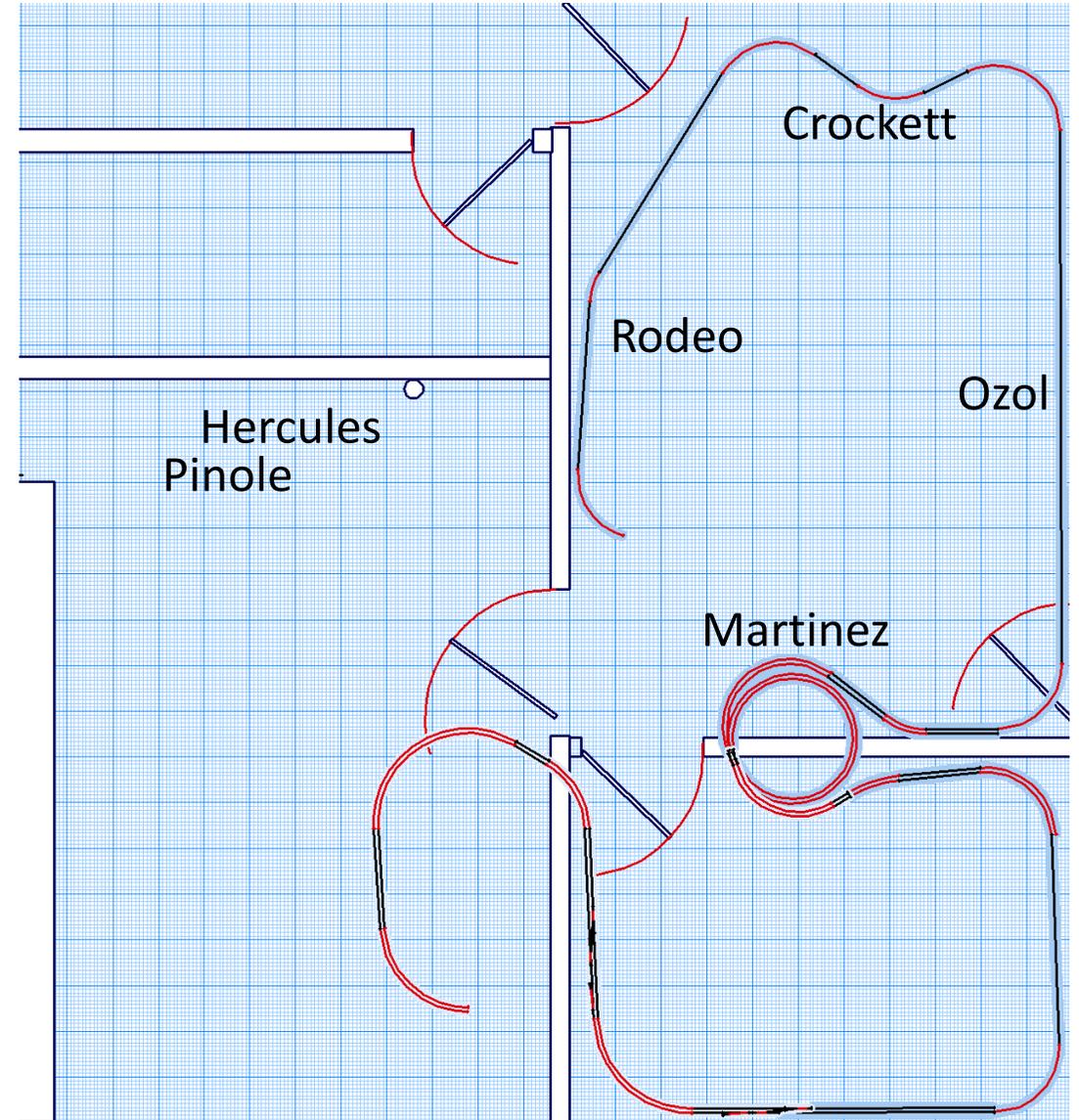
Crockett

- C&H Sugar

Ozol

- Model railroad sized yard (4 tracks)

