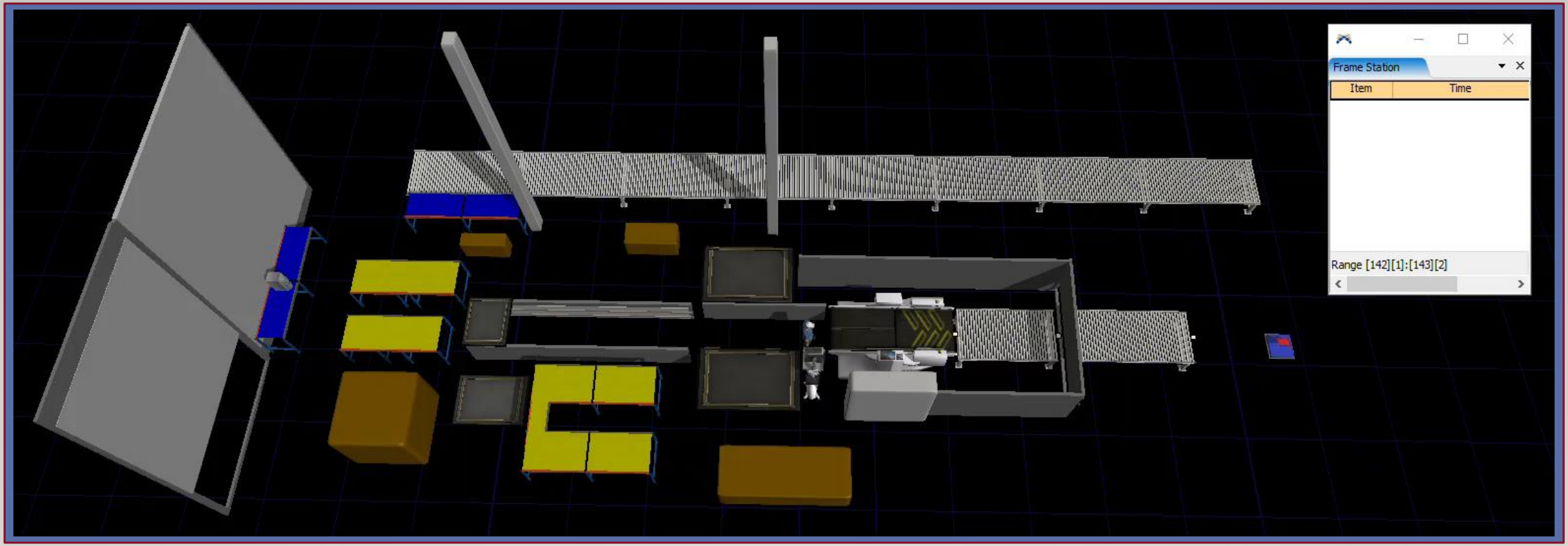
WEINMANN #1: FRAMING STATION ANALYSIS

DOES THE FRAMING STATION PRODUCE 2000 BD FT PER HOUR, AFTER REMOVING BOTTLENECKS?

Results….

