

GEOMETRIC DESIGN	
Issue	Comment
A. Speed – (Design Speed; Speed Limit & Zoning; Sight Distance; Overtaking)	
<p>Are there speed-related issues along the corridor? Please consider the following elements:</p> <ul style="list-style-type: none"> • Horizontal and vertical alignment; • Posted and advisory speeds • Driver compliance with speed limits • Approximate sight distance • Safe passing opportunities 	
B. Road alignment and cross section	
<p>With respect to the roadway alignment and cross-section please consider the appropriateness of the following elements:</p> <ul style="list-style-type: none"> • Functional class (Urban Principal Arterial) • Delineation of alignment; • Widths (lanes, shoulders, medians); • Sight distance for access points; • Cross-slopes • Curbs and gutters • Drainage features 	
C. Intersections	
<p>For intersections along the corridor please consider all potential safety issues. Some specific considerations should include the following:</p> <ul style="list-style-type: none"> • Intersections fit alignment (i.e. curvature) • Traffic control devices alert motorists as necessary • Sight distance and sight lines seem appropriate • Vehicles can safely slow/stop for turns • Conflict point management • Adequate spacing for various vehicle types • Capacity problems that result in safety problems 	
D. Auxiliary lanes	
<ul style="list-style-type: none"> • Do auxiliary lanes appear to be adequate? • Could the taper locations and alignments be causing safety deficiencies? • Are shoulder widths at merges causing safety deficiencies? 	

E. Clear zones and crash barriers	
<p>For the roadside the major considerations are clear zone issues and crash barriers. Consider the following:</p> <ul style="list-style-type: none"> • Do there appear to be clear zones issues? <ul style="list-style-type: none"> — Are hazards located too close the road? — Are side slopes acceptable? • Are suitable crash barriers (i.e, guard rails, curbs, etc.) appropriate for minimizing crash severity? • Barrier features: end treatments, visibility, etc. 	
F. Bridges and culverts – (if necessary)	
<p>Are there specific issues related to bridges and culverts that may result in safety concerns?</p>	
G. Pavement – (Defects, Skid Resistance, and Flooding)	
<ul style="list-style-type: none"> • Is the pavement free of defects including excessive roughness or rutting, potholes, loose material, edge drop-offs, etc.) that could result in safety problems (for example, loss of steering control)? • Does the pavement appear to have adequate skid resistance, particularly on curves, steep grades and approaches to intersections? • Is the pavement free of areas where flooding or sheet flow of water could contribute to safety problems? • In general, is the pavement quality sufficient for safe travel of heavy and oversized vehicles? 	
H. Lighting (Lighting and Glare)	
<p>It is important to consider to the impacts of lighting. Some specifics include the following:</p> <ul style="list-style-type: none"> • Is lighting required and, if so, has it been adequately provided? • Are there glare issues resulting from headlights during night time operations or from sunlight? 	

TRAFFIC CONTROL DEVICES

Issue	Comment
I. Signs	
<p>Signage is a critical element in providing a safe roadway environment. Please consider the following:</p> <ul style="list-style-type: none">• Are all current signs visible (consider both night and day)? Are they conspicuous and clear? Are the correct signs used for each situation?• Does the retroreflectivity or illumination appear satisfactory?• Are there any concerns regarding sign supports?	
J. Traffic signals	
<ul style="list-style-type: none">• If present, do the traffic signals appear to be designed, installed, and operating correctly?• Is the signal processing the traffic efficiently?• Is the controller located in a safe position? (where it is unlikely to be hit, but maintenance access is safe)• Is there adequate sight distance to the ends of possible vehicle queues?	
K. Marking and delineation	
<ul style="list-style-type: none">• Is the line marking and delineation:<ul style="list-style-type: none">— appropriate for the function of the road?— consistent along the route?— likely to be effective under all expected conditions? (day, night, wet, dry, fog, rising and setting sun, oncoming headlights, etc.)• Are centerlines, edgelines, and lane lines provided? If not, do drivers have adequate guidance?	

ROADWAY ACTIVITY

Issue	Comment
<p>With respect to roadway activity please consider safety elements related to the following:</p> <ul style="list-style-type: none">• Pedestrians• Bicycles• Public transportation vehicles and riders• Emergency vehicles• Commercial vehicles• Slow moving vehicles	

ENVIRONMENTAL CONSIDERATIONS

Issue	Comment
Weather & Animals	
<p>From an environmental perspective it is important to consider any potential impacts. Most notably is likely to be the impacts of weather or animals, including:</p> <ul style="list-style-type: none">• Possible effects of rain, fog, snow, ice, wind on design features.• Has snow fall accumulation been considered in the design (storage, sight distance around snowbanks, etc.)?• Are there any known animal travel/migration routes in surrounding areas which could affect design?	