Upper Level



Upper level – Benicia to Roseville



Benicia

- Separated main
- Huge steel viaduct
- Autorack unloading

Davis

- Cal Northern interchange
- Classic Mission style station

Sacramento

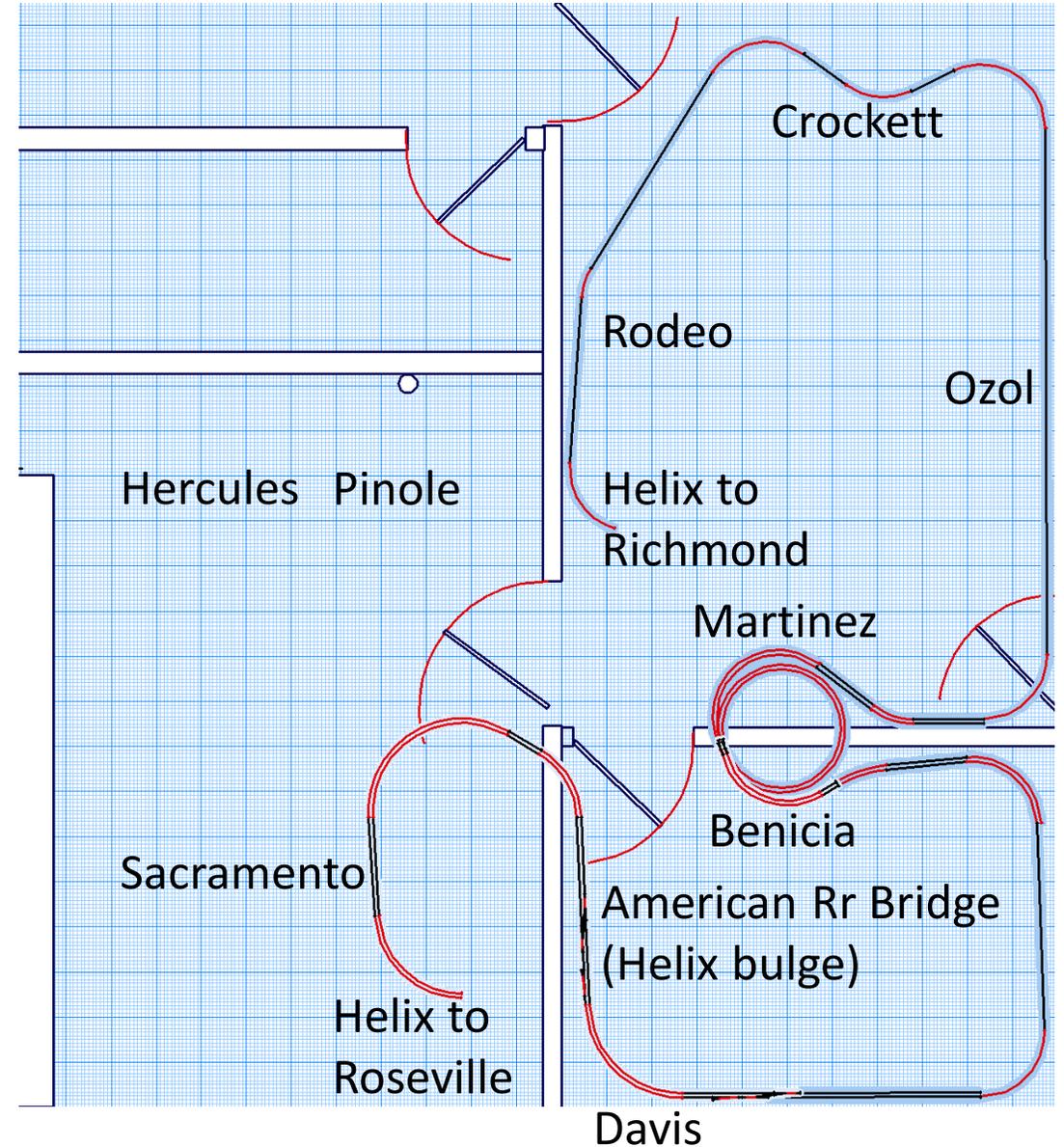
- Amtrak station

American River Bridge

