

# **GUIDELINES FOR SNOWMOBILE TRAIL SIGNING & PLACEMENT**



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## **1.0 INTRODUCTION**

Snowmobilers travel beyond their local trail systems much more frequently now than ever before. When traveling on unfamiliar trails, a rider's enjoyment and safety are greatly enhanced by uniformed trail markings, detailed information signage, and careful identification of potential hazards. A delightful ride can quickly turn into an unpleasant experience if a rider becomes lost, hungry and low on fuel along a poorly marked trail system.

While there are many good reasons why grooming or trail routing in a particular area may not be adequate, there are very few acceptable excuses for the absence of basic signing. Every club must accept trail signing as their first priority. The trail administrator, landowner, rider, local club and organized snowmobiling in general all benefit from good basic signing practices.

The purpose of snowmobile trail signs is to:

- a) regulate the flow of traffic along the trails
- b) improve travel within and between districts and
- c) professionalize and promote recreational snowmobiling

Many clubs have developed and implemented excellent signing programs. In other areas, local traffic conditions or limited resources make elaborate signing systems inappropriate or impossible. Regardless of local circumstances, every trail must be signed to a minimum level which exhibits a fundamental concern for safety of those using it.

## **2.0 PURPOSE OF THIS DOCUMENT**

This document provides guidelines for the effective placement of signs on the VAST Trail System. It should be seen as a process to improve snowmobile trail development in a safe and cost effective manner as opposed to a rigid policy statement. It is anticipated that as a result of ongoing communication and development these guidelines will continue to evolve through time.

## **3.0 TRAIL SIGNING REQUIREMENTS**

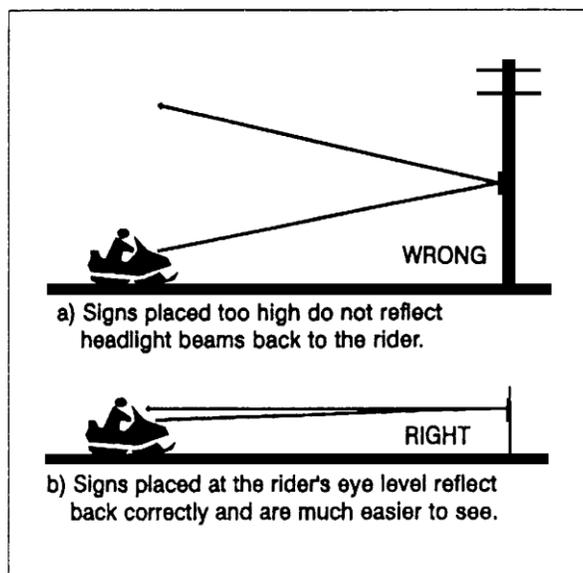
The Vermont Association of Snow Travelers has developed this manual to provide the minimum guidelines for regulatory, warning signs and trail markers. These guidelines should be applied to all designated snowmobile trails that are open to the public. Their placement should follow the guidelines described in section 4.

## **4.0 TRAIL SIGN PLACEMENT**

What sign to use where is dealt with in the next section. This section provides basic information on how signs are to be oriented and installed.

### **4.1 Sign Orientation**

The most critical part of sign mounting is understanding how reflective signs work. One good analogy is to think of reflective signs as mirrors. To maximize the night time view of the sign it must be placed at eye level, perpendicular to the direction of travel of the trail. This orientation also ensures that the sign is visible over the longest possible period so that the rider has a chance to understand the message and to react accordingly. This important concept is illustrated by figures 1 and 2.



**Figure 1 - Sign Orientation, Side View**

Figure 3 on the next page defines an imaginary “window” for sign locations. Signs should be oriented perpendicular to the trail within a 5' x 5' area which starts 3' from the trails edge and 2' above the trail. Signs mounted outside the window will not perform as well.

