## ΛLLPLΛΝ

# ALLPLAN HIGHWAY PERFORMANCE HIGHLIGHTS



Project: Maintenance Highway A2 Stansstad-Beckenried, Switzerland, Engineering office: CES Bauingenieur AG

Allplan Highway is the professional and powerful solution developed for the design of roads and infrastructure planning. It supplements the Allplan platform with an extremely efficient terrain model as well as by numerous functions for interactive routing and the automatic derivation of plans.



Site plan, Entryway, Payerne, Departement of Infrastructure, Lausanne, Switzerland

#### **INTEGRATED SOLUTION**

As part of a comprehensive product line created especially for architects and engineers, Allplan Highway provides the ideal basis for integrated design processes. If required, buildings and engineering structures can easily be embedded. It also eliminates the need for time-consuming and costly switching between systems, reduces the time required to become familiar with the software and optimizes coordination processes.

#### INTERACTIVE WORK PROCESSES

All design parameters can be changed at any time, in the site plan, longitudinal or cross-sections, as required. The model and all derived plans and schedules are updated immediately.

#### **PROFESSIONAL PRESENTATION**

With a broad range of layout and design tools, Allplan Highway supports the creation of visually attractive planning documents and realistic presentations. You therefore have the ideal basis for creating attractive and professional design presentations for city authorities and residents.

### AN OVERVIEW OF ALLPLAN HIGHWAY

Digital Terrain Model	Allplan Highway contains an extremely powerful digital terrain model that was specially developed to meet the requirements of traffic route planning. With contours and gradients, the digital terrain model not only provides the basis for road design, is also enables you to modify the route ideally to your environment. The data can be imported in numerous formats (including LandXML, GeoTIFF, ESRI) from surveying software or aerial photos (including LIDAR). Structure and break lines and fillets can be defined in addition to points to help you achieve the best possible correspondence between reality and the model. Triangular irregular network (TIN) and regular grids are possible here. To optimize the data structure, the digital terrain model supports working with very different point densities, so smoothed surfaces can coexist with sharp breaklines.
Routes and Gradients	Straight lines, arcs, clothoids and parabolas allow you to define any kind of route. Routes and gradients can be interactively developed on a graphical basis, taking account of constraints and tangential intersection points.
Transverse Profiles at the Touch of a Button	Predefined cross-sections, with road surfaces, shoulder and slopes can easily selected from a library, can be assigned to the route. Section changes can be applied gradually from section to section or abruptly. The transverse slopes can be calculated automatically and adapted manually. Changes to the terrain or route are not just reflected in the 3D model, they are also applied immediately in the site plan and longitudinal and cross sections and lists.
Exact Pegs	All the detail points in the project can be exported together with their coordinates and descriptions to ASCII files. You can also create pegging tables (polar and orthogonal).
Automatic Quantity Takeoffs	Road segment lengths, surfaces and volumes (including cut and fill) are calculated automatically and serve as a basis for tenders.
Convincing Plans	The plans are generated from the model automatically. For the final touch, they can be graphically revised or enhanced prior to printing.

CURRENT SYSTEM REQUIREMENTS ARE AVAILABLE AT WWW.ALLPLAN.COM/INFO/SYSINFO

For unlimited use of Allplan a graphics card with a minimum of 1 GB RAM needs to be available as well as a Windows 64Bit system.

MAKE MORE OUT OF ALLPLAN – WITH THE PLUS IN SERVICE!

Allplan Highway is also available with a Serviceplus contract. With Serviceplus your software is always up to date. Strengthen your competitive position, increase your leading edge. More information at **www.allplan.com/serviceplus** 

