



Design Concept Update – Platform Moved on Hillman Rollers

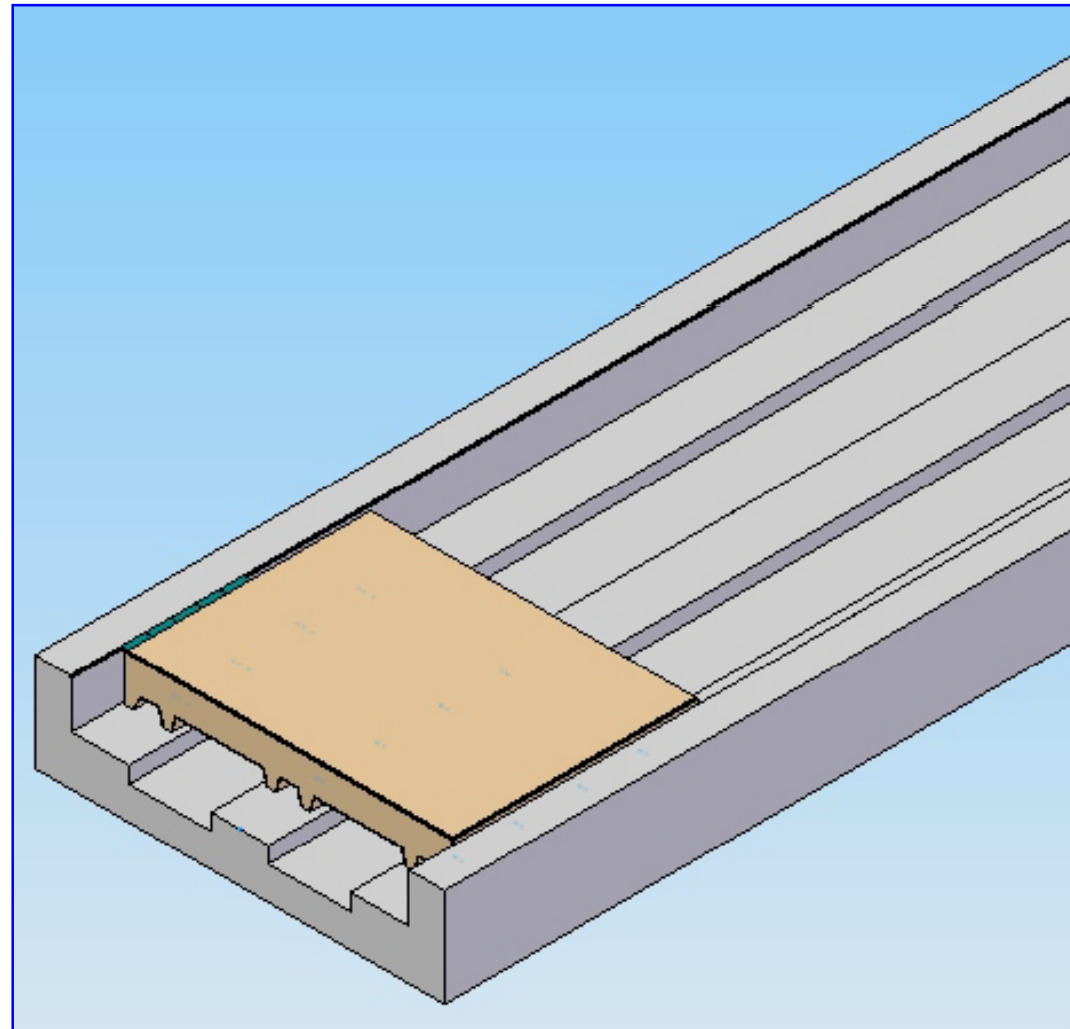
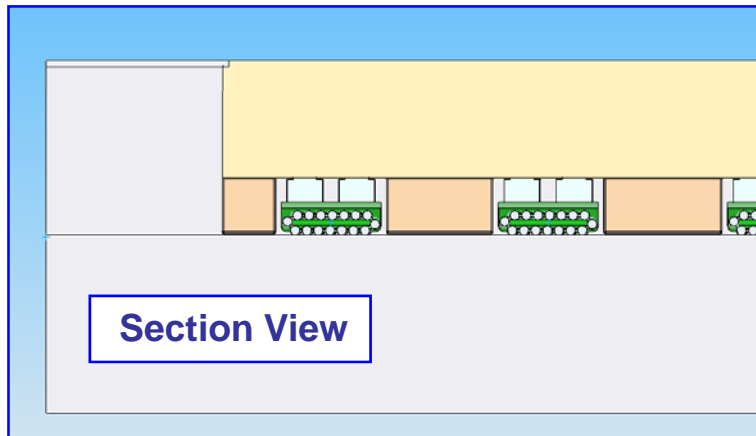
