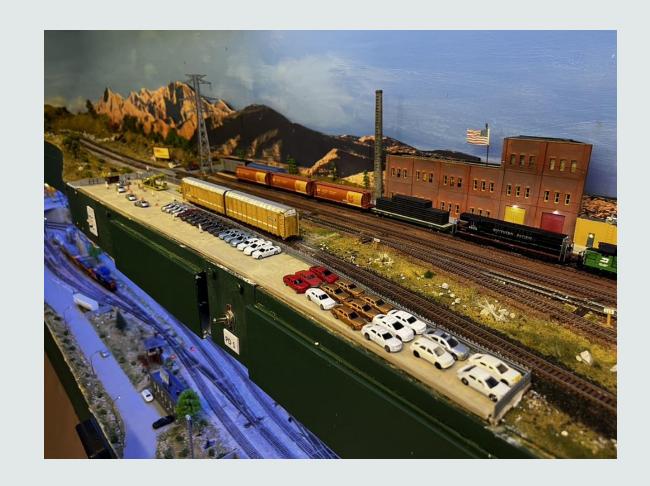


### WE WILL COVER:

- 2019/24 Layout
- Strengths and Weaknesses
- Why Change?
- New Plan
- Elements of new layout
- Lessons and "Better" practices

Note: These are my views – they may not Work in all cases!







### "OLD" LAYOUT

- 2 Levels:
  - No Helix
  - Max Grade 1.75%
- Atlas Code 55 N Scale
- Pacific Northwest Contemporary Era
- Tam Valley Servos
- NCE Wireless Plus
- Signals Atlas and Azetrak
- "Fully" scenic'd
- Walk in around the wall plus peninsular (noelix)
- Mostly Kato, Scale Trains, Micro Trains, Atlas.
- Mostly metal wheels
- Woodland Scenics Light Hubs



# STRENGTHS OF CURRENT LAYOUT

- Runs Reliably
- Long Run 25 minutes for Amtrak, Fast freights
- Signals and animation (signs, welder, Building fire, emergency vehicles etc)
- Visible staging
- Servos with dwarf signals (via Tam Valley relays)
- Wiring robust.
- NCE and 8 Power districts (NCE EB1)
- Large radius 18inch minimum
- Drop down fascia for access to wiring.
- Wide aisles no pinch points
- Limited hidden track



### CHALLENGES OF CURRENT LAYOUT

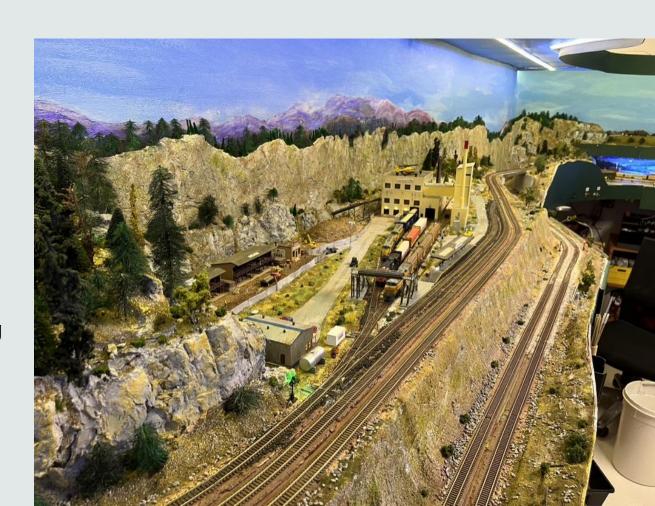
- Dual level creates tight areas for maintenance
- Lower level "low" not easy to work under.
- Wiring with all servos, signals and live frogs etc is busy.
- Peninsular divides room scene divider down the middle.
- Drop down fascia area is busy with circuits, terminal boards, wires etc.



### DECISION TO BUILD NEW LAYOUT

- Created my "Druthers"
- Planned to review with LDSIG at Long Beach convention.
  - Byron Henderson
- Asked local N Scalers and other NMRA members
- Began documenting my new standards
   wire colors, Bus and Power district wiring etc.

