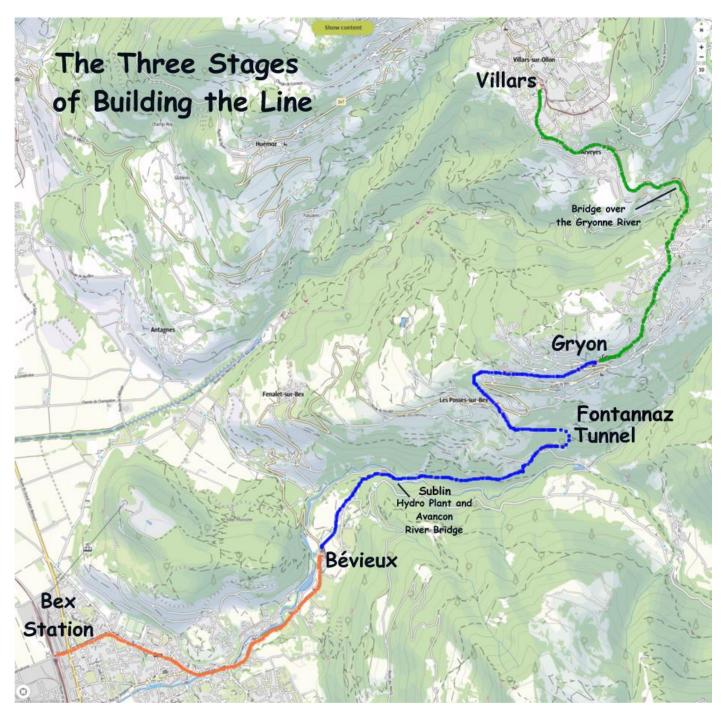
### The History of the Bex - Villars - Brettaye (BVB) Railway from 1895

The arrival of Lausanne-Simplon railway line in 1857 started interest in a rail connection from the valley floor to the mountain villages, and in1895 the towns of Aigle and Bex both set up committees to investigate the possibilities. In October 15, 1897, the Federal Authorities granted concessions simultaneously for <u>both</u> the Aigle-Ollon-Villars and Bex - Gryon-Villars lines.

#### 1897.

While Aigle dithered about a choice of route, Bex went ahead with a plan to build a railway line in three sections to Villars, via the village of Gryon. This was encouraged by a planned hydro-electric installation by the company 'Forces Motrices de l'Avançon' (FMA) on the Avançon river at Sublin, above Bévieux.



#### 1898 Popular rejoicing



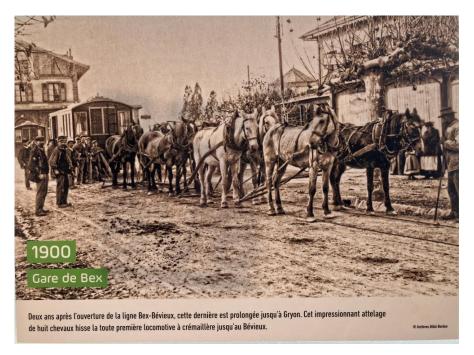
**Bex Station** 

On January 20 1898 work began, and a little over seven months later, on September 9, the train line linking Bex station to Bévieux was inaugurated. This line served several purposes. Not only did it comfortably transport the guests up to prestigious Hôtel des Salines, but it also served, to deliver the precious salt from the mine down to the station, where it was transferred from small cars to CFF wagons. Finally, the train facilitated the delivery of mail.

