Inspection methodology: Bituminous road

a. The structure to be assessed is identified and located with the help of available local people and liaison. The GPS location of some permanent reference point close to the road like hand pump, bore well, house, tree, electric pole, etc. are taken.
b. The track (path) of the road is marked using *Mytrack* or *GPS essentials* mobile application by walking or riding the vehicle on the road. This activity will be done simultaneously with the measurement of road length using Pedometer (measuring wheel). In addition to this, the ride-ability and pavement surface conditions are also observed.
c. Suitable sample sections (best condition section, average condition section and worst condition section) of the road are selected. Sample section can be reduced to two or even one in case the road is in uniform condition throughout its length. The chainage of the section and the width of the road at sample section is measured with the help of Pedometer and measuring tape respectively. The GPS location of each sample section is also taken.
d. With the help of hoe (kudal/tikav), a small pit approximately to a depth of 20cm is dug at the edge of the road at each sample point and the thickness of road layers such as Carpet, BBM/MPM and WBM is measured. In case when it becomes difficult to differentiate between BBM/MPM layer and WBM layer due to same type of material (40mm size metal), the combined thickness of both the layers may be taken.
e. Other parameters of the road like the width of shoulder, number of the culvert, size of drainage, etc. are also observed and measured wherever required.
f. With the help of villagers, the information regarding the process of construction is also collected.
g. Images of all the data observed on field are captured.
h. The data observed on the field is recorded in *ODK collect* mobile application.