

Camp Haccamo Train Committee Meeting at 7 pm on Wednesday, October 22, 2008

Attendees: Karl Bucella, Myron Fox, Bill Gormont, Ed Johnston, Don Milton, Brad Shea, Mark Skipworth, Bruce Spector.

The next meeting will be held at 7 p.m. on Wednesday, November 5 at Perkins Restaurant on Ridge Road West.

Discussion:

We greatly appreciate the attendance of Mark Skipworth, who with Nancy Skipworth are owner-engineers of MN&D Railroad Train Rides in Farmington. Mark provided the following recommendations:

Ballast: limestone gravel about ½ inch in size.

Ties: use 4x4 32" long, white pine if we can get it. creosote treated. Recommend finding a supply of "waste" 4x4's. If cost is no object, then plastic 4x4's are preferred and last forever. Pressure treated lumber will work, but it can be expensive. Pre-drill for spikes or lag bolts with lag bolts preferred.

Site and Rail prep / laying rail and ballast: Straighten ALL of the rail and then bend to the required radius. First, excavate 6 to 8 feet wide and at least one foot deep, with deeper being better. Then, fill and compact subgrade using recycled concrete road base to provide a solid footing with great drainage. Lay the ties and rail. Ballast with ¾ foot of crushed, washed rock which will stay in place and "lock" very well. Washing will keep the dirt out initially. Line the track, spread the ballast, then grade the rails up in the ballast and tamp the ballast. This will seat the ties on rock and allow water drainage thus minimizing rotting. Tamp the 8" points, one spot each side of the tie close to the rail both inside the rail and outside the rail, both rails, eight spots. Do not tamp the ends or center of the ties as this will cause premature tie failure. Make sure to spike the rails with >>>>>> pattern either with spikes or lag bolts. Outside the rail farther from the direction of travel and inside the rail in the direction of travel. Do not spike directly across from each other. The >>>> pattern will keep the ties perpendicular to the rails. Ensure that the ballast is even with the top of the ties all the way past the ends of the ties. It is the ballast that will hold the track in place, don't skimp on covering the ends of the ties. This provides lateral support preventing the track from moving sideways. Remember to allow gaps in the joints for rail expansion due to heating in the sun. The cooler temp you lay the track in, the larger gap you need to leave, allowing for expansion. On a 15" gauge, recommended about 12" center to center on the ties.

Mark recommended contacting a masonry supplier to create the base of a cinder block tunnel to be used as a train shed, contiguous to the station.

Mark recommended using wooden sleepers instead of steel ties.

Rail suppliers: www.akrailroad.com www.LBfoster.com www.harmersteel.com

Mark knows someone in Pennsylvania who has used rail, different lengths with splice bars (joiners). All prices FOB – Troy, Pennsylvania. Between 700' and 800' of used 12# Rail and 40-50 sets of used Splice Bar sets (without Bolts). Rail lengths are from 10 feet

to 30 feet, some smaller pieces will come with it. Price for 700' of 12# Used Rail and 45 sets of Used Splice Bars would be \$4,000. REMEMBER THAT 700' OF RAIL PRODUCES 350' OF TRACK.

Plan:

- 1) Assess the rail at Camp Haccamo, October 24.
- 2) Assess the destination location at Sunshine Camp, October 31.
- 3) Document the procedure for deliveries, signoffs, Nov/2008
- 4) Document the liability for materials, Nov/2008
- 5) Engineering assessment of excavation that will be needed, Nov/2008.
- 6) Determine where to store train rails, excavated, fill material
- 7) Negotiate, finalize, document the destination location, Nov/2008
- 8) Negotiate, document, communicate the schedule, Nov/2008
- 9) Remove train from rails, transport and store, Nov/Dec 2008
- 10) Remove rails from ground and store them, Nov/Dec 2008
- 11) Accept train and rails at Sunshine Camp
- 12) Accept materials for the road bed at Sunshine Camp, April, 2009
- 13) Excavate and landscape, April, 2009
- 14) Fill the sub-bed with recycled concrete road base, April/May 2009
- 15) Lay the track, May/June, 2009
- 16) Build the engine shed / maintenance shed, May/June, 2009
- 17) Additional landscaping by each club, May/June, 2009
- 18) Completion, June 15, 2009

Action Item #1 (COMPLETE): Myron Fox will contact Allan Francis, a Mechanical Engineer who lives in Fairport. Myron will describe our requirements to evaluate the current Camp Haccamo tracks and evaluate what can be saved for re-use at Sunshine Camp. We are requesting advice on how to remove and store the tracks, what kind of gravel base including the type and size of stone, how much stone per linear foot of track, a sequencing of deinstallation activities and estimated cost for the project. Ed Johnston will contact Rick Rubino and ask for help with the same list of requests. Ed Johnston and Myron Fox will compare notes on their research and make a recommendation as to who should be asked to do the review.

