

Detailed Instructions for Completing the Design Exception/Waiver Form

Most of the data requirements on the form are self-explanatory. However, there are some that are not immediately obvious.

Refer to the *Basic Instruction* sheet for additional instructions.

The Design Exception / Design Waiver form was created using tables. Cells will automatically expand where data exceeds one line of text.

Request for Design Exception / Design Waiver from UDOT Standards Project Information Form

Page 1:

1. Type of Request: Select one or both options.
2. Location and Concept: Enter in the information exactly as it appears in ePM.
3. Roadway Characteristics and Traffic Data:
 - a. “Functional Class” - identify by functional class: freeway, urban arterial, rural arterial, urban collector, rural collector, or local road.
 - b. If the project design life is less than 20 years, show the projected traffic for the design life in the first “Projected” line and that for a 20-year design life in the second “Projected” line.
4. Geometric Data: “Clear Zone” - give intended standard for project.
5. Accident History: include data for at least three years if available. Provide information as it appears in the OSR. It is required that the Operational Safety Report be attached.
6. Remarks: Provide a detailed description of the proposed project including limits, paving, structure, drainage, grading, signing, lighting, signals, and safety work anticipated and details of work at any intersections. Also include any identified accident-related data (for example: most prevalent type of accident, accident clusters at reference point, etc.).

Page 2:

1. Adjoining Section Geometric Compatibility:
 - a. “Direction” - location in relationship to project.
 - b. “Compatibility” - Discuss any design geometric inconsistencies in the 13 critical elements between the adjoining section and the section of the proposed project.
2. Programmed Future Improvements: discuss any programmed work on the same facility adjacent to the subject project. Define type of work: 3R, reconstruction, etc.
3. Cost Data: data to complete “Project Cost to Attain FHWA 13 Critical Elements and Additional AASHTO Standards” comes from completion of Pages 3 and 4. These costs are additional costs to the Project Cost as Proposed. Also enter the amount of Project Cost Savings identified using Practical Design. Include a Detailed Estimate spreadsheet with an item by item breakdown.
4. Comments: This is a good place to clarify that the project met design standards for the time it was constructed.

Pages 3 and 4:

Exceptions to FHWA's 13 Critical Elements and Waivers of Additional Design Criteria:

Use the most up-to-date Project Design Criteria form to identify UDOT standards for design speed, lane width, shoulder width, horizontal alignment, vertical alignment, grades, stopping sight distance, cross slopes, super elevation, structural capacity, bridge width, vertical clearance, and lateral offset to obstruction. Look also for updated waivers.

1. **Element:** List one of the additional design criteria. Note that there could be several entries under some of these elements.
2. **Location:** give specific locations by stations or reference point and direction (example: northbound) if appropriate.
3. **Standards:** Show UDOT standard even if there is no difference between AASHTO and UDOT standards.
4. **Mitigation:** can steps be taken to lessen the effect of this exception such as signing shielding, pavement marking, slope flattening, etc.? Those which are possible and probable should be included.
5. **Remarks:** indicate what would be required to overcome this exception. Things which may be included are a description of required alteration, cost, right-of-way requirements, and any potential environmental concerns. If possible, get accident data for the segment of roadway affected by this exception.

Note: **Vertical Clearance** remarks should include the following information if available:

1. An alternate route around each substandard vertical clearance substructure. The alternate route should have standard vertical clearances. If at least one standard vertical clearance through-lane exists (in both directions), this can be considered an alternate route. A diamond interchange can also provide an alternate route.
2. Anticipated schedule for future projects which will correct or improve the substandard vertical clearance. Include the type of project (bridge replacement, etc.) and year programmed.

Page 5:

Design Exception Request - Bridge Rail or Parapet

1. **Mainline or Overcrossing:** Is the structure on the National Highway System (NHS) or on a roadway crossing over the NHS?
2. **Sufficiency Rating:** available from the UDOT Structures Division.

Existing Systems Table

Bridge:

3. **Rail Type:** include sketch.

4. Height: for General Motors (GM) type rail only, will the height from the bridge deck to the foreslope break be 12 in or less? (To remain in place, this dimension must be 12 in or less.)
5. Standards: does the approach rail/bridge rail transition attachment meet standards?
6. Width (Total): width inside rail to inside rail.
7. Condition: rate condition of existing bridge rail: good, fair, or poor.

Approach:

8. Type: guardrail or precast barrier?
9. Attached: is the approach rail attached to the bridge rail?
10. Standards: does the approach rail/bridge rail transition attachment meet standards?
11. Width (Total): width shoulder break to shoulder break.
12. Remarks: include proposed mitigation or corrective action.

Note: Use as many pages 3, 4, and 5 as necessary to cover all exception and waiver items.

Page 6:

1. All signature fields with the exception of the FHWA representative must be filled for every submittal. The FHWA signature will be coordinated by the Central Preconstruction office when required.
2. Submit all forms in accordance with Basic Instructions, General: Process.