

## 1.1 MAN-MADE CHANNEL ASSESSMENT

There are two types of man-made storm drainage systems; either piped or open channels. A piped system completely removes a stream from its natural environment, eliminating any natural functions that may have existed. The lowest RCI of 0 is therefore applied to all piped systems. Refer to page 4 for an example of a piped system.

Man-made open channels are further divided into two main categories; hard-lined and naturalized. Hard-lined channels include concrete, gabion, and/or riprap-lined channels. Although still connected to its environment, much of the natural functions of the stream are severely impaired. Refer to pages 4 and 5 for examples of a hard-lined channel and the corresponding RCI.

Naturalized man-made channels (i.e. channels that are not restricted by armoring techniques or have “naturalized” over time through sediment deposition and/or re-vegetation) should be assessed utilizing the Natural Channel Assessment Methodology outlined in Section 1.2 and Section B of Form 1-1.

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### MAN-MADE CHANNEL ASSESSMENT

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|---|---|--|
| <b>1. Piped Channel</b>                               | → | RCI = 0.0                                    |
| <b>2. Open Channel lined with concrete</b>            | → | RCI = 0.25                                   |
| <b>3. Open Channel lined with riprap, gabion, etc</b> | → | RCI = 0.50                                   |
| <b>4. Naturalized, Man-Made Channel</b>               | → | Apply Natural Channel Assessment Methodology |



**OPTION 1: Piped Channel**

**RCI = 0.0**



**OPTION 2: Open Channel lined with concrete**

**RCI = 0.25**



**OPTION 3: Open Channel** lined with riprap, gabions or comparable material

**RCI = 0.50**



**OPTION 4: Naturalized, Man-Made Channel**

Apply Natural Channel Assessment Methodology