

LOCATION HYDRAULIC STUDY FORM

Dist. 08 Co. SBd Rte. 210 P.M. 19.3/20.1

EA 44394 Bridge No. 54-1160

Floodplain Description:

The floodplain lies within Lytle Creek in the City of Rialto, County of San Bernardino. Lytle Creek is an 18-mile long watercourse that originates in the San Gabriel Mountains and flows to the Santa Ana River. The floodplain in the vicinity of the Project is confined by the existing levee located in the vicinity of the easterly Project limits.

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

The construction of State Route 210 (SR-210) Interchange at Pepper Ave. (Project) is located in the City of Rialto from approximately 625 feet west of Eucalyptus Ave. to approximately 3,000 feet west of N. State Street and south of Highland Ave. within the state right of way.

The Project includes construction of east- and west-bound on- and off-ramps at Pepper Ave. and construction of Pepper Ave. from the state/city right-of-way at the south end to Highland Ave. at the north end. There will be proposed catch basins to collect surface runoff from the Project and the runoff will be conveyed by a proposed storm drain system that discharges to the pre-Project point of flow concentration.

The Lytle Creek floodplain is confined by the existing levee located along the westerly edge of the floodplain limits and the risk associated with the proposed encroachment is insignificant. The Project will not involve any placement of fill within the floodplain and all Project improvements will be constructed above the elevation of the existing top-of-levee. As such, there is no longitudinal encroachment into the floodplain, and the proposed Project will not raise floodplain elevations. There are no present beneficial uses or natural values associated with the existing floodplain that will be affected by the Project. Thus, there are no impacts with regard to natural or beneficial uses, and restoration activities are not applicable.

2. ADT: Current 28,000 Projected 29,000

3. Hydraulic Data: Base Flood $Q_{100} = \underline{N/A^*}$ CFS WSE₁₀₀ = N/A*
The flood of record, if greater than Q_{100} : $Q = \underline{N/A^*}$ CFS WSE = N/A*
Overtopping flood $Q = \underline{N/A^*}$ CFS WSE = N/A*
Are NFIP maps and studies available? YES X (Map Only), Zone A NO _____

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

* N/A= Not Applicable

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

Potential Q₁₀₀ backwater damages:

- A. Residences? NO X YES _____
- B. Other Bldgs? NO X 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 X
- C. Practicable detour available? NO _____ YES X
- D. School bus or mail route? NO _____ YES X

7. Estimated duration of traffic interruption for 100-year event hours: No Change

8. Estimated value of Q₁₀₀ flood damages (if any) – moderate risk level.

- A. Roadway \$ No Change
- B. Property \$ No Change
- Total \$ No Change

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 10/01/2012
(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)

* N/A= Not Applicable