Action Item #2: Don Milton will contact Odenbach's and Hanson Aggregates to request if gravel can be acquired at minimal cost to fill the track bed at Sunshine Camp. *Don reports that Dolomite may donate some of the required materials.*

Action Item #3 (COMPLETE): Bill Gormont and Karl Bucella will seek vendors who may sell the tracks which meet the 15 inch requirement. *Documented in separate emails.*

Action Item #4 (COMPLETE): Bill Gormont will contact Mike Moran, the Chief Engineer at Sea Breeze, requesting advice on our project. Mike has experience installing tracks.

On October 15th, Bill Gormont met at Seabreeze Park with Mike Moran, electrical engineer at the park and Dean Shorey, the engine builder/train expert. They inspected the train, track and actually operated the train through its full layout. It incorporates a ground level boarding station, grade crossing, two trestle bridges and a combination tunnel/train storage building.

Track

The track gauge is 24 inch. Rails are attached to wooden ties with one lag bolt placed through a ¼ inch square hand-made washer. Two lag bolt washer combinations are inserted into the tie against the rail base, one on opposite sides of the rail. The rail is larger/heavier than our 12 pound rail. The exact rail size was unknown. This is the rail that has been at the park for many years. They have extra rail on hand resulting from shortening the length of the track layout by about 2/3. They don't use rail spikes due to their loosening and the easier installation of the lag bolts.

Engine

The gasoline operated Seabreeze engine was hand-built by Dean Shorey and is loosely designed around the style of an 1880's C.P. Huntington. The engine used before this one was lost in the carousel fire when a wooden beam fell and crushed the superstructure and motor. The engine frame and trucks were salvaged. A Ford gasoline engine from a Bobcat excavator was used as the new power plant. The engine powers a hydraulic pump which, through a flow controller, drives two hydraulic motors. One motor is mounted to each of the two drive truck assemblies. Dean added a control system that works in conjunction with the engine governor. The control system automatically increases the engine rpm when the train is placed into motion and also controls the train speed at a maximum of 5 mph. The train moves in only a forward direction. It does not move in reverse.

Storage

The train is housed in a wooden shed/tunnel at night during the park open season and during the off-season. If off-season maintenance is required, the train is removed from the tracks and relocated to a maintenance building for repair/update. The train is moved by a fork truck, with appropriate rigging, to safely move it from the rails and transport it to the shops.

Resources

Dean Shorey - Contacted an amusement park ride manufacturers and obtained their recommended supplier list of track suppliers, track installers and steel tie supplier. That list is attached. He is willing to offer additional recommendations for materials if needed.

Mike Moran – Worked for a commercial railroad. His expertise is switch (turnout) machines and control systems. He indicated that full size railroads have the track grounded for control circuit reasons and for lightning protection. Each rail joint is connected by a heavy braided cable, welded to each side of the rail across the splice. The Seabreeze railroad does not have that feature installed on its track. He is willing to offer additional information and provide other expertise if needed. He does not have actual experience in laying track.

Action Item #5 (OCTOBER 31 MEETING PLANNED) : Brad Shea will take the lead role, with Karl Bucella and Bill Gormont, to contact Tracey Dreisbach. Brad, Karl and Bill will request a visit to Sunshine Camp to review the planned location of the train tracks. We will request the assistance of Ed Parrone as well, whom we will invite to visit Sunshine Camp for the review. The grade at any point in the track loop cannot exceed 1.5 degrees. They will evaluate the site for the need to excavate prior to installing the tracks. They will ask Tracey if an environmental review is required before work begins. They will ask Tracey where the train platform will be placed. After this review, we will estimate how much track will be required

Action Item #6: Ed Johnston will ask Rick Rubino for guidance on contractors who are able to move the train engine.

Action Item #7: Ed Johnston will ask Rick Rubino of LAL if his company can help to lay the track. Bruce Spector will ask the same of Finger Lakes as well as Genesee & Wyoming Railroad.

Action Item #8: All members of the committee will seek a trailer in which to transport the train.