

1. BACKGROUND



- Peshekee Yard is approximately 120 acres with a calculated 14 acres used for operations and log storage.
- It is located 34 miles west of Marquette, MI and 66.5 miles southeast of Houghton, MI along US 41.
- Due to these boundaries, there is limited space to expand the yard.

2. OBJECTIVE

- Peshekee Yard Improvement Project entails yard and rail system improvements for the yard.
- Improve CN and Longyear the rail capacity at the yard
- Develop a design to efficiently operate a log storage and rail trans-load facility.



3. DESIGN OPTIONS

DESIGN ONE



- Distance between the spurs is 125 ft
- Trucks can navigate between spurs and a row of logs can be stacked
- Holds approximately 29 cars

DESIGN TWO



- Distance between the spurs is 125 ft
- Design has potential to be expanded to the siding connect to the CN mainline.
- Hold approximately 29 rail cars

DESIGN THREE



- Distance between the spurs are 95 ft
- The third spur allows space to fit approximately 60 rail cars
- Separate lines for fuel and facility operations.

4. FINAL DESIGN & OPERATIONS

- The final design chosen was Design Three.
- Design Three offers a significant amount of car storage on the tracks, 60 cars total if the siding is included.
- Without the siding being used as car storage JM Longyear would still be able to store approximately 47 cars across the three spurs.
- To keep operations moving smoothly, the siding would be used only to move cars from spur to spur.
- When cars come in from the main line CN's locomotives will enter onto the siding and a trackmobile owned by JM Longyear would then move the cars to their correct spurs for loading.

5. COST ESTIMATE

FINAL DESIGN ESTIMATED COST

Item	Unit Cost	Unit	Amount	Estimated Total Cost
Install (1) #8 Turnout	\$45,000	Ea	5	\$225,000
Surfacing	\$1.5	LF	3950	\$6,000
Ballast	\$50	Ton	3072	\$154,000
Freight Siding	\$1,420,300	Mile	0.748	\$1,063,000
			Total Cost	\$1,448,000

- This option has 3,950 linear feet of track
- Five turnouts to provide a total of three spurs and a siding that runs the length of the site.
- This final design option is estimated to cost \$1,448,000

6. SUMMARY

- Final design chosen allows JM Longyear to expand their logging operations and explore the opportunity of adding different markets to the yard.
- These markets could use the building with rail access and the potential for fuel operations and fuel tanks.
- Design has more than the required 25 railcar storage with an estimated 60 rail cars.
- Limits the amount of wetlands destroyed the renovation of the project site.
- The initial investment has potential for a great return for JM Longyear if the additional rail operations were added and the markets were expanded.