

# SURFACE CROSS DRAIN INSPECTION FORM



Landowner \_\_\_\_\_ Date \_\_\_\_\_

Road Segment \_\_\_\_\_ Form No. \_\_\_\_\_

Service Level  High  Medium  Low

## General Observations on All Cross Drains Use for drain dip, open top pipe, open top wood, or open top log culvert and rubber water diverter and waterbar.

### 1. Cross Drain Marker

Is the surface crossdrain location permanently marked at the road edge?  Yes  No

### 3. Outlet

Is outlet armored?  Yes  No  
 Is erosion evident at outlet?  Yes  No  
 Is there a sediment filter located below outlet?  
 Yes  No  
 Does the area below the outlet concentrate or disperse water?  Concentrate  Disperse

### 2. Rate the surface cross drain location

Good or  Poor.

#### Good Locations:

- Low spot in road
- At grade change >2%
- Above a road segment with steep downhill grade
- Below a spring or seep which enters a ditch
- Above stream crossing
- At designed spacing interval
- Draining a ditch

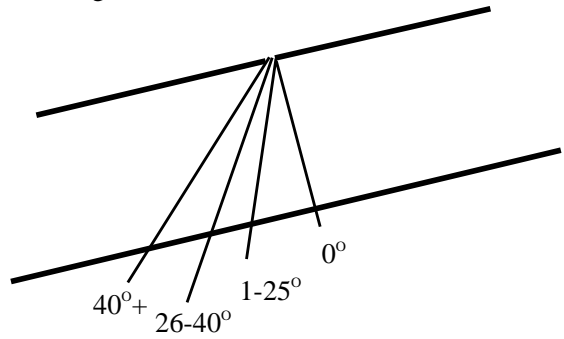
#### Poor Locations:

- Drains directly into a stream
- Does not provide drainage
- Placement appears random
- Heavy traffic road
- Other \_\_\_\_\_

### 4. Skew

Stand at inlet, look across road perpendicular to road length and estimate degree of skew downslope.

Skew Angle  0°  1-25°  26-40°  40°+

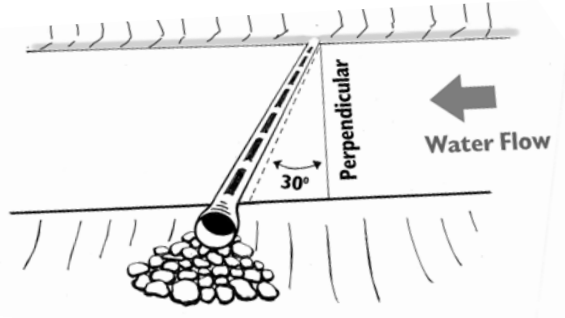
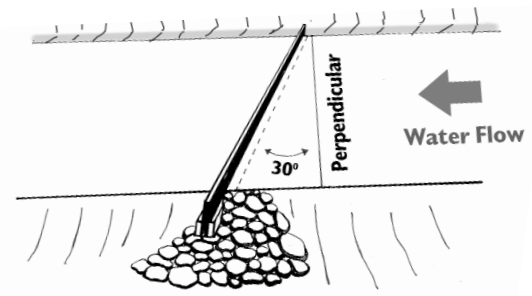


## General Observations on Specific Cross Drain Structures

### Rubber Water Diverter

Height above road surface.  
 <3 in.  > 3 in.

Describe any damage \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



### Open Top Pipe Culvert

Is pipe below road surface.  Yes  No  
 Clear of any debris?  Yes  No

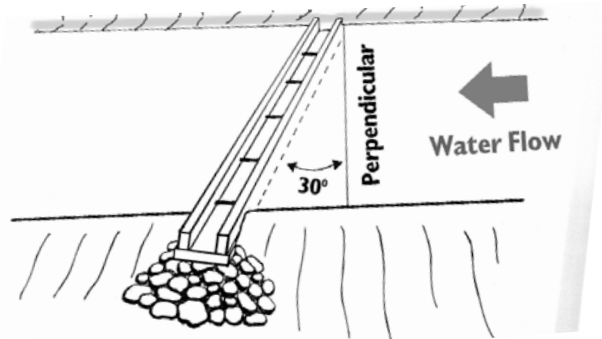
Describe any damage \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Open Top Wood Culvert

Is opening below road surface?  Yes  No

Clear of any debris?  Yes  No

Describe any damage \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



## Water Bar

Closed road or road with minimal traffic?