The Current Process Present at the Framing Station



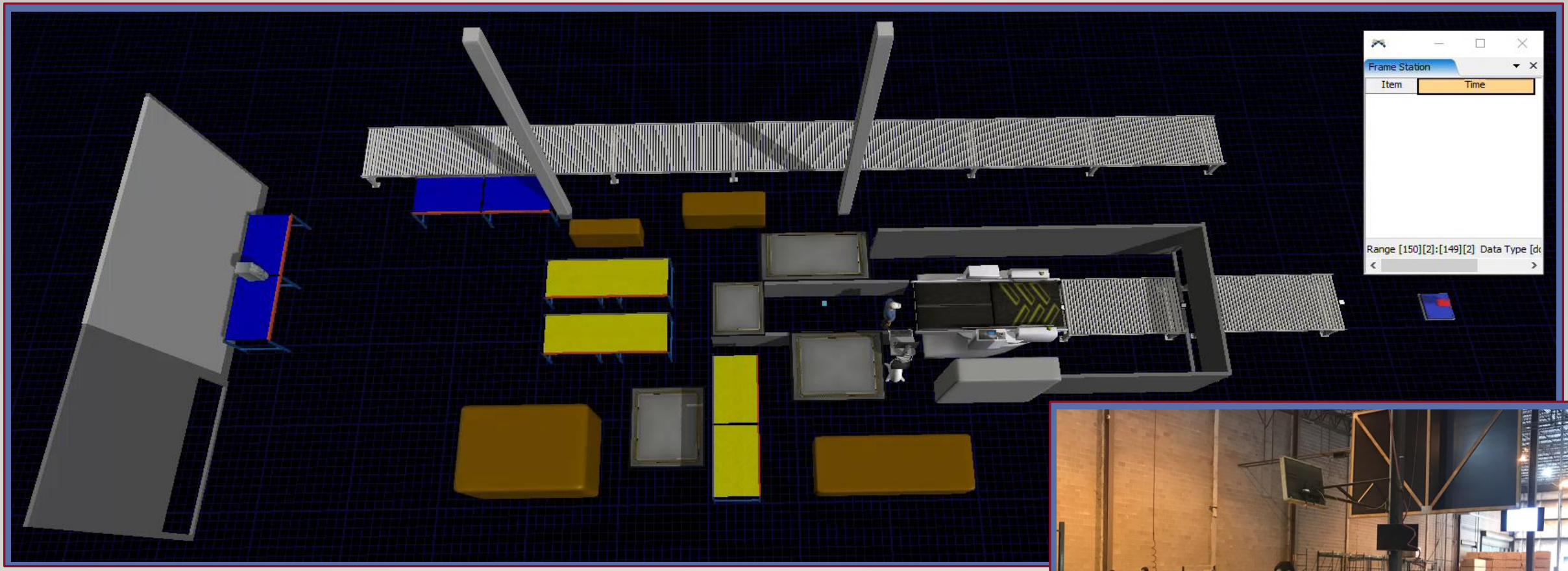
Assumptions:
- Remove bottlenecks before and after the framing station
- Results are based on the framing station running without unexpected stops for a 10-hour shift

Results (per 10-hour shift):
- 142 wall panels produced
- Avg Bd ft per wall panel: 131.6 (06/21 – 06/24 on ShopNet)
- 142 * 131.6 = 18,687.2 Bd ft

→ 1,868.7 Bd ft/ hr

Process Conditions:
- Requires ≈95 ft in length
- Requires framer to climb over panel components
- No excess storage