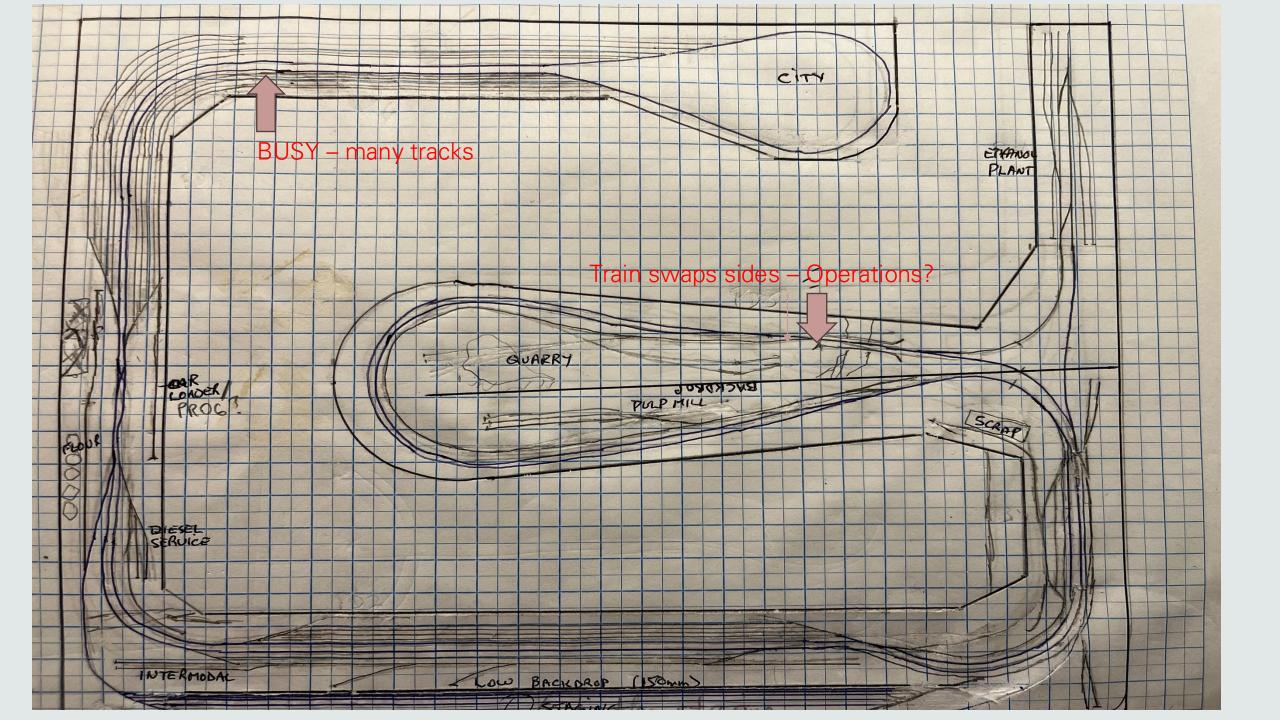
Aim: Easier to maintain.
Simpler
Even better