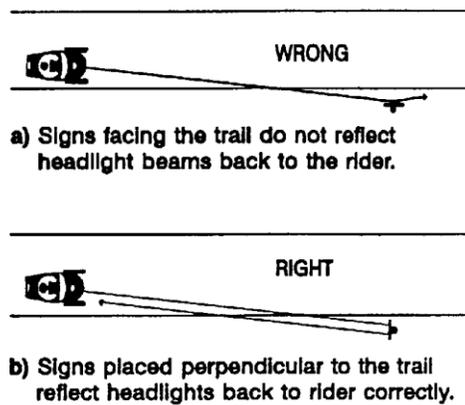


Figure 2 - Sign Orientation, Plan View

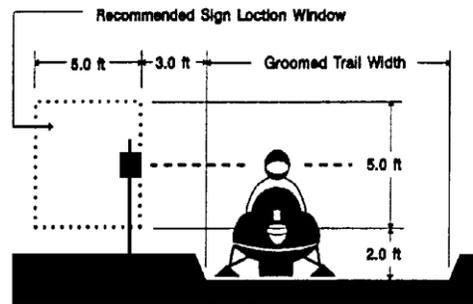


Figure 3 - Recommended Sign Location Window

## 4.2 Posting Distances

What is the proper distance before a hazard to place a warning sign? There are several factors involved in calculating the minimum posting distance including: sign legibility or recognition; decision making time; the coefficient of friction between the track and snow; a comfortable breaking distance; and the initial speed of the snowmobile when the sign is seen by the operator.

In these guidelines we are dealing with warning and regulatory signs with the idea that we want the snowmobile to be able to come to a complete stop before the obstruction or trail condition. In some case a complete stop is not necessary, but we suggest posting distance should be sufficient for a complete stop in the event that it is necessary.

The factor with the greatest effect on the calculations for posting distance is speed of the vehicle when the operator sees the sign. For this reason, the following sign placement distance table is based on speed in miles per hour. It becomes the sign crew's responsibility to estimate the common appropriate speeds on the portion of the trail where the signs are being installed. The intent of the table is to give a recommended minimum distance and an acceptable range rather than a specified distance.

### **Sign Placement Table**

<b><u>Average Anticipated Speed</u></b>	<b><u>Recommended Minimum Distance from Sign to Hazard or Stop</u></b>
25 mph	150 feet
35 mph	250 feet
45 mph	350 feet
55 mph	500 feet

#### **4.3 Mounting Considerations**

The methods used to mount trail signs vary greatly depending on the intended permanence of the installation. The following points provide guidance in selecting an appropriate mounting method to suite your circumstances.

- Generally, signs should be placed to the right of the trail to conform to the rider's familiarity with highway signs.
- The sightline from the driver to the sign must be clear for the entire distance through which the sign is intended to be viewed. This requires routine monitoring.
- Signs should be placed as late in the fall as possible and removed promptly at the end of the season. This reduces vandalism, reduces potential trespass and conserves the sign life by reducing exposure to the sun and elements.
- Mounting signs on living trees is not recommended. If it is the only alternative, use aluminum nails. Ensure that all nails are removed when the signs are removed.
- On posts, use bolts or screws instead of nails to reduce vandalism and theft. A cordless drill with spare battery packs is an ideal tool to drive screws providing the sign holes are predrilled.
- Use an existing mounting object such as a fence post only if it is within the recommended sign location window and the permission of the owner has been obtained.
- Use durable materials for permanent installations, i.e. flexible plastic, fiberglass, steel, or 4X4 pressure treated lumber.
- If more than one sign is used at the same location, they should be placed vertically with the most important sign on top.

- It must be remembered that the trail will be used in both directions. Separate and often different signing is required for each direction of travel.
- Signing is often done by persons who are familiar with the trail and who know where they are and where they are going. When putting up signs, imagine that you have never been in this area or on this trail before. Try to picture what signs would be necessary to get you safely to your destination.
- Have your signage reviewed by someone less familiar with the area to identify locations that need improvement.
- Overuse of signs should be avoided. Only authorized trail signs should be allowed to avoid clutter and confusion. Signage posted by businesses should be carefully controlled by the trail operator.
- Extra regulatory and warning signs should be carried on grooming equipment and by patrollers to replace those that have been vandalized.

#### **4.4 Intersection Signing** *(See Figures 6.4 & 6.4(2))*

All Corridor Trail Intersections on the Statewide Snowmobile Trail System (SSTS) shall include the following signage:

1. A sign(s) that is durable and can accommodate the proper directional and informational signage to be posted on and/or hung from it.
2. Intersection number *(as shown on the latest edition of the VAST Trail Map)*. The intersection number shall be displayed at the top of the sign/post and shall be constructed of a white reflective material displayed on a black background.
3. Corridor route number and direction (N, E, S, W) accompanied by a directional arrow *(as shown on the latest edition of the VAST Trail Map)*.
4. Next trail intersection number along the anticipated route of travel accompanied by a directional arrow *(as shown on the latest edition of the VAST Trail Map)*.
5. Route Logo sign posted along the side of each trail leaving from the intersection, but within sight of the intersection, to assure riders they are interpreting the intersection signs correctly.