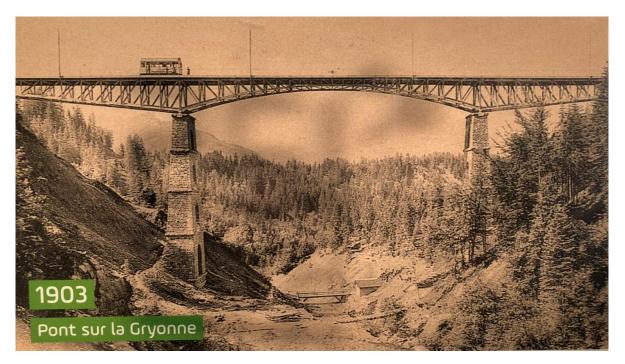
#### 1900. The train reaches Gryon

Just two years after the opening of the Bex-Bévieux line, the train was able to climb to the village of Gryon. Due to the steepness of the track the <u>Abt rack system</u> was employed. This design uses two racks, with teeth offset from each other to smooth out the gear engagement. One of the steepest sections was beside the Sublin hydro electricity station - which powers the line.

Period photographs show an impressive team of eight horses that was needed to transfer the very first rack locomotive to Le Bévieux for the opening of this second section on June 4, 1900. From the station, the tramway first pulled the wagons to Le Bévieux, then the new locomotive took over to push them towards Gryon, at the breathtaking speed of 9 km/h!



#### 1901. A spectacular bridge



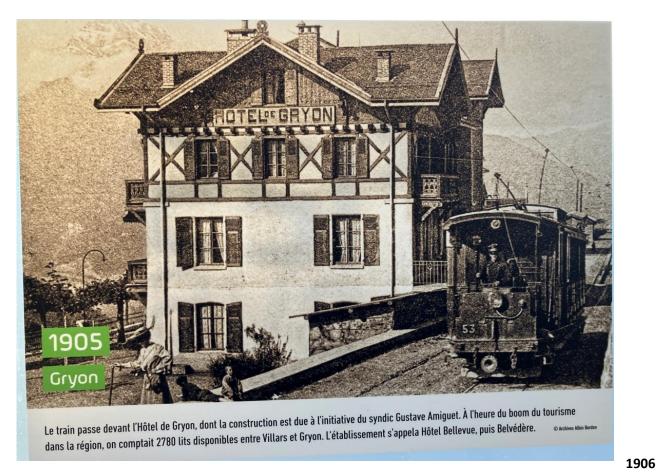
On June 13, 1901, the third Gryon-Villars section opened for operation. To connect the two Alpine villages, a viaduct was built over the Gryonne, between La Barboleuse and Arveyes. Built by the teams of the Ateliers Mécaniques de Vevey, the impressive stone and metal structure is 145 metres long and 48 metres high. The State of Vaud required the constructor to include a road beside the rail line spanning the Gryonne river gorge.



The bridge was replaced in 1980 by another concrete structure, located further upstream and forming a remarkable curve.



Gryon Station in 1904, after the addition of the clocktower



#### Villars-Chesières, the postman's tram

Another railway bridge was built, connecting Villars to Chesières, and only 2 months after work began the train could travel from Bex to Chesières on August 12, 1906.

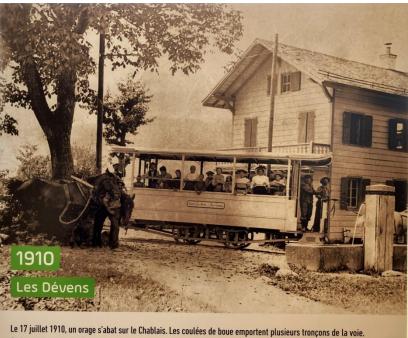


Cela fait près de 10 ans que le train atteint Villars. À l'entrée du village, à l'emplacement où se dresse aujourd'hui l'Hôtel Bristol, les passagers découvrent un paysage encore largement agricole, et un panorama à couper le souffle sur les sommets alpins.

Sunday, July 17, 1910: after a scorching day, a cataclysmic storm hits Chablais. Coming from the Dents-du-Midi, the clouds advance on Saint-Maurice, Bex, Ollon and Aigle, pouring torrents of water on the region.

A dense, heavy and rapid rain fell without interruption until midnight. The Avançon overflows, carrying away not only several roads, but also certain sections of railway, notably at Bévieux.

It will take a month of work to repair them.



On improvise des solutions : des chevaux acheminent les wagons entre Le Bévieux et la gare de Bex.