Proposed Framing Station Process I

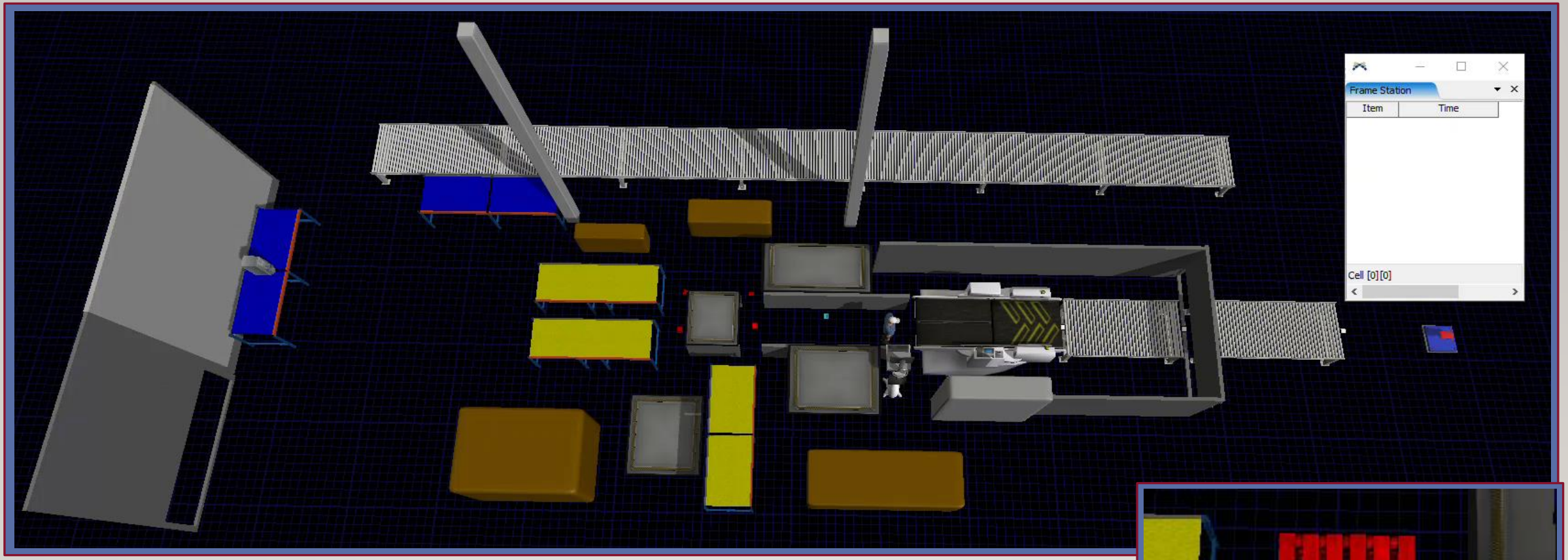


Results (per 10-hour shift):
- 150 wall panels produced
- 150 * 131.6 = 19,740 Bd ft

→ 1,974 Bd ft/ hr

Changes:
- Rollers from CB station to framing station 44ft → 24ft (any comb. of rollers)
- Redesign Sub-CB station to account for less space
- Requires ≈72 ft in length
- Storage increase

