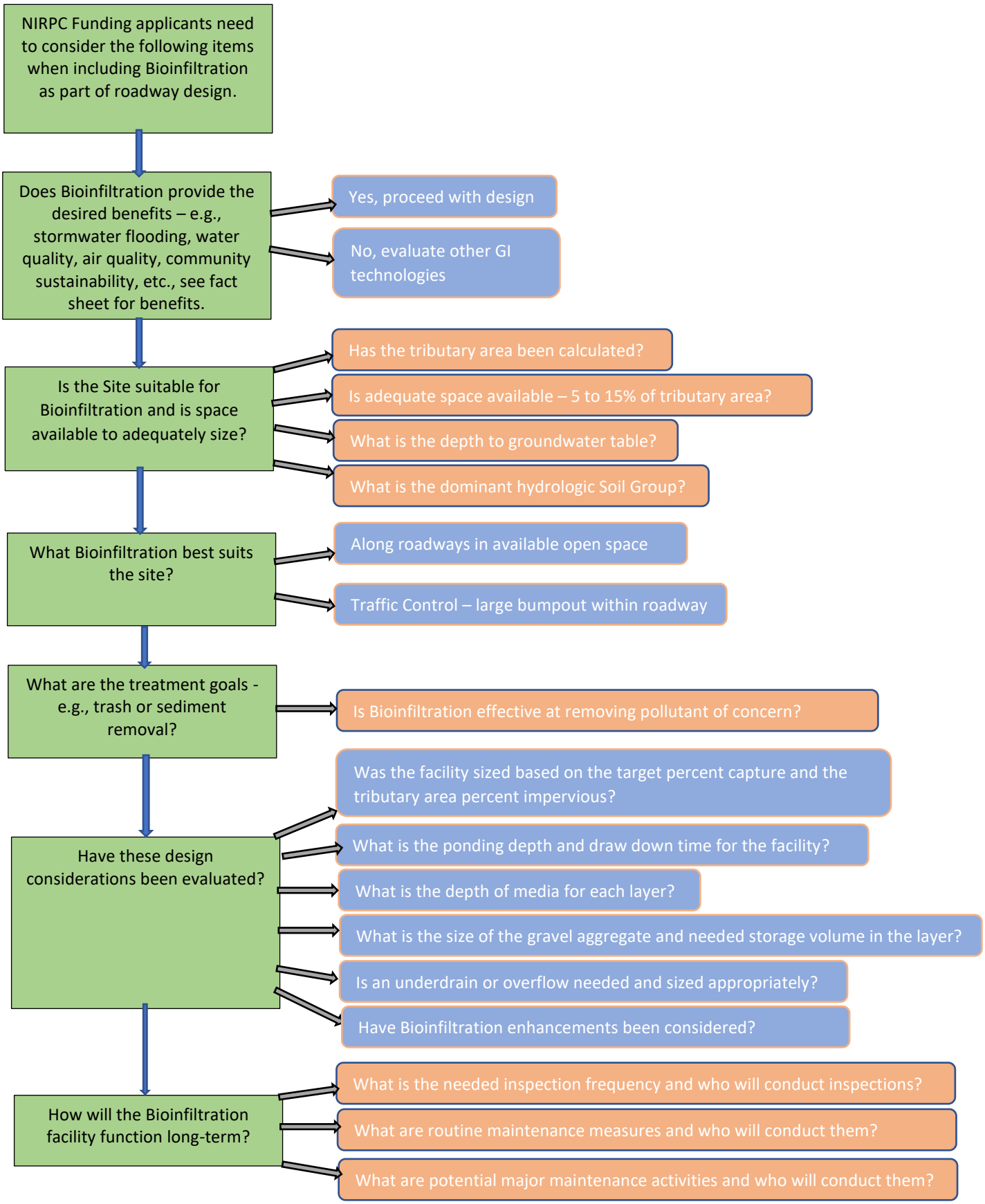
NIRPC Funding applicants need to consider the following items when including Bioinfiltration as part of roadway design.
Does Bioinfiltration provide the desired benefits – e.g., stormwater flooding, water quality, air quality, community sustainability, etc., see fact sheet for benefits.
Yes, proceed with design
No, evaluate other GI technologies
Is the Site suitable for Bioinfiltration and is space available to adequately size?
Has the tributary area been calculated?
Is adequate space available – 5 to 15% of tributary area?
What is the depth to groundwater table?
What is the dominant hydrologic Soil Group?
What Bioinfiltration best suits the site?
Along roadways in available open space
Traffic Control – large bumpout within roadway
What are the treatment goals - e.g., trash or sediment removal?
Is Bioinfiltration effective at removing pollutant of concern?
Have these design considerations been evaluated?
Was the facility sized based on the target percent capture and the tributary area percent impervious?
What is the ponding depth and draw down time for the facility?
What is the depth of media for each layer?
What is the size of the gravel aggregate and needed storage volume in the layer?
Is an underdrain or overflow needed and sized appropriately?
Have Bioinfiltration enhancements been considered?
How will the Bioinfiltration facility function long-term?
What is the needed inspection frequency and who will conduct inspections?
What are routine maintenance measures and who will conduct them?
What are potential major maintenance activities and who will conduct them?