### "DRUTHERS"

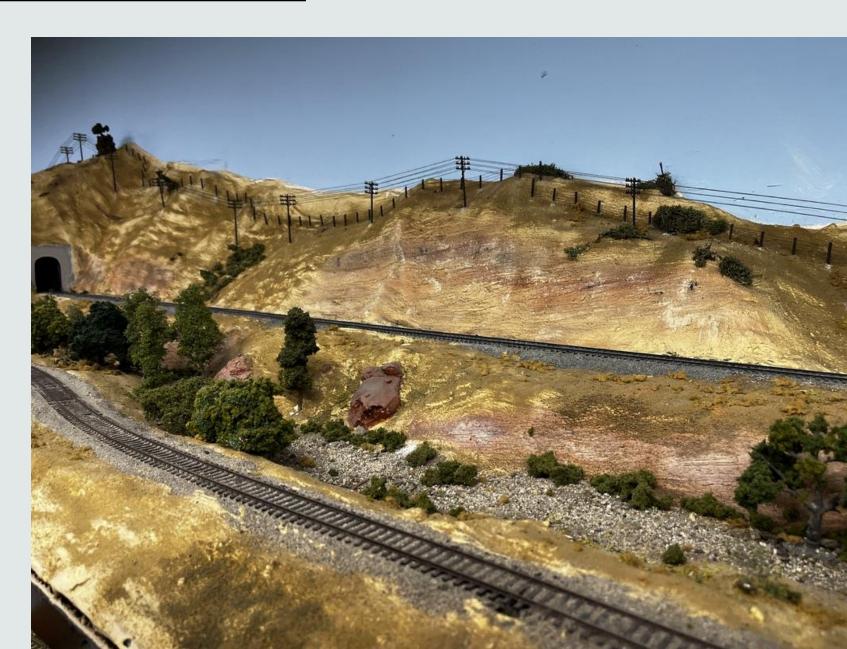
- Single deck 138cm height
- · California scenery contemporary era
- Peco Code 55 track mainly Electro frogs. (Unifrog)
  - manual throw
- 18 inch minimum radius
- Long trains up to 30 cars
- "No" grades
- Tortoise for mainline switches
  - switches on fascia in line with turnout
- "1.5M" aisles minimum
- Develop as modules build in garage free standing
- Signals, Dwarf, mainline, automation??
- Operations long runs, industrial switching
- Photo Backdrops
- Dioramas built at workbench
- No hidden staging tunnels. (scenery / hills as view blocks)
- Operations for 4-5 operators.





# COMMENTS ON PLAN- LDSIG

- Too busy a lot of staging
- How many trains will you run?
- Peninsular not ideal for operations View block?
- Be consistent with scenery and Era buildings.
- More industry needed. Use industries as "staging"
- Countryside more?
- Good luck keep me updated.



### OTHER WILL DO'S BASED ON EXPERIENCE

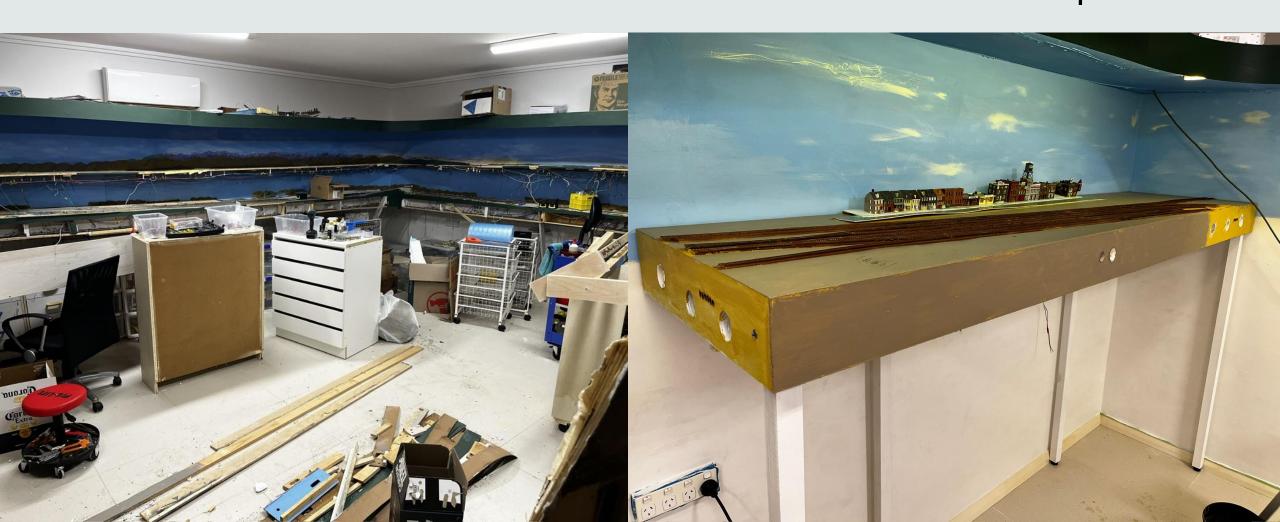
- NCE plus WIFI and wireless (wifiTrax)
- PVA white glue to hold cork roadbed / track
- Seal and paint all timber white for visibility
- Fascia painted an earth color to match scenery
- Accessory Bus heavy (10 amp) to carry loads.
   5V DC, 12V DC, 16V AC
- Recessed switches on fascia for Power Districts, Tortoise: Light Hubs?
- Light weight modules 4mm ply + 30mm EPS Foam
   12mm x 100mm frame 40mm holes for Bus etc
- 3mm cork roadbed sanded and sealed
- Curtains (black) on spring wire support. Later!
- Scenery / Buildings as dioramas built at workbench where possible.