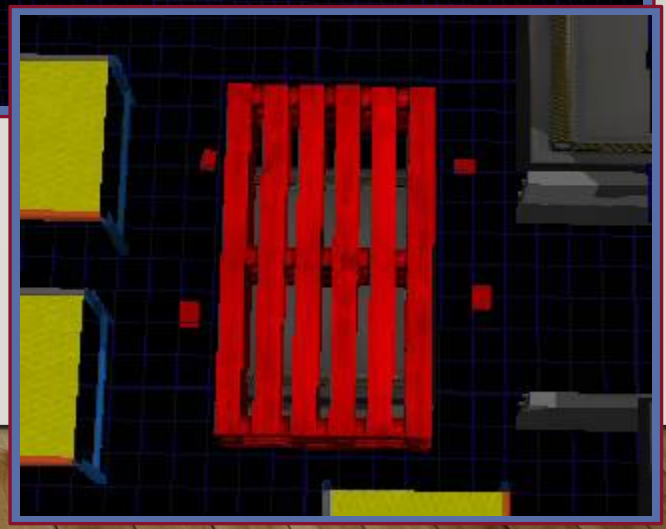
Proposed Framing Station Process II



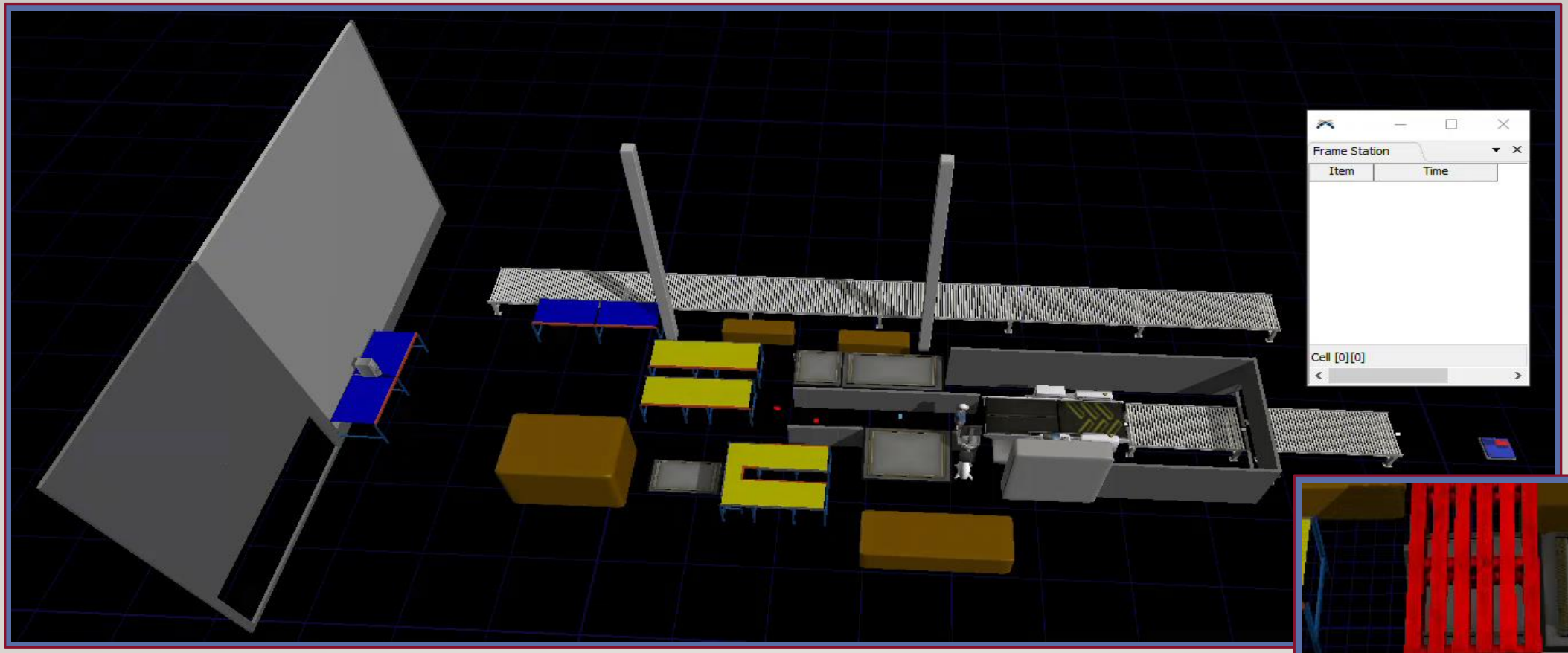
Results (per 10-hour shift):
- 152 wall panels produced
- 152 * 131.6 = 20,003.2 Bd ft

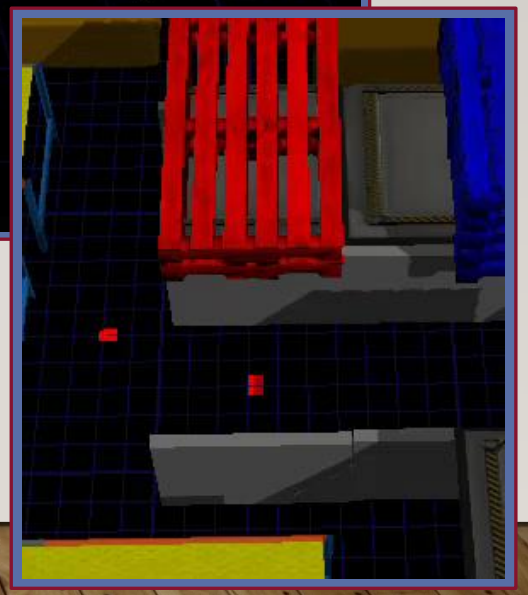
→ 2,000 Bd ft/ hr

Changes:
- Rollers from CB station to framing station 44ft → 27ft (6ft roller | 3ft gap | 18ft roller)
- Framer pathing, see video to the right
- Redesign Sub-CB station to account for less space
- Requires ≈75 ft in length
- Storage increase