## 5.0 Standard Trail Sign List

The key to establishing a uniform signing system is the development of a list of standard signs based on the IASA Guidelines for Snowmobile Trail Signing. The regulatory and warning signs listed in this section are the minimum recommended by the NEIASA.

### 5.1 Regulatory Signs

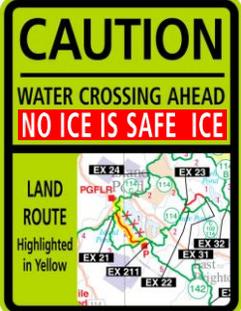
<u>Design</u>	<u>Name &amp; Use</u>	<u>Physical Characteristics</u>
	<b>Stop</b> Instructs riders to bring their snowmobile to complete stop before proceeding slowly.	<i>12"x12" Octagon</i> Red background with white lettering.
	<b>No Snowmobiling</b> Identifies areas where snowmobiling is not allowed.	<i>12"x12" Square</i> White background with black graphic, red circle & slash.
	<b>No Wheeled Vehicles</b> Identifies areas where wheeled vehicles are not allowed	<i>12"x12" Square</i> Red background with white lettering.
	<b>Bridge Designed For Snowmobiles Only</b> Informs other users that bridge is designed for use by snowmobiles and is not safe for any other use.	<i>6"x9" Rectangle</i> White background with red lettering.
	<b>Trail Closed</b> Informs riders that the trail ahead is closed.	<i>12"x12" Square</i> White background with black lettering.
	<b>Road Closed to Snowmobiles</b> Informs riders that a road is not open to snowmobiles.	<i>12"x18" Rectangle</i> Red background with white lettering.
	<b>Stay on Trail</b> Reminds riders of the importance of staying on the marked trail.	<i>12"x12" Square</i> White background with black lettering.
	<b>Do Not Enter</b> Instructs riders not to enter a particular area or trail.	<i>12"x12" Square</i> White background, red circle with white lettering.

	<p><b>Private Trail</b>                  Informs riders that the trail leads to a private residence and is not a VAST trail.</p>	<p><i>12"x12" Square</i>                  White background with red lettering.</p>
	<p><b>Dead End</b>                  Informs riders that the trail does not connect through to another trail.</p>	<p><i>12"x12" Square</i>                  White background with red lettering.</p>
	<p><b>No ATV's</b>                  Informs other users that ATV's are not allowed on VAST trails.</p>	<p><i>12"x12" Square</i>                  White background with black graphic, red circle &amp; slash.</p>
	<p><b>Trail Open to Snowmobiles Only</b>                  Informs other users that VAST trails are open for snowmobile travel only and that other uses are not permitted.</p>	<p><i>12"x18" Rectangle</i>                  Red background with white lettering.</p>
	<p><b>Speed Limit</b>                  Instructs riders not to exceed a specified speed limit (<i>Miles Per Hour</i>) while operating their snowmobile along the trail.</p>	<p><i>12"x12" Square</i>                  White background with black lettering.</p>
	<p><b>Curfew Signs</b>                  Informs riders that the trail ahead is closed during certain hours of the day or night.</p>	<p><i>12"x18" Rectangle</i>                  Red background with white lettering.</p>

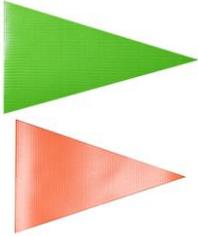
## 5.2 Cautionary Signs

<u>Design</u>	<u>Name &amp; Use</u>	<u>Physical Characteristics</u>
	<p><b>Stop Ahead</b> Informs riders that they are approaching a Stop sign.</p>	<p><i>12"x12" Square</i> Yellow background, red octagon, black arrow.</p>
	<p><b>Stop Ahead – RR Xing</b> Informs riders that they are approaching a stop sign placed on either side of active railroad tracks.</p>	<p><i>12"x12" Square</i> Yellow background, red lettering.</p>
	<p><b>Slow</b> Instructs riders it is necessary to reduce their speed.</p>	<p><i>12"x12" Square</i> Yellow background, black lettering.</p>
	<p><b>Arrow (Left or Right Turn)</b> Informs riders that the trail makes a significant change in direction.</p>	<p><i>12"x12" Square</i> Yellow background, black arrow.</p>
	<p><b>Bridge Ahead</b> Informs riders they are approaching a bridge which is narrower than the trail.</p>	<p><i>12"x12" Square</i> Yellow background, black graphic and lettering.</p>
	<p><b>Junction Ahead</b> Informs riders that they are approaching a trail intersection.</p>	<p><i>12"x12" Square</i> Yellow background, black lettering.</p>
	<p><b>Steep Hill</b> Informs riders that they are approaching a section of trail with a steep uphill or downhill grade.</p>	<p><i>12"x12" Square</i> Yellow background, black lettering.</p>
	<p><b>Blind Hill</b> Informs riders that they are approaching a section of trail with a reduced line of sight in both directions.</p>	<p><i>12"x12" Square</i> Yellow background, black graphic and lettering.</p>