Yes  No

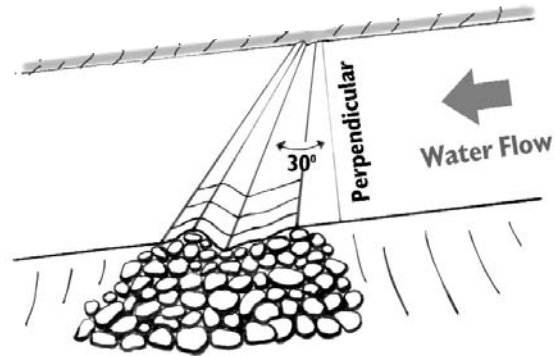
Do ruts cut through the waterbar?  Yes  No

Depth of waterbar below road grade?

<12 inches  >12 inches

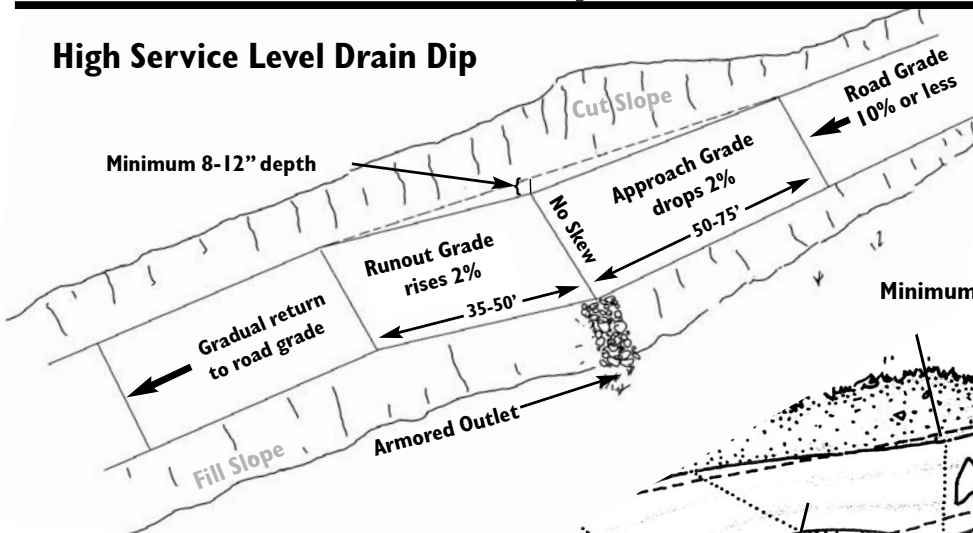
Height of waterbar above road grade?

<12 inches  >12 inches

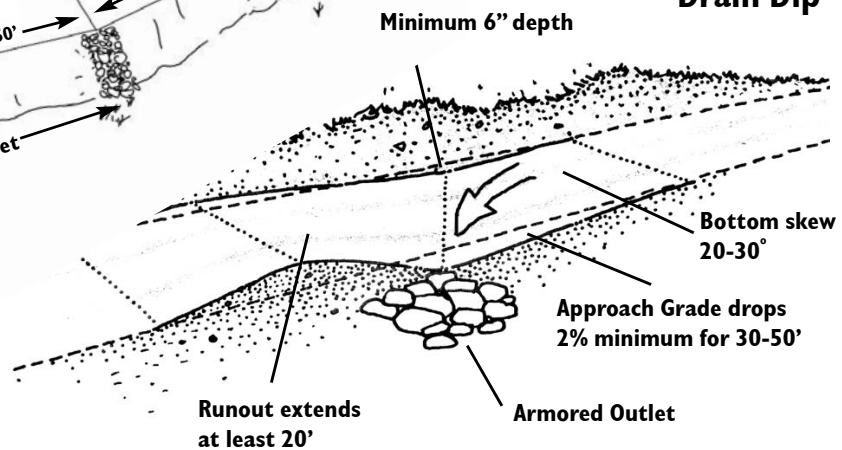


## Observations on Drain Dips

### High Service Level Drain Dip



### Low Service Level Drain Dip



## I. Location

Is dip located on a curve with <100 radius?  Yes  No

Is road grade 10% or below?

Yes  No

## 2. Drain Dip Specifications

Outslope  <3%  3-5%  >5%

Approach grade and distance.

Grade % \_\_\_\_ Distance (feet) \_\_\_\_

Runout grade and distance.

Slope % \_\_\_\_ Distance (feet) \_\_\_\_

Is the drain dip best described as:  High Service Level

Low Service Level (Compare with diagram)

Is drain bottom armored?  Yes  No

If no, would armor help to:

Reduce rutting  Stop erosion  Reduce maintenance