# FOLLOWING THE 2024 NMRA CONVENTION!

**Demolition** 

1<sup>ST</sup> Module in place

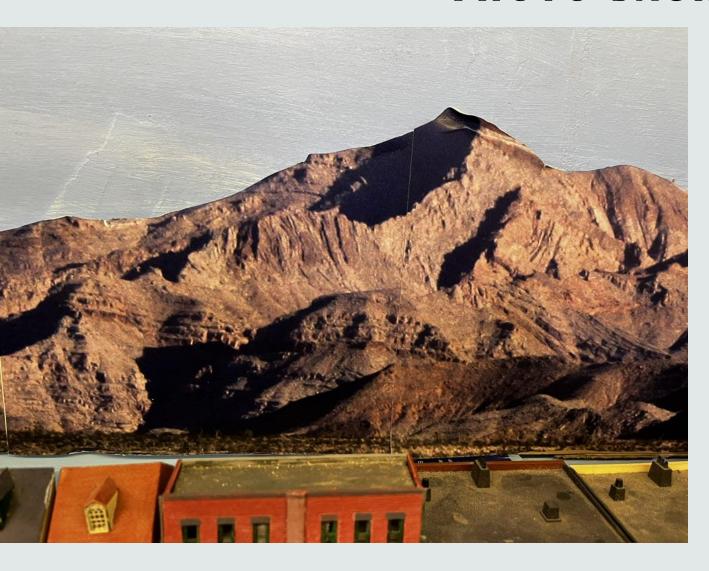


### FIRST STEPS

- Re paint all walls.
- Build all the modules and ensure stability. Bolt together, level etc
- Paint sky background and clouds
- Photo backdrops mount on 3mm styrene and remove sky.
- Install accessory and DCC BUS.
- NCE Bus and fascia panels.
- Using stencils for curves rough out the mainline
- Lay first cork roadbed sand and seal
- Lay 1<sup>st</sup> tracks starting with switches.

# Don't rush!

### PHOTO BACKDROP





Spray glue (3M) used to attach the photos to a 3mm frame cut to shape - then hot glue to wall.

### HOW IS IT GOING?





Mainline switches – Tortoise with dwarf signals
Hills from Styrofoam – covered with base of sand & PVA glue
Frog Juicers on all Electro-frog turnouts
Testing structure positioning for yard designs.

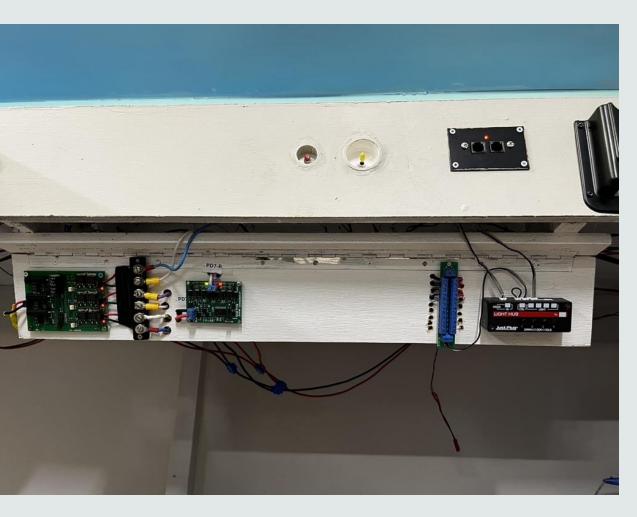
### MORE PROGRESS





Gravel pit / mine site.

# DROP DOWN PANELS





Panel lowered.