	<p><b>Ice</b>                  Informs riders that they are approaching a section of trail that may be ice covered and slippery, proceed with caution.</p>	<p><i>12"x12" Square</i>                  Yellow background, black graphic and lettering.</p>
	<p><b>Yield To Groomer - Any Place, Any Time</b>                  Informs riders that they may encounter a piece of trail grooming equipment at any time and that they must yield the right of way when they do.</p>	<p><i>12"x12" Square</i>                  Yellow background, black graphic and lettering.</p>
	<p><b>Caution Logging Operation</b>                  Informs riders that a logging operation is taking place in and along the trail ahead, and that trucks, equipment and debris may be in the trail.</p>	<p><i>12"x12" Square</i>                  Yellow background, black graphic and lettering.</p>
	<p><b>Skiers on Trail</b>                  Informs riders that they can expect to see skiers on the trail. Used in areas where landowners and others frequently utilize a particular section of trail.</p>	<p><i>12"x12" Square</i>                  Yellow background, black graphic and lettering.</p>
	<p><b>Left/Right Hazard Marker</b>                  Identifies a fixed object hazard along the side of the trail. This is used any time the fixed object narrows the normal width of the trail such as bridge railings. The stripes slope downward towards the trail.</p>	<p><i>6"x12" Rectangle</i>                  Yellow background, black stripes.</p>
	<p><b>Wildlife In Trail</b>                  Informs riders that they can expect to see wildlife on the trail. Used in areas where turkeys, deer and moose cross and walk along the trail frequently throughout the winter.</p>	<p><i>12"x12" Square</i>                  Yellow background, black lettering.</p>
	<p><b>Trail Logo</b>                  Informs riders that they are in fact on a VAST trail. Also used to inform other users that they are on a VAST trail and can expect snowmobile traffic. Generally used on sections of trail that travel along the side of a public highway.</p>	<p><i>12"x12" Square</i>                  Yellow background, black lettering.</p>
	<p><b>Public Highway – Keep Right</b>                  Informs riders they are traveling along a public highway and must stay as far to the right as possible.</p>	<p><i>12"x12" Square</i>                  Yellow background, black lettering.</p>

	<p><b>Snowmobile Crossing</b>                  Informs motorists on public highways that they are approaching an intersection with a snowmobile trail, and that there will likely be snowmobiles trying to cross the highway.</p>	<p><i>18"x18" Square</i>                  Yellow background, black lettering.</p>
	<p><b>Road Open To Snowmobiles</b>                  Informs motorists that snowmobiles may be present on road. Also lets riders know that the road is open for snowmobile travel in case other trail markings get knocked over etc.</p>	<p><i>12"x18" Square</i>                  Yellow background, black graphic and lettering.</p>
	<p><b>Exit Right</b>                  Informs riders that the trail will exit the roadway it is traveling down and turn to the right.</p>	<p><i>12"x12" Square</i>                  Yellow background, black lettering.</p>
	<p><b>Exit Left</b>                  Informs riders that the trail will exit the roadway it is traveling down and turn to the left.</p>	<p><i>12"x12" Square</i>                  Yellow background, black lettering.</p>
	<p><b>Water Crossing Signage (1)</b>                  Placed at a trail intersection closest to body of water to inform riders the trail they are traveling on crosses a body of water. The sign provides riders with a map showing the trail along the land route that leads to the same destination.</p>	<p><i>36"x24" Rectangle</i>                  Fluorescent yellow-green background with black lettering.</p>
	<p><b>Water Crossing Signage (2)</b>                  Placed within sight of a body of water to inform riders that the trail they are traveling on crosses a body of water.</p>	<p><i>18"x12" Rectangle</i>                  Fluorescent yellow-green background with black lettering.</p>
	<p><b>Water Crossing Signage (3)</b>                  Placed on a Dead End trail that is near a body of water to inform riders that there is no trail across or on the other side of the body of water.</p>	<p><i>18"x12" Rectangle</i>                  Fluorescent yellow-green background with black lettering.</p>