**1911 The hydro-electric scheme** is commissioned, ensuring a reliable source of electricity to the line.

#### 1913 First step towards the summits

Inauguration on December 18, 1913 of the line between Villars and Bretaye, came after barely a year of work. Although the line was directly electrified, a steam locomotive - purchased from the company operating the Aigle-Leysin - was used during the construction of the tracks.

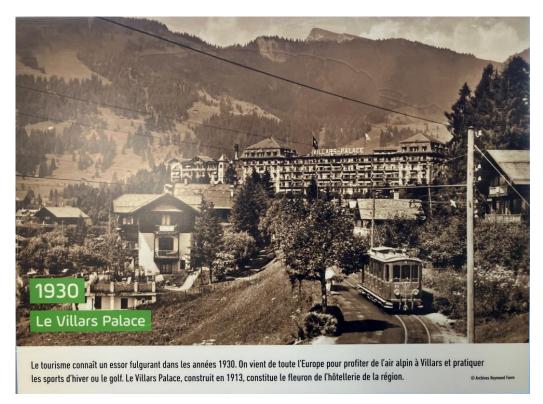


We speak of Villars-Bretaye, but it would be more accurate to speak of Villars-Les Bouquetins: this is where the train stops, while tourists, skiers and skaters must walk the path that separates them from the pass.

The outbreak of the First World War put a stop to the progress of the line, and it would be necessary to wait more than 20 years for the line to reach Bretaye.



#### 1930. The rise of tourism



In Villars, tourism developed from the beginning of the century, and experienced a meteoric rise in the 1930s. People came from all over Europe to enjoy the alpine air and practice winter sports or golf - the course in Villars opened in 1922.

As a direct consequence of this development, the BVB was stormed by many tourists, for whom it was a modern and comfortable means of transport. Among them, many English, who came to spend several weeks in the resort bringing large trunks. The BVB was then operated on a seasonal basis, from May 15 to September 15 and from December 15 to February 15.

#### 1931. The ibex

A park intended to accommodate a dozen ibex, for the pleasure of tourists and hikers, is installed a stone's throw from the stop that will bear the same name. The initiative is to be credited to Professor Ernest Wilczek. A pharmacist and botanist, he is known for having brought back precious herbariums from his distant travels, but also from his wanderings in the Vaud Alps. Having become extremely rare throughout the Alpine Arc, the ibex is reintroduced in some regions from the populations preserved on the Italian side. It is even said that two of the ibex of Bretaye were offered with great pomp to the Canton of Vaud by the head of the Italian government, a certain Mussolini.

#### 1932 The military house

At the instigation of General Henri Guisan, the first stone of the military house of Bretaye was laid. The Alpine troops were sent for training courses in this large building with a false chalet feel, whose stone facades were brightened up by red and white shutters. According to accounts, the soldiers especially perfected their skiing skills there in winter... and their fishing skills in summer, in the nearby Lac des Chavonnes.

#### 1938. Capital of skiing



Vingt ans après la construction du premier tronçon jusqu'aux Bouquetins, la ligne atteint enfin le col de Bretaye. De là, les skieurs empruntent la célèbre « funi-luge » tractée par un câble qui les emmène jusqu'au Grand Chamossaire.

July 15, 1938 marked the opening of the last section of the line, leading from Bouquetins to the Col de Bretaye, which had become a mecca for winter sports: following the founding of the company << Télé-Skis Bretaye SA >», chaired by Louis Chamorel, the first ski lift in Switzerland was inaugurated in 1936 in Chaux-Ronde, followed by a << funi-luge », a large sled pulled by a cable which, from 1937, took skiers to the Grand Chamossaire. The arrival of the train in Bretaye was therefore a logical next step in the development of what quickly became one of the main ski resorts in Europe. Champions from all over the world came to Villars to perfect their training. All praised the quality of the railway and sports facilities.