Proposed Framing Station Process III

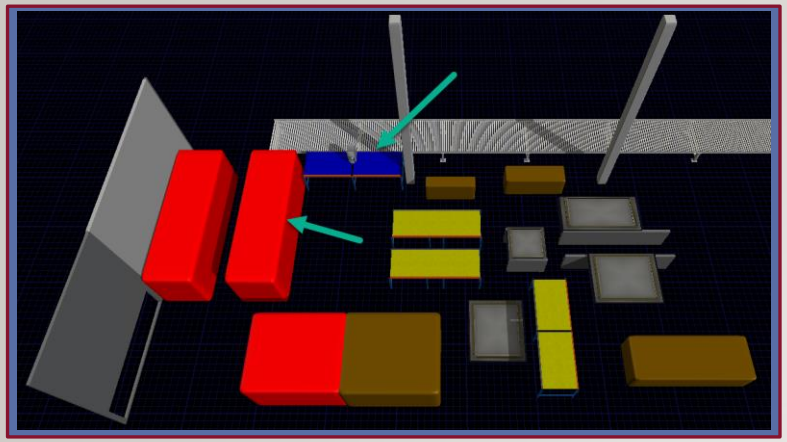




Results (per 10-hour shift):
- 148 wall panels produced
- 148 * 131.6 = 19,476 Bd ft

→ 1,950 Bd ft/ hr

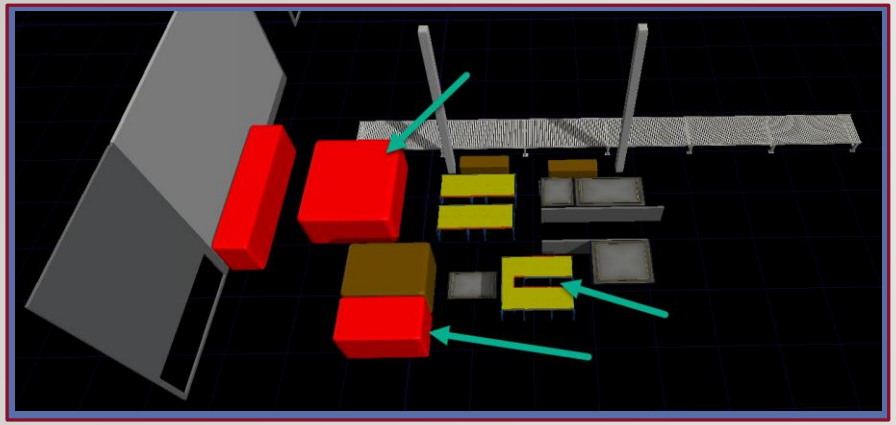
Changes:
- Rollers from CB station to framing station 44ft → 24ft (any comb. of rollers)
- Framer pathing, see video to the right
- CB station is pushed up to align with moved queue
- Requires ≈72 ft in length
- Storage increase