### 5.3 Trail Markers

<u>Design</u>	<u>Name &amp; Use</u>	<u>Physical Characteristics</u>
	<p><b>Green/Orange Arrow</b> Used on sign stakes in fields and other open areas as well as on signboards or trees to point riders in the proper direction as well as to reassure them they are following a designated VAST trail. Green arrows are used to mark corridor trails and orange arrows are used to mark secondary and feeder trails.</p>	<p><i>7"x9" Diamond</i> Green with white arrow. <i>7"x9" Diamond</i> Orange with white arrow.</p>
	<p><b>Green/Orange Pennant</b> Used on sign stakes in fields and other open areas or on fence posts or trees in the woods to clearly mark the boundaries of the trail and let riders know they are following a designated VAST trail. Green pennants are used to mark corridor trails and orange pennants are used to mark secondary and feeder trails.</p>	<p><i>12"x9" Triangle</i> Fluorescent green vinyl. <i>9"x6" Triangle</i> Fluorescent orange vinyl.</p>
	<p><b>Green/Orange Stay On Trail</b> Used on sign stakes to remind riders to stay on the designated trail. Green signs are used to mark corridor trails and orange signs are used to mark secondary and feeder trails.</p>	<p><i>6"x8" Rectangle</i> Green with white lettering. <i>6"x8" Rectangle</i> Orange with white lettering.</p>
	<p><b>Reflector</b> Used on sign stakes in fields and on trees in wooded areas to identify the edges of the trail in the dark. Lights from snowmobiles and grooming equipment illuminate the reflector which helps operators identify the edge of the trail ahead.</p>	<p><i>2"x2" Square</i> White reflective 3-M sheeting.</p>

## 5.4 Information Signs

<u>Design</u>	<u>Name &amp; Use</u>	<u>Physical Characteristics</u>
	<b>Food</b> Informs riders that there is a location that sells food ahead.	<i>6"x6" Square</i> Blue background with white graphic and lettering.
	<b>Fuel</b> Informs riders that there is a location that sells fuel ahead.	<i>6"x6" Square</i> Blue background with white graphic and lettering.
	<b>Fuel/Food</b> Informs riders that there is a location that sells food & fuel ahead.	<i>6"x6" Square</i> Blue background with white graphic and lettering.
	<b>Repairs</b> Informs riders that there is a location that repairs snowmobiles ahead.	<i>6"x6" Square</i> Blue background with white graphic and lettering.
	<b>Lodging</b> Informs riders that there is a location that provides a place to stay ahead.	<i>6"x6" Square</i> Blue background with white graphic and lettering.
	<b>Phone</b> Informs riders that there is a location that has a pay phone for emergencies ahead. This is quickly becoming an obsolete sign with the invention of cellular phones.	<i>6"x6" Square</i> Blue background with white graphic and lettering.
	<b>Snowmobile Parking</b> Informs riders where to park their snowmobiles when they arrive at an establishment.	<i>6"x6" Square</i> Blue background with white graphic and lettering.
	<b>Services Arrow</b> Directs riders in the proper direction in order to access any of the services indicated on the signs above.	<i>6"x6" Square</i> Blue background with white graphic and lettering.
	<b>VAST Trail Access Parking</b> Used to inform riders there is an official VAST Trail Access Parking Area where they can park their trucks and trailers, unload their machines and access an official VAST trail.	<i>24"x24" Square</i> Blue background with white graphic and lettering.

	<p><b>Green/Orange Custom Directional</b> Used on signboards to inform riders what towns are in each direction. Also used at road crossings (under stop signs) to inform riders of road names as they cross them. Green signs are used to mark corridor trails and orange are used to mark secondary and feeder trails.</p>	<p><i>2"x12" Rectangle</i> Green with white lettering. <i>2"x12" Rectangle</i> Orange with white lettering.</p>
	<p><b>Green/Orange Distance Marker</b> Informs riders how far it is to the next location. Green signs are used to mark corridor trails and orange are used to mark secondary and feeder trails.</p>	<p><i>4"x2" Rectangle</i> Green with white lettering. <i>4"x2" Rectangle</i> Orange with white lettering.</p>
	<p><b>Junction Marker</b> Informs riders of the location they are at in reference to the VAST Trail Map.</p>	<p><i>8"x5" Rectangle</i> Black background with white lettering.</p>
	<p><b>Route Logo</b> Informs riders what corridor trail number they are on in reference to the VAST Trail Map.</p>	<p><i>8"x12" Rectangle</i> Green background with white graphics and lettering.</p>

