

Module CIVIL

Civil project	×
Project type CExisting	New
OK	Cancel

In new project we must first define input dates.

Civil project	×
Object:	Example1
Road:	Road
Section:	Road section
Axis number:	1
Road classification	○3 ○4 ○5
Land type Flat Hilly	Steep hilly O Mountainly
LEFT PAVEMENT lane width	n [m] 3.350
RIGHT PAVEMENT lane wid	th [m] 3.350
MIDDLE LEFT PAVEMENT la	ne width [m] 0.000
MIDDLE RIGHT PAVEMENT	lane width [m] 0.000
Road type O HW/FR	Other
ОК	Cancel

2. Define station file

creating file Example1.raz

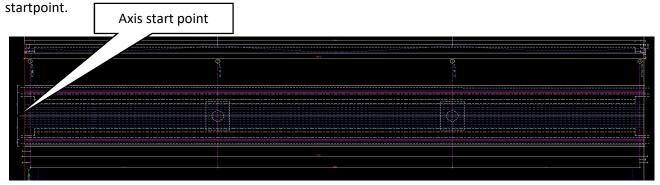
Defining stations - distances, for cross axis and deck construction cross sections drawing.

Define station file	>
Definition type Writte equal distances between profiles	O Select distances
Auxiliary line color	
Select color >>	

For drawing of 3d model, where in the equal profile (cross axis) apears two different sections, we must define equal stations!

3. Checking axis start point.

We usually extend polyline - axis for 1m in opposite station direction. **Polyline must be drawn in station direction!** For polyline start point check use command in module BASICS -> Ratio -> Pedit -> Select polyline



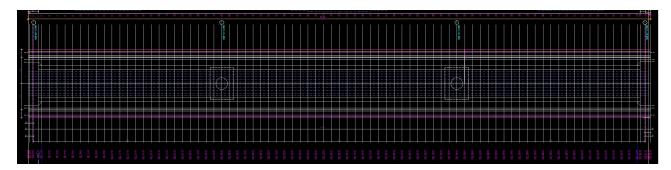
4. Define cross axis file

creating file Example1.pro

	Station files	×
Define cross axis X	Current file *.raz C:\Primeri Moduli\Example1\Example1.raz	
Definition type O Single From file *.raz	Replace file >> File include starting rows OK Cancel	
Select starf Axis length Station on s Minimum disf Distance to 1.axis numbe Data process Define NEW f	start of EXTENDED AXIS in m < 0.000 >: -1 tance to 1. axis must be > 0.10! 1. cross axis <1.000>:	

5. Draw cross axis

Cross axis file		
Curent file *.pro		
C:\Primeri Moduli\Example1	\Example1.pro	
Replace file >>		
Marks and axis lines		
Mark insertion side		
Left	◯ Right	
Draw axis horizontal		
Step:		1
Number prefix Prefix:		P
Axis line length [m]:		15.0
Axis line length [m]:		
Mark and station distance from	m axis lines [m]:	15.0
	m axis lines [m]:	
Mark and station distance from	m axis lines [m]: Select color >>	
Mark and station distance from		
Mark and station distance from		
Mark and station distance from	Select color >>	1.0
Mark and station distance from Line color Text Style	Select color >> Height [mm]	1.0
Mark and station distance from Line color Text Style MOD_Arial	Select color >> Height [mm]	1.0
Mark and station distance from Line color Text Style MOD_Arial	Select color >> Height [mm] 0 6.0	1.0
Mark and station distance from Line color Text Style MOD_Arial	Select color >> Height [mm] 0 6.0].0].0].0



LONGITUDINAL PROFILE

6. Define longitudinal profile vertical alignment file

creating file Example1.nvp

Define longitudinal profile vertical alignment file X

Defining type	● Fro	om file *.raz and drawin
[ОК	Cancel

Select polyline – vertical alignment, laying in station area and defined in file Example1.raz. Starting points of all selected polylines in longitudinal profile, must proceed from left to right! Poylines must be without arcs. First replace arcs in polylines in module BASICS with command Ratio -> Change arc/circle to polyline.

0		O a look at
	79.40	
1		1

Define longitudinal profile vertical alignment file	×		
Station file			
Current file *.raz C:\Primeri Moduli\Example1\Example1.raz			
Replace file >>			
Join vertexes to polyline			
First section			
Elevation in first vertex [m]:	100.000		
Section number:	1		
Elevation marks			
Draw elevation marks in vertexes			
Colors			
Marks symbol			
Select color >>			
Elevation text		400.000	
Select color >>		100.000	
OK Cancel			Starting point

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	Selected station file: C:\Primeri Moduli\Example1\Example1.raz	
	Select 2D or 3D longitudinal profile polyline:	
	Processing	
	Elevation symbol direction Up/Down <u>: finished.</u>	
	Define NEW longitudinal profile vertical alignment file.	
	Selected longitudinal profile vertical alignment file:C:\Primeri Moduli\Example1\Example1.nvp	
	Writting dates to file << C:\Primeri Moduli\Example1\Example1.nvp >> finished.	
		0
-		
	79.40	
*		-

7. Define screwing file

Define screwing file - first section \times	
Axis number:	
Stations Station on section start [m] 0.000 Station on section end [m]	
Slopes On section start Slope - left roadway side [%] 2.5 Slope - right roadway side [%] On section end Slope - left roadway side [%] 2.5 Slope - right roadway side [%] 2.5 Slope - right roadway side [%] 2.5	Define screwing file on sectionsXStation on section end [m]100,000Slopes on section end100,000Slope - left roadway side [%]2.5Slope - right roadway side [%]-2.5
OK Cancel	OK Cancel End

CROSS SECTIONS -> ROADWAY

8. Define roadway slope file in cross sections

creating file Example1.psk

creating file Example1.vij

Define roadway slope file	×
Cross axis file Current file *.pro	
C:\Primeri Moduli\Example1\Example1.pro	
Replace file >>	
Cross sections screwimg file Current file *.vij C:\Primeri Moduli\Example1\Example1.vij	
Replace file >>	
OK Cancel	

S S D 3

	Cross axis file Current file *.pro C:\Primeri Moduli\Example1\Example1.pro Replace file >>
	Replace file >>
	Longitudinal profile verical alignment file
Define 3d roadway level file	
File types .pro + *.nvp () *.	C:\Primeri Moduli\Example1\Example1.nvp
OK Cance	el OK Cancel

10. Define roadway and widening file in cross sections

creating file Example1.voz

Because the roadway has widening, select in column Widening Variable and after them we select in situation or sketch left and right roadway border.

Roadway in situation			×
Cross axis file			
Current file *.	pro		
C:\Primeri Mo	duli\Example1\Example1.pr	0	
Replace file >	·>		
Slope file in sec	tion profles		
Current file *.	psk		
	duli\Example1\Example1.ps	k	
Replace file >	>>		
Widening			
None	O Constant	○ Variable	
Roadway			
Roadway width LEFT [m]:			3.350
Roadway width RIGHT [m]:			3.350
	ОК	ancel	