Storage Option I

23’ * 7’ = 161 ft^2
23’ * 7’ = 161 ft^2
10’ * 13’ = 130 ft^2

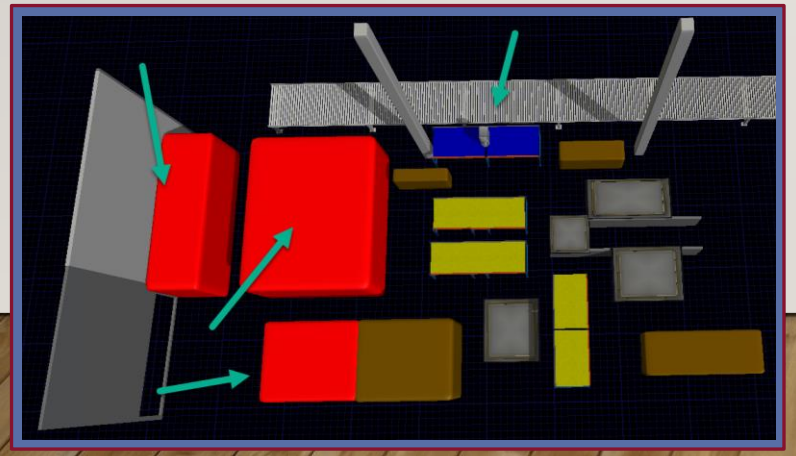
452 ft^2 in additional Storage



Storage Option II

17’ * 15’ = 255 ft^2
23’ * 7’ = 161 ft^2
10’ * 13’ = 130 ft^2

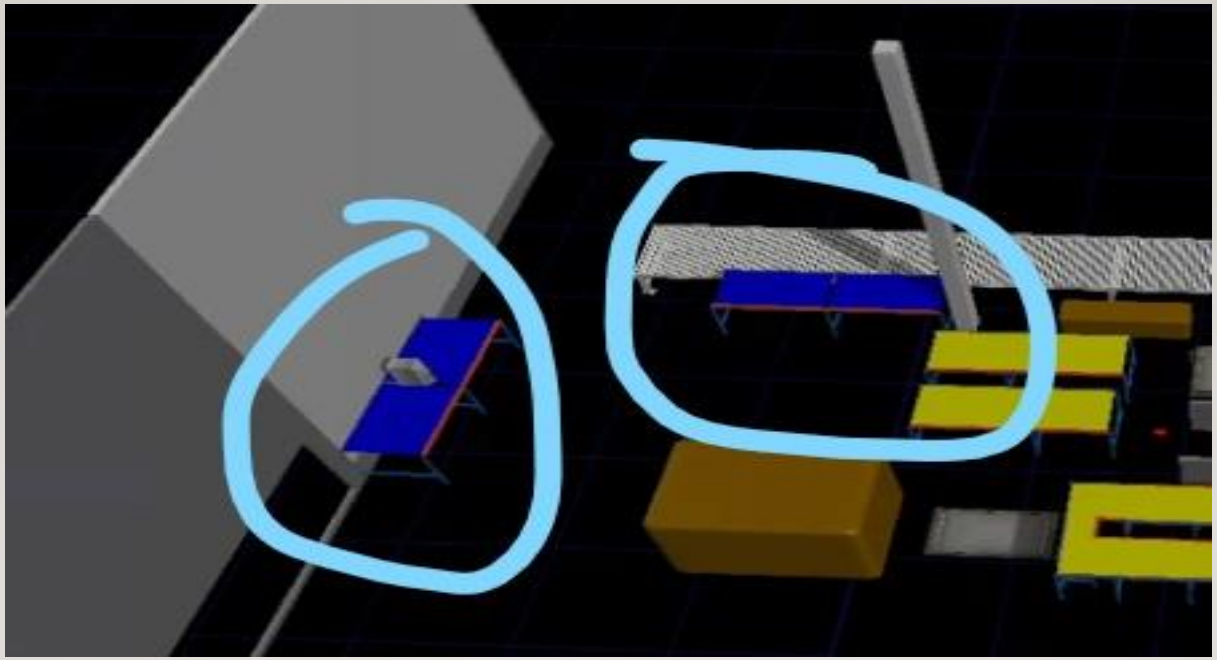