## 6.0 Examples of Sign Use

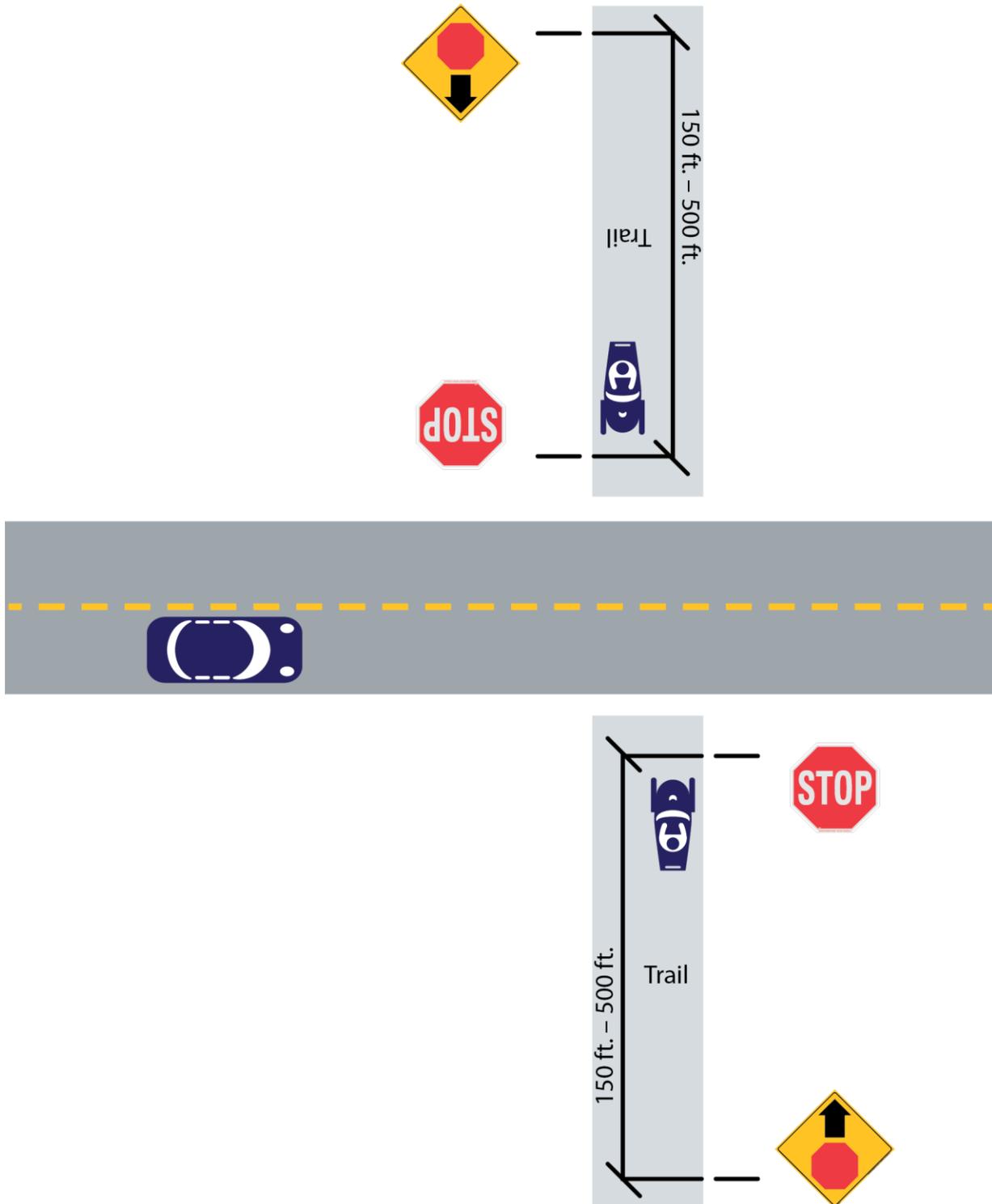
The following five pictograms are intended to give signing crews an example of a few of the basic situations that they will encounter on most trails. Only a few of the signs contained in section 5.0 are shown in these pictogram examples. It is very possible that future updates of this manual may contain examples showing the placement of additional signs, but the distance will still correspond to the table in section 4.2.

