Appendix L  Location Hydraulic Study Form
LOCATION HYDRAULIC STUDY FORM


Floodplain Description:

1. Description of Proposal (include any physical barriers i.e. concrete barriers, soundwalls, etc. and design elements to minimize floodplain impacts)

2. ADT: Current: Projected:

3. Hydraulic Data: Base Flood \( Q_{100} = \ldots \) m\(^3\)/s
   WSE = 
   The flood of record, if greater than \( Q_{100} \)
   \( Q = \ldots \) m\(^3\)/s
   WSE = 
   Overtopping flood \( Q = \ldots \) m\(^3\)/s
   WSE = 
   Are NFIP maps and studies available? YES NO

4. Is the highway location alternative within a regulatory floodway?
   YES NO

5. Attach map with flood limits outlined showing all buildings or other improvements within the base floodplain.

Potential \( Q_{100} \) backwater damages:

A. Residences? NO YES
B. Other Bldgs? NO YES
C. Crops? NO YES
D. Natural and beneficial

FLOODPLAIN VALUES? NO YES

6. Type of Traffic:

A. Emergency supply or evacuation route? NO YES
B. Emergency vehicle access? NO YES
C. Practicable detour available? NO YES
D. School bus or mail route? NO YES

7. Estimated duration of traffic interruption for 100-year event hours:

8. Estimated value of \( Q_{100} \) flood damages (if any) – moderate risk level.
A. Roadway $_________  
B. Property $_________  
Total $_________

9. Assessment of Level of Risk  
   Low _____ X _____
   Moderate _____
   High _____

For High Risk projects, during design phase, additional Design Study Risk Analysis May be necessary to determine design alternative.

Signature – Dist. Hydraulic Engineer __________________________ Date __/__/20__7
(Item numbers 3,4,5,7,9)

Is there any longitudinal encroachment, significant encroachment, or any support of incompatible Floodplain development?  
   NO _____ X _____ YES _____

If yes, provide evaluation and discussion of practicability of alternatives in accordance with 23 CFR 650.113

Information developed to comply with the Federal requirement for the Location  
Hydraulic Study shall be retained in the project files.

Signature – Dist. Project Engineer __________________________ Date __/__/20__7
(Item numbers 1,2,6,8)
LOCATION HYDRAULIC STUDY FORM

Dist. __Co._ Ate. __K.P._
EA _______________ Bridge No. _______________

Floodplain Description:

1. Description of Proposal (include any physical barriers i.e. concrete barriers, soundwalls, etc. and design elements to minimize floodplain impacts)

2. ADT: Current __102,000__ Projected __175,000__

3. Hydraulic Data: Base Flood Qref  m$^3$/s
   WSEP=_____ The flood of record, if greater than Qref:
   Q=_____ m$^3$/s WSEP=_____
   Overtopping flood Q=_____ m$^3$/s WSEP=_____
   Are NFIP maps and studies available?  YES X NO_____

4. Is the highway location alternative within a regulatory floodway?  YES_______ X NO_____

5. Attach map with flood limits outlined showing all buildings or other improvements within the base floodplain.

Potential Qref backwater damages:

A. Residences?  NO X YES_____
B. Other Blgs?  NO______ YES_____
C. Crops?  NO X YES_____
D. Natural and beneficial

FLOODPLAIN VALUES? NO X YES_____

6. Type of Traffic:

A. Emergency supply or evacuation route?  NO______ YES X_____
B. Emergency vehicle access?  NO______ YES_____
C. Practicable detour available?  NO______ YES_____
D. School bus or mail route?  NO______ YES_____

7. Estimated duration of traffic interruption for 100-year event hours: __________

8. Estimated value of Qref flood damages (if any) -- moderate risk level.
A. Roadway $__________ Information not available.
B. Property $__________
Total $__________

9. Assessment of Level of Risk
   Low ______ X ______
   Moderate ______
   High ______

For High Risk projects, during design phase, additional Design Study Risk Analysis
May be necessary to determine design alternative.

Signature – Dist. Hydraulic Engineer ______/____/______ Date _____/____/_______
(Item numbers 3,4,5,7,9)

Is there any longitudinal encroachment, significant encroachment, or any support of
incompatible Floodplain development? NO ______ X ______ YES ______

If yes, provide evaluation and discussion of practicability of alternatives in accordance
with 23 CFR 650.113

Information developed to comply with the Federal requirement for the Location
Hydraulic Study shall be retained in the project files.

Signature – Dist. Project Engineer ______/____/______ Date _____/____/_______
(Item numbers 1,2,6,8)
LOCATION HYDRAULIC STUDY FORM


Floodplain Description: Floodplain

1. Description of Proposal: (Include any physical barriers i.e. concrete barriers, soundwalls, etc. and design elements to minimize floodplain impacts)

2. ADT: Current Projected

3. Hydraulic Data: Base Flood Qbase = m^3/s

WSF = The flood of record, if greater than Q100:

Q100 = m^3/s WSF =

Overtopping flood Q = m^3/s WSF =

Are NIFIP maps and studies available? YES NO

4. Is the highway location alternative within a regulatory floodway?

YES NO

5. Attach map with flood limits outlined showing all buildings or other improvements within the base floodplain.

Potential Q100 backwater damages:

A. Residences?

B. Other Bldgs?

C. Crops?

D. Natural and beneficial

FLOODPLAIN VALUES? YES NO

6. Type of Traffic:

A. Emergency supply or evacuation route? YES

B. Emergency vehicle access?

C. Practicable detour available?

D. School bus or mail route?

7. Estimated duration of traffic interruption for 100-year event hours:

8. Estimated value of Q100 flood damages (if any) - moderate risk level.
A. Roadway $____________ Information not available
B. Property $____________
Total $____________

9. Assessment of Level of Risk
   Low __ X ______
   Moderate ______
   High ______

For High Risk projects, during design phase, additional Design Study Risk Analysis
May be necessary to determine design alternative.

(Item numbers 3,4,5,7,9)

Is there any longitudinal encroachment, significant encroachment, or any support of
incompatible
Floodplain development? NO ______ YES ______

If yes, provide evaluation and discussion of practicability of alternatives in accordance
with 23 CFR 650.113

Information developed to comply with the Federal requirement for the Location
Hydraulic Study shall be retained in the project files.

Signature – Dist. Project Engineer ___________________ Date 8/10/2007
(Item numbers 1,2,6,8)