546 ft^2 in additional Storage

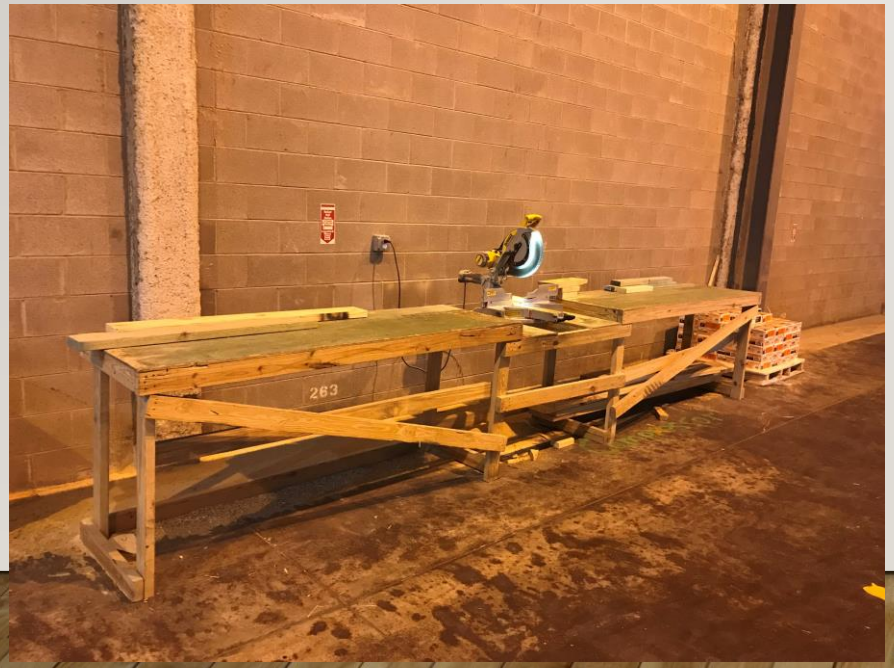


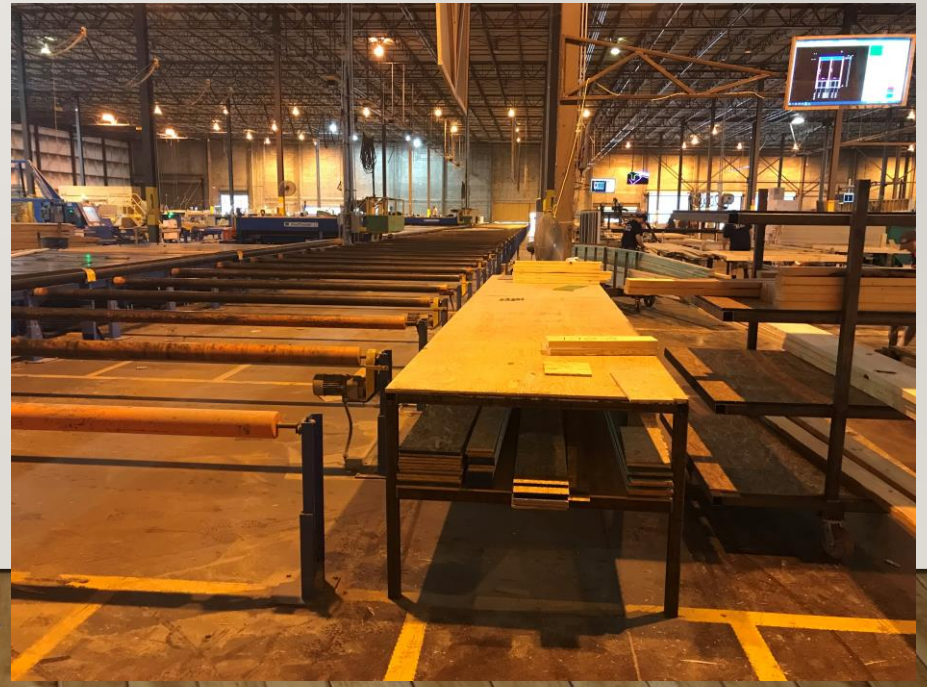
Storage Option III

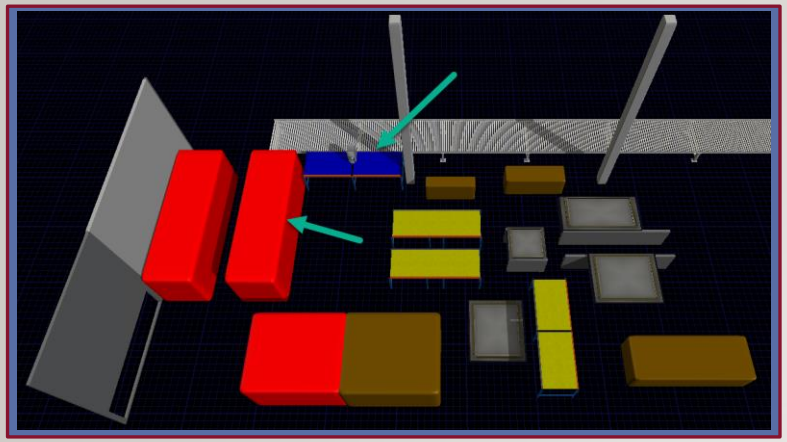
17’ * 22’ = 374 ft^2
23’ * 7’ = 161 ft^2
10’ * 13’ = 130 ft^2