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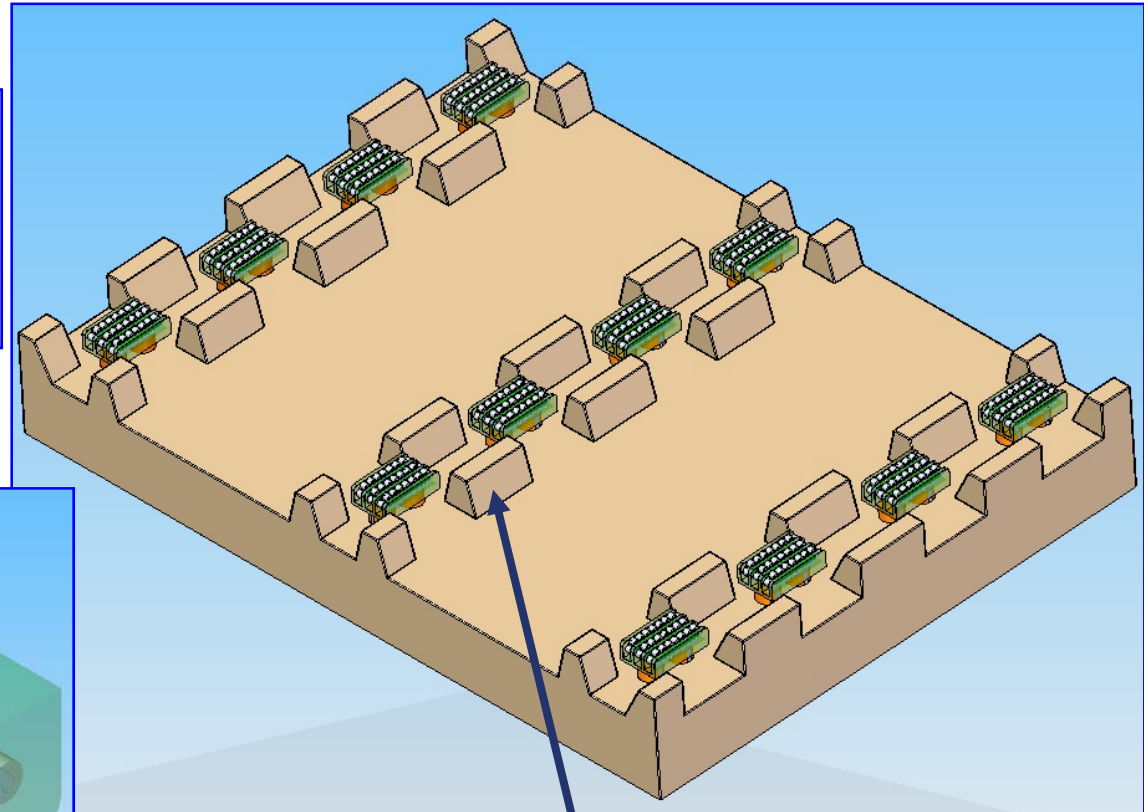
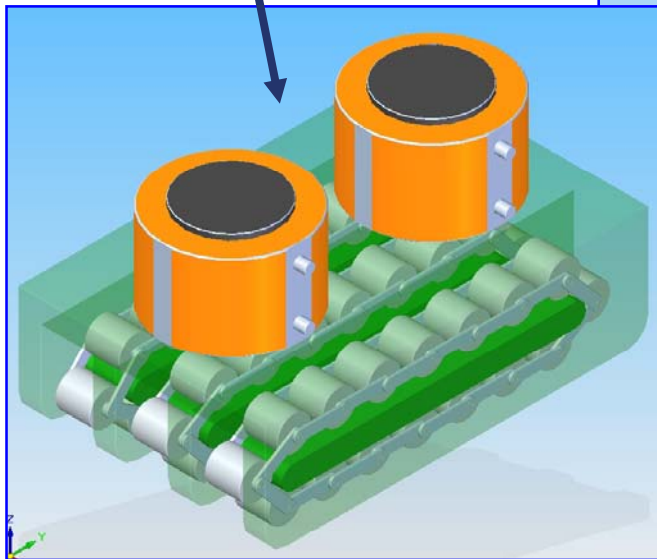
Concept developed in discussions with A. Herve and A. Seryi.

