

## Central Office Design Exception and Variation Documentation Checklist

District:

Project Name:

Project Section:

BMP:

EMP:

Exemption BMP:

EMP:

FM:

New Construction       RRR

### Requested Control Element(s):

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> Design Speed*          | <input type="checkbox"/> Lane Width             | <input type="checkbox"/> Shoulder Widths    | <input type="checkbox"/> Bridge Widths*          |
| <input type="checkbox"/> Structural Capacity*   | <input type="checkbox"/> Vertical Clearance* ** | <input type="checkbox"/> Grades             | <input type="checkbox"/> Cross Slopes            |
| <input type="checkbox"/> Superelevation         | <input type="checkbox"/> Horizontal Alignment   | <input type="checkbox"/> Vertical Alignment | <input type="checkbox"/> Stopping Sight Distance |
| <input type="checkbox"/> Horizontal Clearance** |   |   |  |

\*Requires supplementary review (i.e. Planning/Structures/etc)

\*\*May require Utility Accommodation Manual (UAM) Exception Submittals

Complete	N/A	Page No.	Central Office Use Only	
			Complete	Insufficient
<input type="checkbox"/>	<input type="checkbox"/>	a) <b>Exhibit 23-A</b> Submittal/Approval Letter Included (Cover Letter)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	b) Summary description of included support documentation such as: 1. Location map or description 2. Typical section 3. Aerial or Photo logs when they best illustrate the element issues 4. Crash History and analysis 5. Plan sheets in the area of the exception/variation elements 6. Profiles in the area of vertical alignment exception/variation elements 7. Tabulation of pole offsets for horizontal clearance exception/variation 8. Applicable Signed and Sealed Engineering Support Documents	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	c) Project description ▪ General project information, typical section, begin/end milepost, county section number ▪ Include Work Mix, To – From, Objectives, Obstacles and Schedule	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	d) Description of the exception/variation element and applicable criteria (AASHTO and Department value or standard) ▪ Detailed explanation of why the criteria or standard cannot be complied with or is not applicable ▪ Description of any proposed value for project and why it is appropriate	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	e) Amount and character of traffic using the facility ▪ Description of the anticipated impact on Operations, Adjacent Sections, Level Of Service, Safety, Long and Short Term Effects ▪ Is the Exception <input type="checkbox"/> temporary or <input type="checkbox"/> permanent? ▪ Description of the anticipated Cumulative Effects	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	f) A plan view or aerial photo of the exception location, showing right of way lines, and property lines of adjacent property.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	g) A photo of the area	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	h) Typical section or cross-section of exception location	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	i) The milepost and station location of the exception	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	j) Any related work programmed or in future work plans	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	k) The Project Schedule Management (PSM) Project Schedule Activities maintained by the Finance Management Office.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	l) All mitigating efforts ▪ An explanation of what if any associated existing or future limitations as a result of public or legal commitments. ▪ Description and explanation of any practical alternatives, the selected treatment and why.	<input type="checkbox"/>	<input type="checkbox"/>

Complete	N/A	Page No.	Central Office Use Only	
			Complete	Insufficient
<input type="checkbox"/>	<input type="checkbox"/>	m) Comments on the most recent 5-year crash history including all pertinent crash reports.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	n) Description of the anticipated Cost (Social and to the Department - Benefit/Cost)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	o) Summary Conclusions	<input type="checkbox"/>	<input type="checkbox"/>
For the specified conditions the following additional documentation is required:				
<input type="checkbox"/>	<input type="checkbox"/>	p) For design speed on FIHS/SIS <ul style="list-style-type: none"> <li>Provide typical sections at mid blocks and at intersections</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	q) For lane width <ul style="list-style-type: none"> <li>Provide locations of alternative routes that meet criteria</li> <li>Proposal for handling drainage</li> <li>Proposed signing and pavement markings</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	r) For shoulder width <ul style="list-style-type: none"> <li>Proposal for handling stalled vehicles</li> <li>Proposal for handling drainage</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	s) For bridge width <ul style="list-style-type: none"> <li>Plan view of the approaching roadways</li> <li>Existing bridge plans (these may be submitted electronically)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	t) For a bridge with a design inventory load rating less than 1.0 <ul style="list-style-type: none"> <li>Written evaluation and recommendation by the Office of Maintenance is required</li> <li>Load rating calculations for the affected structure</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	u) For vertical clearance <ul style="list-style-type: none"> <li>Locations of alternative routes that meet criteria</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	v) For cross-slope <ul style="list-style-type: none"> <li>Proposal for handling drainage</li> <li>Details on how the cross slope impacts intersections</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	w) For conditions that may adversely affect the roadway's capacity <ul style="list-style-type: none"> <li>Provide the comments on compatibility of the design and operation with the adjacent sections</li> <li>Effects on capacity (proposed criteria vs. AASHTO) using an acceptable capacity analysis procedure</li> <li>Calculate reduction for design year, level of service</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	x) For superelevation <ul style="list-style-type: none"> <li>Provide the side friction factors for the curve for each lane of different cross-slope at the PC of the curve, the point of maximum cross-slope, and the PT of the curve using the following equation:  <math display="block">f = \frac{V^2 - 15Re}{V^2e + 15R}</math> </li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	y) For areas with crash histories or when a benefit to cost analysis is requested <ul style="list-style-type: none"> <li>Provide a time value analysis between the benefit to society quantified in dollars and the costs to society quantified in dollars over the life of the exception</li> <li>Roadside Safety Analysis Program (RSAP) – crashes into roadside objects</li> <li>Historical Crash Method (HCM) – sites with a crash history</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>