665 ft^2 in additional Storage









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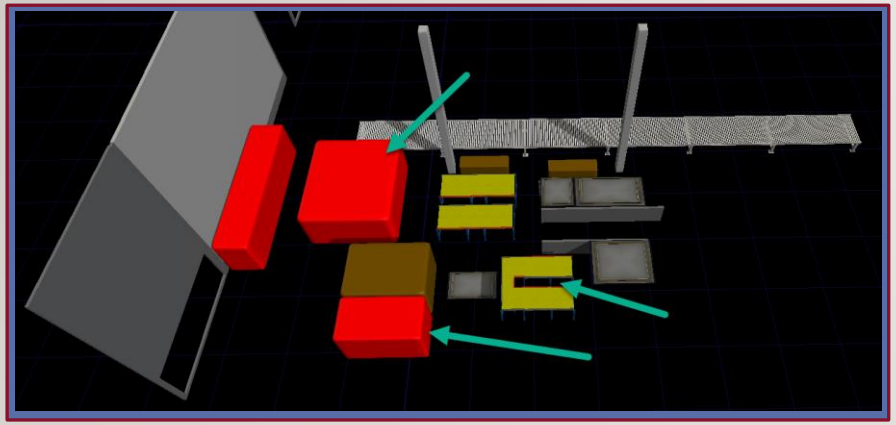

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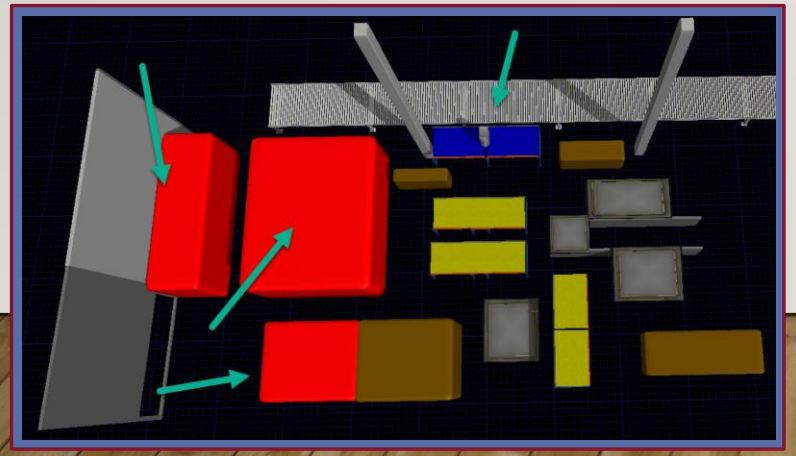

Storage Option III

17’ * 22’ = 374 ft^2
23’ * 7’ = 161 ft^2
10’ * 13’ = 130 ft^2

665 ft^2 in additional Storage

Framing Station Analysis Summary

Process	Bd ft per hr.	Length (ft)	Amount of Change Required
Current	1860	95 ft	None
Option 1	1975	72 ft	- Reduce length between CB and Framing station 44ft → 24ft - Redesign Sub-CB Station (optional) - Framer climbs over component
Option 2	**2000**	**75 ft**	- **Reduce length between CB and Framing station 44ft → 27ft (6-8 ft conveyor required)** - **Redesign Sub-CB Station (optional)** - **Changed framer pathing (Training)**
Option 3	1950	72 ft	- Reduce length between CB and Framing station 44ft → 24ft - Redesign Sub-CB Station (optional) - Changed framer pathing and CB drop location (Training)

Storage Options	Extra Storage (ft^2)
Current	0 ft^2
Option I	452 ft^2
Option II	546 ft^2
Option III	**665 ft^2**