Platform details:

- 20x15x2m
- 5m wide trenches for cable chain and roller access.
- Steel reinforced concrete or steel plate construction.



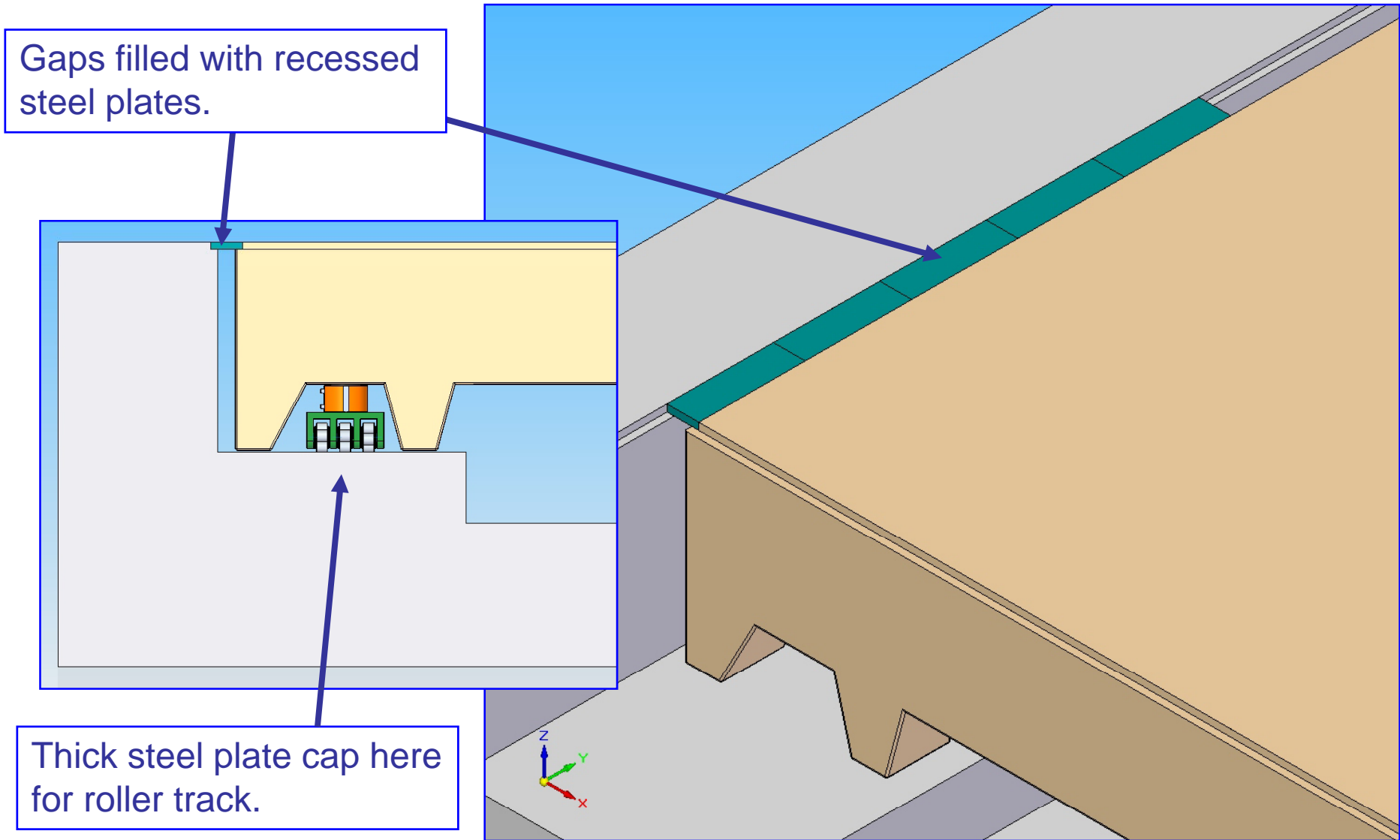
Uses 1.5kT roller module with 1kT hydraulic jacks. Design must be optimized to distribute load evenly over roller module.



Feet support platform when stationary.

