PART B - APPLICATION FOR STREAM CHANNEL ALTERATION PERMIT
[Required For Stream Channel Alterations and Construction of Diversion Works Structures in Stream Channels (Section 13-169-50)]

B-1 Project Objectives (Describe the purpose of the project):

Project is an erosion control and public safety improvement.

B-2 Project Description (Describe the proposed alteration within the stream channel):

a. Materials Concrete, gabion aprons, #3 rock, geotextile fabric

b. Quantities In-stream excavation 3,060 C.Y., In-stream fill 2,634 C.Y

c. Excavation Excavation includes existing outlet structure and existing soils

d. Fill Fill consists of structural fill material

e. Disposal Excavated material will be disposed off-site.

f. Construction methods Grading, concrete outlet and gabion installation.

g. Temporary facilities 60-inch pipe culvert will be used to divert stream flow during construction of concrete outlet structure.

h. Expected period of time required for construction within stream channel) 145 Days

i. Liability during construction

B-3 Please submit the following (Each plan or map must be legible at 8.5" x 14" sheet:

a. *Location Map (Show location of proposed project relative* to major roadways):
See attached plans

b. Topographic Site Plan (Show contours of the site. Show *existing conditions and proposed alterations with respect* to property boundaries):
See attached plans

c. Plans (Show proposed alterations with respect to property boundaries. Show, sizes, materials, quantities, contours, existing and proposed construction on scaled drawings).
See attached plans

d. *Elevation/Section (Show proposed alterations with respect* to property boundaries; show detailed contours, drawings should be to scale):
See attached plans

B-4 Alternatives to the Proposed Project:

Please identify alternatives to the project, and describe the relative costs and benefits to each alterative.

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Two alternatives to the proposed action were considered and rejected.

The first alternative consisted of Alternatives consist of stream hardening along the project limits. This alternative is considered environmentally undesirable and cost prohibitive. Unstable soil considitions make concrete walls along the stream undesireable. A hardend stream alleviates immediate project area impacts but severly impact dowstream properties.

The second alternative consists of stream bank stabilization and the use of detention basins. This alternative is also considered less environmentally desirable as it is fairly invasive by the use of gabions along the stream banks and the need to disturb off-stream lands to create a detention basin. This alternative is also cost prohibitive.