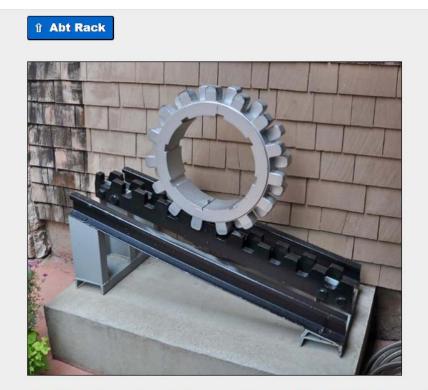
#### 1942. A new station in Villars

The old building, which had been built in 1901, made way for a new station. Inaugurated on December 23, 1942, the building followed the architectural codes of the Alpine chalet. It consisted of an entrance hall and two apartments. One was inhabited by the station master, the other by the family of the director of the Tourist Office, Henri Jakob.

On the top floor, under the roof, the latter had also built a model faithfully reproducing the Villars-Bretaye section. In the middle of the station there was a staircase that allowed customers to go directly to the Villars Palace while remaining sheltered in bad weather. The station undoubtedly became the attraction of the village. This is where tourists disembarked and where everything happened, to the great delight of the local children. Often playing near the station, they help the ladies unload their suitcases, exchanging the few cents received for their efforts for as many soft caramels from the machine that sits in the hall.

#### 1943-1944. The birth of BVB

During the Second World War, there was a significant boom in rail transport in the region, a direct consequence of the petrol shortage affecting the country. It was during these years, paradoxically prosperous for this economic sector, that the merger between the Bex-Gryon-Villars-Chesières (BGVC) line and the Villars-Bretaye line took place, under the name of Bex-Villars-Bretaye (BVB). The Société des Forces Motrices de l'Avançon, already operating both lines, became the sole owner. As an anecdote, some new locomotives acquired in 1942 had been adorned a little too hastily with the acronym "BGVC", even though the merger was going to become effective a few months later. Unexpected expenses were necessary when the correct acronyms had to be reissued.



The Abt system was devised by Roman Abt, a Swiss locomotive engineer. Abt worked for Riggenbach at his works in Olten and later at his IGB rack locomotive company. In 1885, he founded his own civil engineering company. During the early 1880s, Abt worked to devise an improved rack system that overcame the limitations of the Riggenbach system. In particular, the Riggenbach rack was expensive to manufacture and maintain and the switches were complex. In 1882, Abt designed a new rack using solid bars with vertical teeth machined into them. Two or three of these bars are mounted centrally between the rails, with the teeth offset. The use of multiple bars with offset teeth ensures that the pinions on the locomotive driving wheels are constantly engaged with the rack. The Abt system is cheaper to build than the Riggenbach because it requires a lower weight of rack over a given length. However the Riggenbach system exhibits greater wear resistance than the Abt.



#### 1944. The first automobiles

In a village of Villars where the only means of transport are the train and horse-drawn carriages, the arrival of the first cars is a real event. They are not numerous however: there is only one car, that of the doctor, a truck running on charcoal and a jeep. Belonging to the Villars Palace, the latter is intended almost exclusively for transporting the luggage of guests from the station to the hotel. As for fuel, it is provided by a single petrol pump, located just in front of the Tourist Office. Suffice to say that the train is still the only real means of reaching the plain.

#### 1945. The American Dream

Children of the time have vivid memories of it: at the end of the Second World War, the Allied troops stayed in Europe for a few months before returning to their countries of origin. More than 300,000 American Gls crisscrossed the Alps on a triumphant tourist journey, stopping off at the most remarkable sites. Villars was one of them and, several times, the BVB wagons poured groups of soldiers in full uniform into the resort. They were assailed by the kids who watched them from afar and to whom they happily handed out pins, ribbons and chewing gum.

#### 1961. The car strikes back

After 55 years of existence, the Villars-Chesières section was abandoned. The reasons? There were several: timetable problems, difficulty in keeping the track passable in winter and often empty carriages. Above all, the era was one of the reign of the automobile, which was favoured by political circles, and the various proposals aimed at keeping the line were swept aside. Of this tram, replaced by a bus service, Federal Councillor Jean-Pascal Delamuraz would say, melancholy: <<[Its] uninterrupted bleating, its peremptory bell rings, the cry of its wheels on curves belong to the music of history. >> The track would be finally removed in 1963.