These pictograms serve as simplistic guidelines for use on snowmobile trails. It is understood that unusual situations may be encountered relating to trail conditions, topography, man-made objects or other circumstances that will require some modifications to typical sign placement. The most suitable placement of each sign must be determined at the site where all variables are visible. It would be prudent to document the case where sign placement is outside the range indicated in this manual and prepare written justification for your files.

## 6.1 Road Crossing

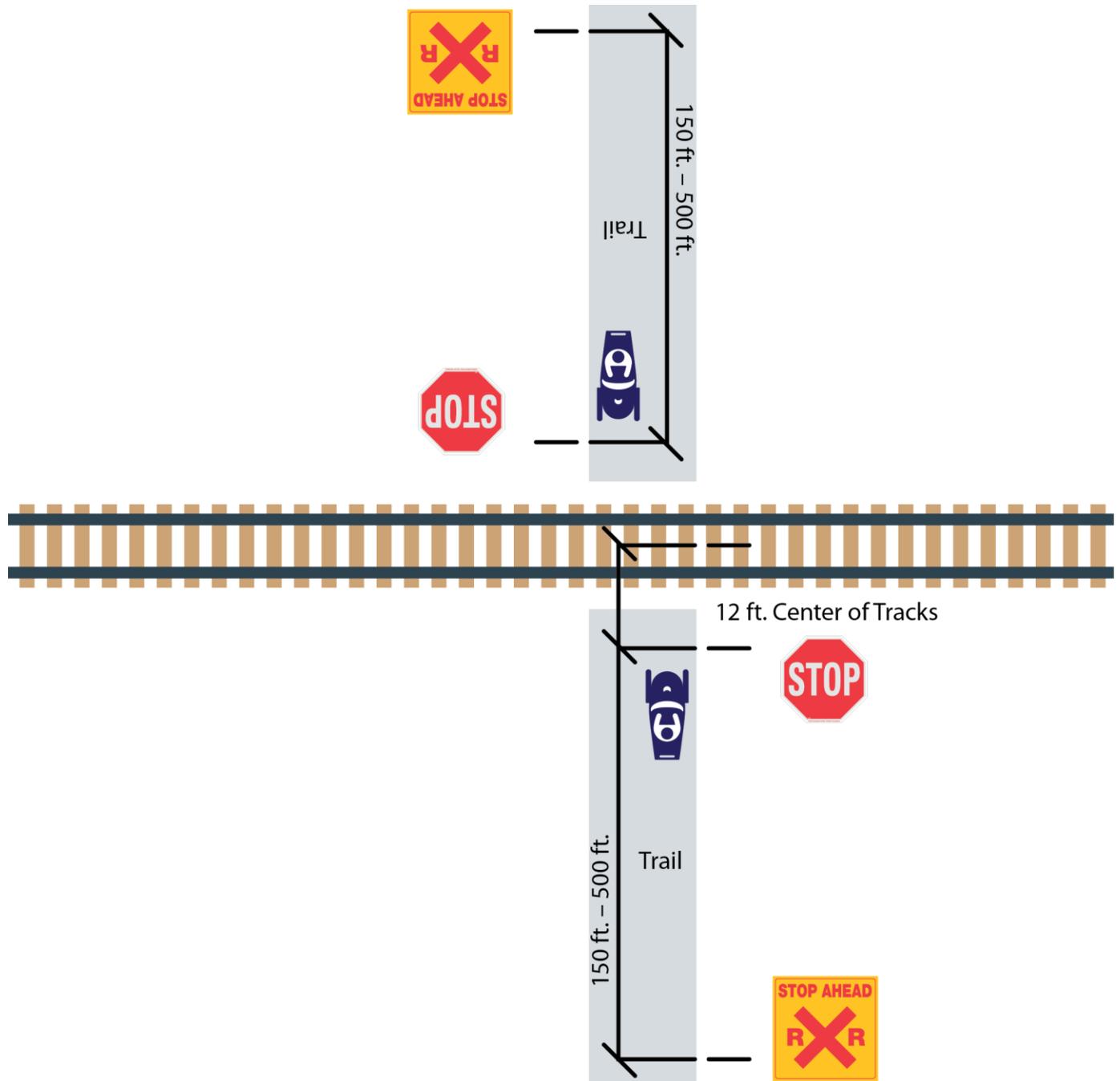
Stop signs should be used to regulate trail users at road crossings where users are required to stop before proceeding. Stop signs should be placed far enough back from the road so that snow plows and/or snow banks do not block signs or break the posts.

Stop signs are usually preceded by a Stop Ahead sign or symbol to alert the rider that they are approaching a stop.