- Cool multi-span through truss bridge

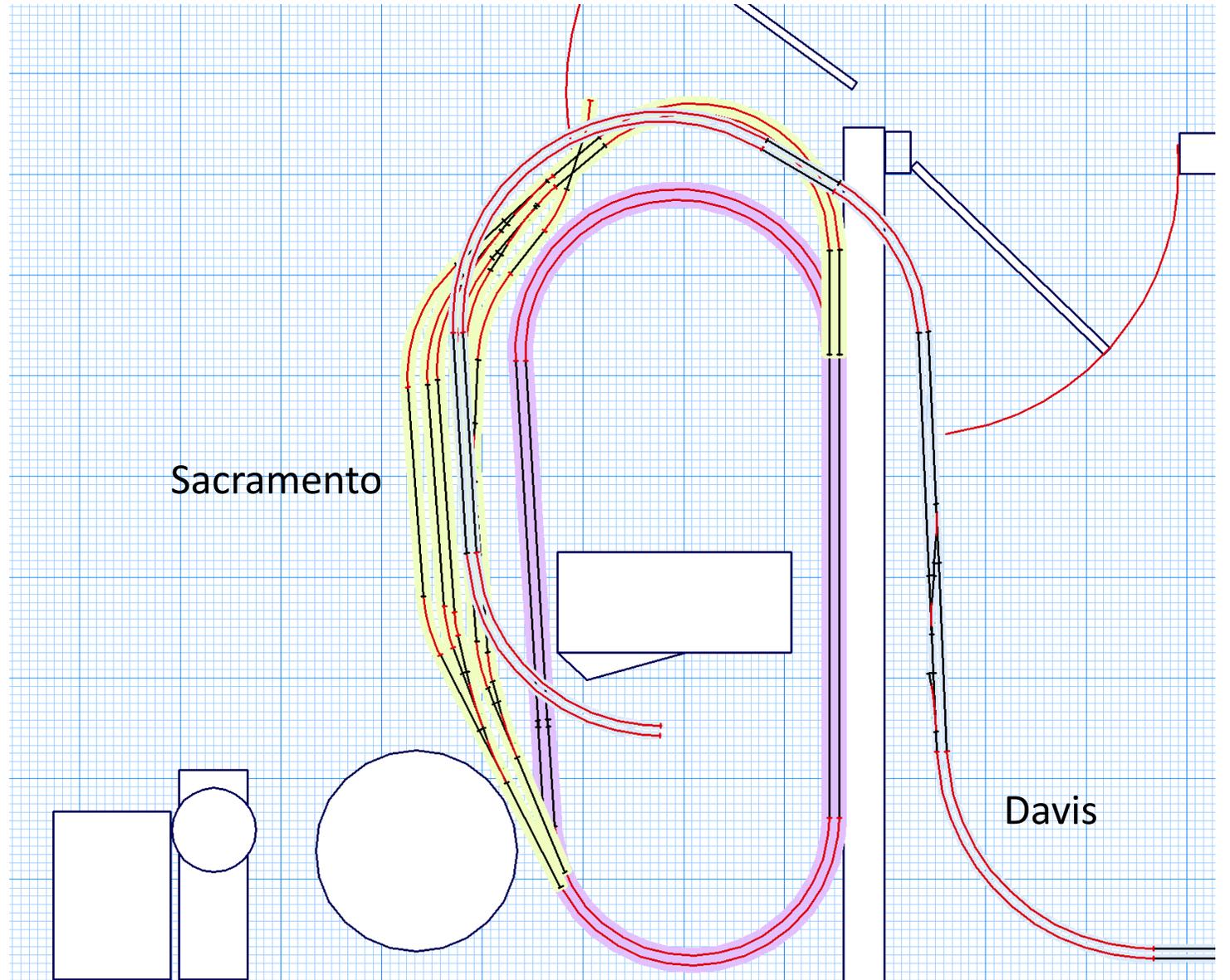
Upper Level

- Mostly mainline running on narrow deck
- Switching above quiet locations
- Ozol yard along wall
- Separated track possible at Benicia
- Davis (CFNR) interchange extends around top of helix