#### 1968. A modern station

Between 1942 and 1968, rail traffic tripled. This explains the need to build a new station to replace the one that had been built at the time. The building, which cost 1.5 million francs, included an additional platform and a second waiting room. At the inauguration on 18 July, the public rushed to visit the brand new station, which now also housed the post office and several apartments. An "artistic fountain", donated by the PTT, was added.

#### 1972. Conquering the snow

On the Villars-Bretaye line, snow clearance during the winter is a major challenge. Further down, above Arveyes, a railcar derailed in 1951, without causing any damage, following the formation of a layer of ice on the rails. Many methods were tested over the years to resolve the problem. Finally, in 1972, a state-of-the-art snowplough was purchased for 400,000 francs. The machine, whose diesel engine develops some 300 horsepower, clears 3,200 tonnes of snow per hour and can climb to the heights at speeds of up to 15 kilometres per hour.



Le déblaiement de la voie durant l'hiver est un enjeu de première importance. En 1972, la compagnie acquiert un chasse-neige dernier cri. Immortalisé près du col de Soud en 1999, cet engin doté de 300 chevaux expulse 3200 tonnes de neige par heure. Archives cantonales vauotises PP 1096/782 © Géraid Ha

#### 1980. Entry into modernity

Between La Barboleuse and Villars, a new concrete viaduct, which forms a wide curve, replaces the metal structure of 1901. This ambitious construction, wide enough to accommodate trains and cars, is part of a major campaign of works intended to modernize the line: over a period of around ten years, kilometres of track were changed, investment was made in new points at Bex, in a new independent platform for the train between Gryon and La Barboleuse, in a modern overhead line between Le Bévieux and Gryon and in a high-power railcar.

#### 1999. The birth of TPC

They had already come together within the Chablais Public Transport Operating Community in 1975, but this time it was a merger: four local railway lines joined together to create the Chablais Public Transport Company (TPC). There was the BVB, of course, but also the Aigle-Leysin (AL), the Aigle-Sépey-Diablerets (ASD) and the Aigle-Ollon-Mon-they-Champéry (AOMC). The merger aimed to rationalise the operation of the lines, limit administrative costs, improve comfort and appeal for travellers as well as safety. In addition, the TPC offer also includes several regional bus lines.

#### 2001. A new train in service

With more than 1,100,000 passengers per year, the BVB is the busiest company within the TPC. A blessing, but also a great responsibility, which led to the decision to invest in three new trains. The inauguration of these railcars, named <<< Bretaye >>, << Barboleuse >>> and << Tuttlingen >>> and adorned with a beautiful orange and red livery, in December 2001, aroused the enthusiasm of the public.



#### 2022. The fable of the fox and the snow

Wednesday, February 2, 2022: It is 3 p.m. when an avalanche starts downstream from Bouquetins. The avalanche hits a train going downhill towards Villars. One of the trains comes off the tracks while the other lies down in the snow. Luckily, the train is empty, and the driver is not injured. Rescuers, avalanche dogs, police, firefighters, helicopters, ski instructors and TPC staff intervene immediately and secure the area. It will take a week, forestry tractors and two crane trucks to hoist the railcar onto the track.



A few days later, the experts' report comes in: the avalanche was caused by... a fox. The slope, the fresh snow and a bit of chance will do the rest, fortunately without casualties.

Video of train recovery after avalanche February 2022:-

#### 2026. A new bridge at Barboleuse

The work has started and should be completed in 2026: the concrete bridge that crosses the Gryonne between La Barboleuse and Arveyes will be replaced by a 140-metre-long metal structure. It will allow the train to cross the valley while avoiding several bends, but also to completely separate road and rail traffic. While the old section will be returned to nature, the new bridge will leave a lasting mark on the landscape with its slender silhouette and its ochre colour, resulting from a natural chemical reaction: the oxidation of a thin layer of metal will protect it and give it its orange-red hue, all without requiring painting and therefore without the slightest environmental impact.