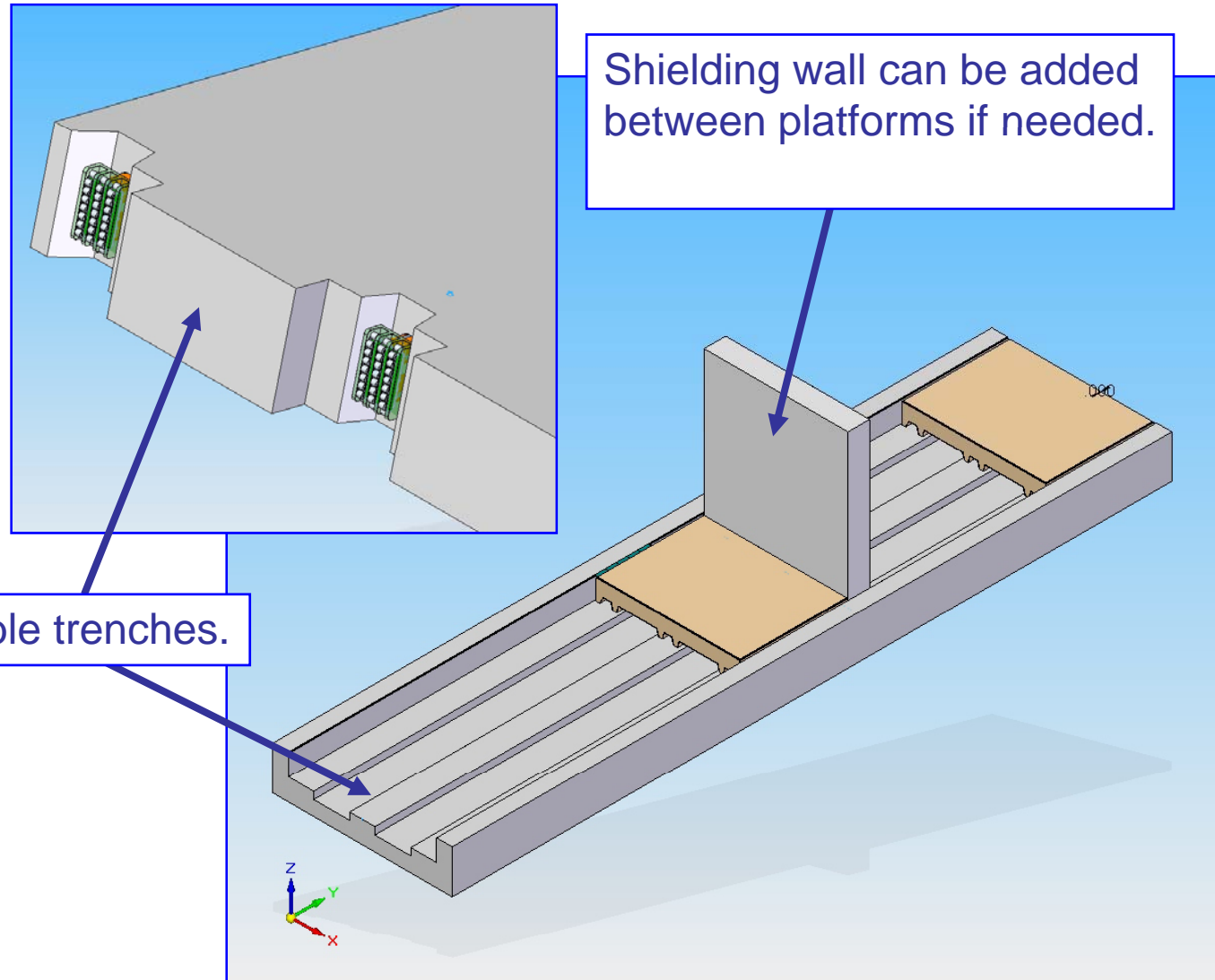


Bridging the Gaps





3m Shielding Wall on Rollers





Need to Investigate....

- 1) How to return platform to beam line position with mm accuracy?

System of alignment male/female V-grooves on platform feet and IR runway. Platform rolled onto beam line roughly aligned. When platform is lowered, grooves mate to align platform to better tolerance than achievable with rollers.

- 2) How to propel platform? Screw drive, hydraulic ram, cable and reel?

Hydraulic ram seems best for large movements. A 50-100m long screw drive could be difficult to engineer.

- 3) How to cover trench? “Accordion” style folding panels? What sort of load could these withstand? If floor panels with trusses are to be used what are the operational issues during a swap?

- 4) How to deal with settling of the IR floor relative to the beamline tunnel? Shims can be used to add height, but how to subtract if needed?