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

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit Cost</th>
<th>Unit</th>
<th>Amount</th>
<th>Estimated Total Cost</th>
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<tbody>
<tr>
<td>Install (1) #8 Turnout</td>
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<td>5</td>
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<td>Surfacing</td>
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<td>3950</td>
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<td>Freight Siding</td>
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<td>Mile</td>
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<td><strong>Total Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$1,448,000</strong></td>
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</table>

- 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.