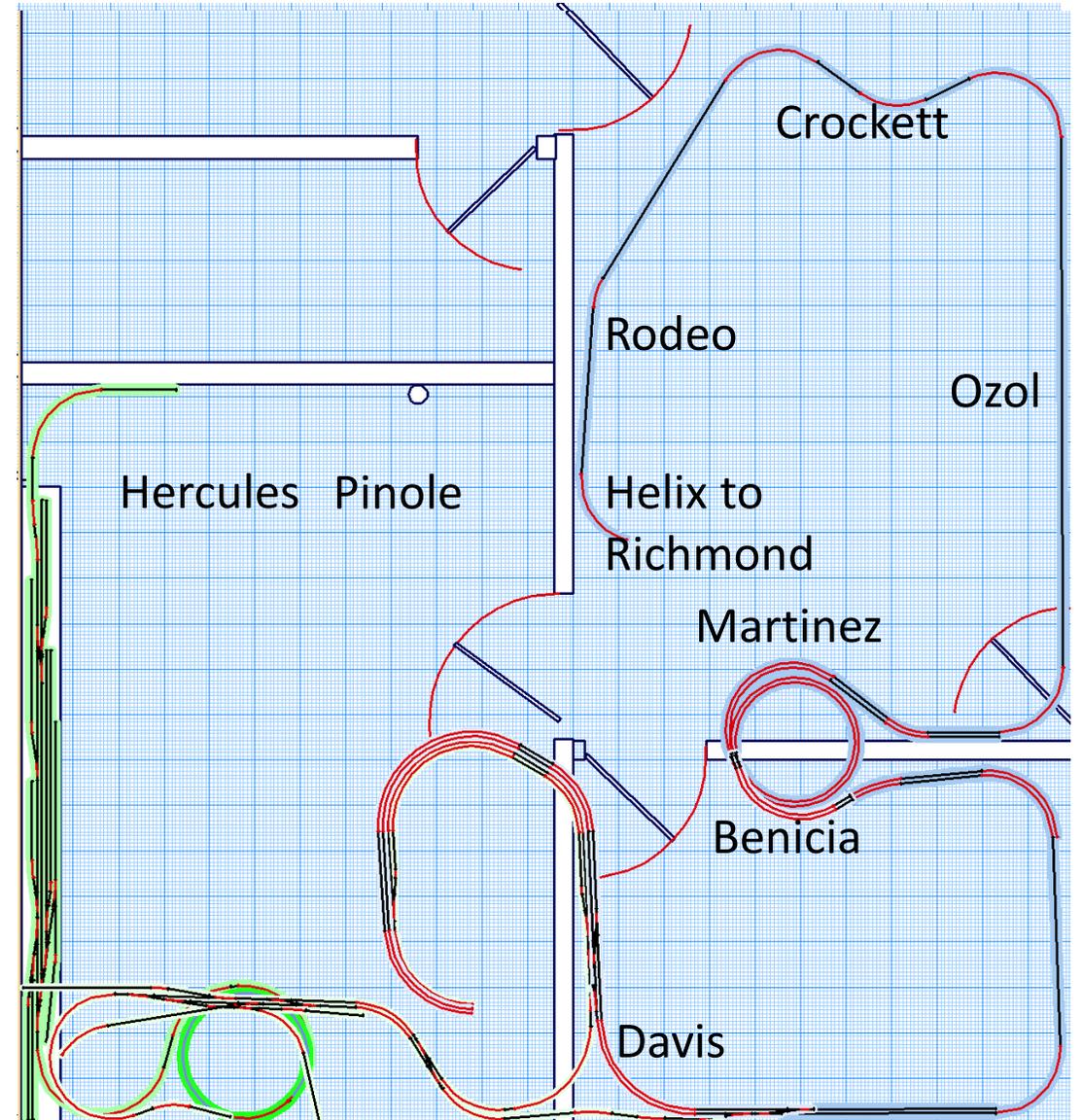
The Big Helix

- Helix
 - 2.25% grade
 - 5" per turn
 - Helix in helix
 - 2.5" separation
 - Modular construction
- Bumpouts
 - Shellmound
 - Berkeley
 - American River Bridge
 - Sacramento



Cal Northern (CFNR)

- UP Roseville manifest block switch at Davis
- Possible UP trackage rights run to Benicia
- CFNR switching above helix
- CFNR yard with a few industries



Passenger Operations



Closing Thoughts

- Change happens, photograph everything you care about!!!
- Exploratory track plan is helpful. It shows
 - What is possible in this space
 - And how less could work too
 - Challenges
- **Concept -> Explore -> Prototype -> Plan -> Build -> Operate -> Enjoy!!**
 - hand laid N scale #8 double slips & scissors crossovers
 - module alignment
 - door gates
 - Interleaved helix

Q&A



BNSF Warm Springs Turn. Siberia Lead, April 2011

Additional Slides