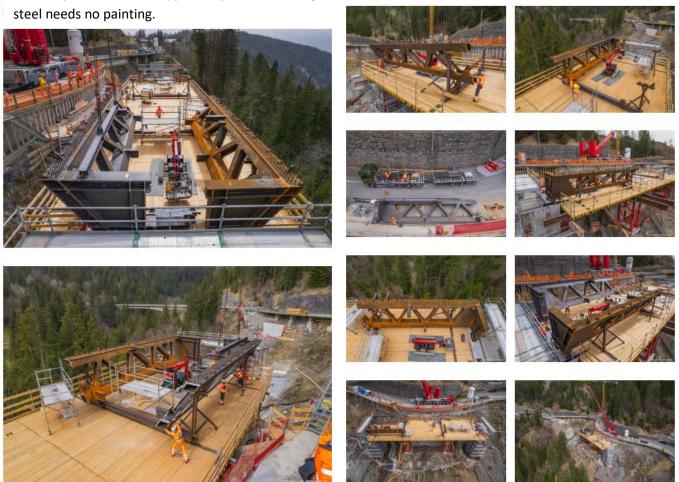


#### More about the bridge from 24Hrs

How the new bridge is assembled

# MORAND

Large prefabricated sections of the bridge were delivered by road and craned into place for final assembly. The Corten (copper alloyed) weathering steel needs no painting.



#### FUTURE: More safety and comfort

To constantly offer the best service to their passengers, TPC never stops improving their offers and their lines. Thus, many projects are planned for the coming years, starting with the securing of the section between Arveyes and Villars, where trains, cars and cyclists currently share the same space.

A tunnel will solve the problem in the long term. Villars station will be modernized and moved, the Fontannaz-Seulaz tunnel will be brought into compliance with the new standards while the Bex station square will also be the subject of a major renovation campaign.



Finally, new rolling stock will be ordered soon, allowing the company and the BVB to remain at the forefront.

## Sécurisation Arveyes - Villars



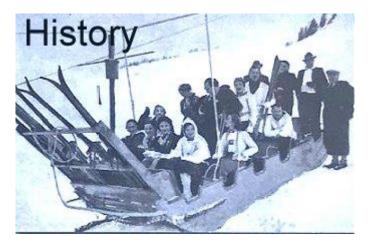
# Sécurisation Arveyes – Villars

### Objectifs

- mise en conformité LHand des gares d'Arveyes et Villars
- amélioration des interfaces des transports publics bus et trains en gare de Villars
- mise en site propre entre Arveyes et Villars



This is <u>a link to a history of the ski resort development</u>. (pictures are taken of a display on Villars high street in 2025)



### Credits



Much of the text is translated from a flyer produced by BVB to celebrate 125 years.

Some of the pictures are reproduced from the TPC publication TPC News

There is also a concise history of the line on Wikipedia here

The Ski Lift pictures are mostly from a display in Villars Station in 2018.

The is an extensive collection of old postcards here

IMPRESSUM Publisher: Transports Publics du Chablais SA, Place de la Gare 5. Case postale 85. 1860 Aigle. www.tpc.ch Publication manager: Christelle Piguet (TPC) Marketing and coordination: Natacha Décoppet (TPC), Angèle Girardet (TPC) Texts: Oriane Grandjean Proofreading: Corinne Grandjean Production: komunik.ch Photos: Cover: Gérald Hadorn archives Interior Albin Bordon archives, Vaud cantonal archives PP 1096/582 © J. Amiguet, Reymond Favre archives, Hernand collection, Vaud cantonal archives PP 1096/488 unknown photographer, Vaud cantonal archives PP 1096/782 Gérald Hadorn, Gerald Hadorn, 360 DSM/Guillaume Allet Printing: Groux & Graph'style (printed in Switzerland).