Panel raised

# OTHER IDEAS THAT WORK





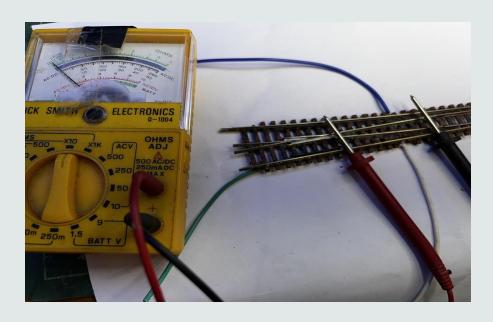
Slide out drawers

# LESSONS LEARNT (THE HARD WAY!)

- Switch wiring check polarity at workbench.
  - wire stock and switch rails.
  - double check soldered wire leads.
- · Sand and seal cork roadbed.
  - use thin smoothed glue (caulk or PVA)
  - spread with "spatula"
- Sleepers / Ties in gaps:
  - file or shave to fit.
  - check fit so rail does not rise.
- End long BUS wires with snubbers.
  - twist long bus wires.
- Use buzzer and check wiring regularly
  - suitcase connectors or solder?
  - connect and check before soldering.
  - run the trains on new track.
- Set goals and vary projects:
  - stop track laying and do some scenery.
  - do some switching to test yard lengths.
  - be flexible with industries and yards –
     (designs on paper don't always translate)



# LESSONS LEARNT CTD.

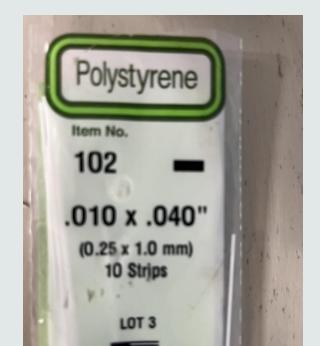


Check wiring









### GOING FORWARD

- 1. Struggling with Industry layout.
  - major industries?
  - re-use industrial buildings?
  - large industries a must for ERA
- 2. Force myself to stop and test all track
  - most works well
  - some frogs need filing
- 3. Signals now or after scenery?
- 4. Operating sessions soon.
  - I will get feedback on everything!
  - Op sessions test reliability
- 5. Consistent scenery.



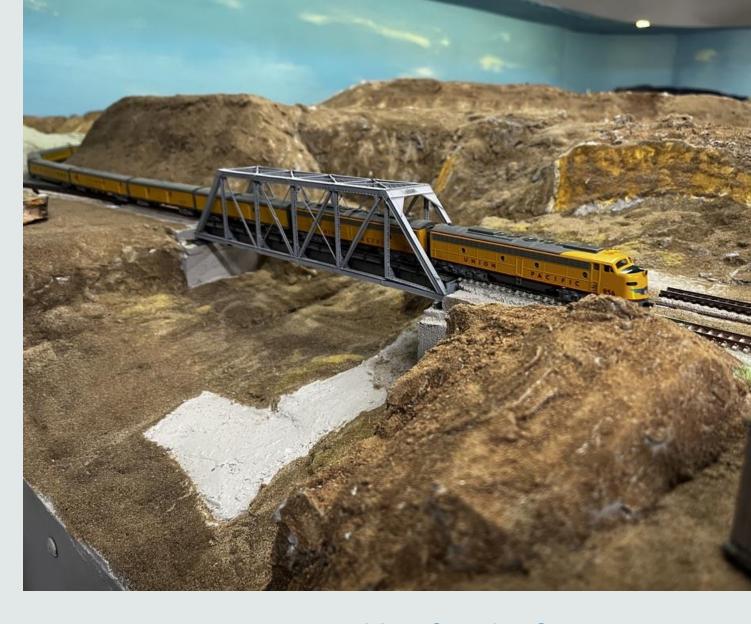
# VALUE OF NMRA/ NSE

- Networking:
  - members and their guidance / advice
- Resources:
  - LDSIG, OPSIG, Member's web pages
  - YouTube (?), Facebook groups.
- Conventions:
  - Local, "National", NSE and other associations



Happy modelling

# THANK YOU



More Questions? jefflee393@gmail.com