

Table 8 Track Improvements

Segment	Anticipated Infrastructure Improvements/Assumptions	Cost
Schenectady to CPF 480	<ul style="list-style-type: none"> 700 ft of new mainline for new alignment through CPF 480; All existing public grade crossings will require warning system modifications; No track work required on existing mainline; 50-foot wide crossings; Signal system costs assumes electronic in-track signal system and interlocking tie-ins; Aplauskill River Bridge needs upgrade to run double track; and Two turnouts at Aplauskill River Bridge will be retired. 	\$6,150,000
CPF 480 to Mechanicville	<ul style="list-style-type: none"> 2.5 miles of new mainline/sidings for congestion relief; All existing public grade crossings will require warning system modifications; No track work required on existing mainline; 50-foot wide crossings; Signal system costs assumes electronic in-track signal system and interlocking tie-ins; Two #20 crossovers, one #15 crossover, three #20 turnouts, and one #15 turnout needed. Two turnouts need to be retired; and Culvert at 1528+00 needs to be extended past proposed siding. 	\$17,006,000
Mechanicville to Hoosick	<ul style="list-style-type: none"> Three new sidings totaling 4.75 miles – assume existing two sidings need no work; Assumed 50-foot wide crossings Updates to existing signal system; All existing public grade crossings will require warning system modifications; and Six new #20 turnouts needed for sidings. 	\$16,778,000
Hoosick to North Bennington	<ul style="list-style-type: none"> Existing mainline needs upgrading over entire length; 50-foot wide crossings; Every third tie is replaced, 50% of segment requires additional surfacing and aligning of curvature to meet increased speeds; All existing public grade crossings will require warning system modifications; One mile of new siding required for congestion relief; Two new #20 turnouts for new siding; and Culvert at 3143+00 needs to be extended past proposed siding. 	\$5,302,000
North Bennington to Manchester	<ul style="list-style-type: none"> Existing mainline needs upgrading over entire length; 50-foot wide crossings; All existing public grade crossings will require warning system modifications; Every third tie is replaced, 50% of segment requires additional surfacing and aligning of curvature to meet increased speeds; Bridge costs assumed for only bridges labeled in POOR condition; and Assume VTR will allow increased passenger service without new signal system. 	\$17,208,000
Manchester to Rutland	<ul style="list-style-type: none"> Existing mainline needs upgrading over entire length; 50-foot wide crossings; All existing public grade crossings will require warning system modifications; Every third tie is replaced, 50% of segment requires additional surfacing and aligning of curvature to meet increased speeds; Bridge costs assumed for only bridges labeled in POOR condition; Siding at MP 36.15 is out of service – assume addition of 3,000-foot siding; Two turnouts needed for new siding; Siding entrance moved back 500 feet to avoid intersection at Brooklyn Road; and Assume VTR will allow increased passenger service without new signal system. 	\$44,510,000
TOTAL		\$106,954,000

New stations are proposed to be constructed in Mechanicville, NY and North Bennington and Manchester, VT. Each station will have a high-level platform to conform to ADA level boarding requirements. The platforms will have retractable edges to allow wide-load freight to pass without constructing a second track to bypass the platform. The length of the platforms will be 425 feet to accommodate 5-car trainsets.

Table 9 summarizes the station cost estimates at each station location.

Table 9 – Station Cost Estimates

Station	
Mechanicville, NY	\$1,550,000
North Bennington, VT	\$2,290,000
Manchester, VT	\$1,450,000
TOTAL	\$5,290,000

The total capital cost including infrastructure improvements and station costs is approximately \$112 million. Total investment for the project is summarized in Table 10 below. A detailed estimates can be found in Appendix B Attachment B (Cost Estimate Tech Memo).

Table 10 – Total Investment

	Quantity	Unit	Unit Price	Total
New Siding Track	54,868	TF	\$200.00	\$10,973,600
Upgrade Mainline Track	283,800	TF	\$52.66	\$14,945,600
Installation of CWR	36	MI	\$750,000.00	\$27,225,000
Shift Mainline Track	17,239	TF	\$150.00	\$2,585,850
Signal System	4	EA	\$4,000,000.00	\$16,000,000
Grade Crossing - Public	3,600	TF	\$3,000.00	\$10,800,000
Grade Crossing - Private	130	EA	\$5,000.00	\$650,000
Grade Crossing - Warning System	72	EA	\$150,000.00	\$10,800,000
Grade Crossing Signage - All	172	EA	\$5,000.00	\$860,000
Undergrade Bridges	9	EA	\$500,000.00	\$4,500,000
Turnouts	25	EA	\$230,200.00	\$5,755,000
Turnout Removal	4	LS	\$70,000.00	\$280,000
Clearing & Filling	1	LS	\$1,529,060.00	\$1,529,060
Culvert Extension	2	EA	\$25,000.00	\$50,000
Mechanicville Station	1	LS	\$1,550,000.00	\$1,550,000
No. Bennington Station	1	LS	\$2,290,000.00	\$2,290,000
Manchester Station	1	LS	\$1,450,000.00	<u>\$1,450,000</u>
Construction Cost				\$112,244,110
Preliminary Engineering (10%)				\$11,224,000
Administration				\$300,000
Construction Engineering (6%)				<u>\$6,735,000</u>
Subtotal				\$130,503,000
Contingency (6%)				<u>\$7,830,000</u>
TOTAL				\$138,333,000

The implementation schedule, shown in Table 11, would include final design, advertisement, contractor procurement, material and vehicle procurement, construction, and final inspection.