## 6.2 Railroad Crossing

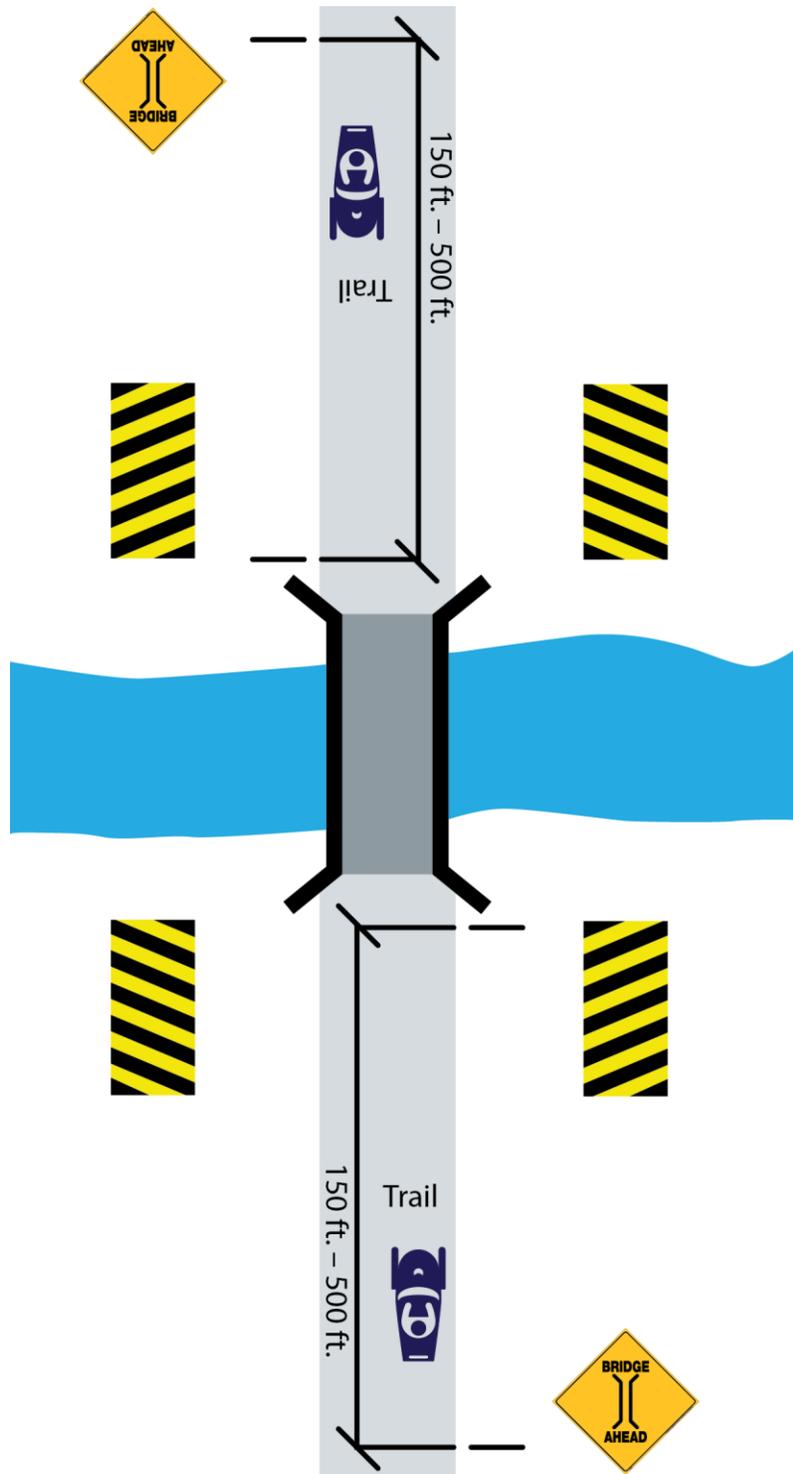
Stop signs should be used to regulate trail users at railroad crossings where users are required to stop before proceeding. Stop signs must be placed at least 12' away from the centerline to ensure they will remain in place when rail cars pass by. This measurement is per specifications from the Vermont Agency of Transportation Rail Division.



### 6.3 Bridge Crossing

ALL bridges must have a "Bridge Ahead" sign and "Hazard Markers". "Bridge Designed for Snowmobiles Only" signs on each end of the bridge are also recommended (not shown in diagram below). Bridge Hazard Markers should be installed on the bridge structure itself or on posts at the approach to the bridge from each side.

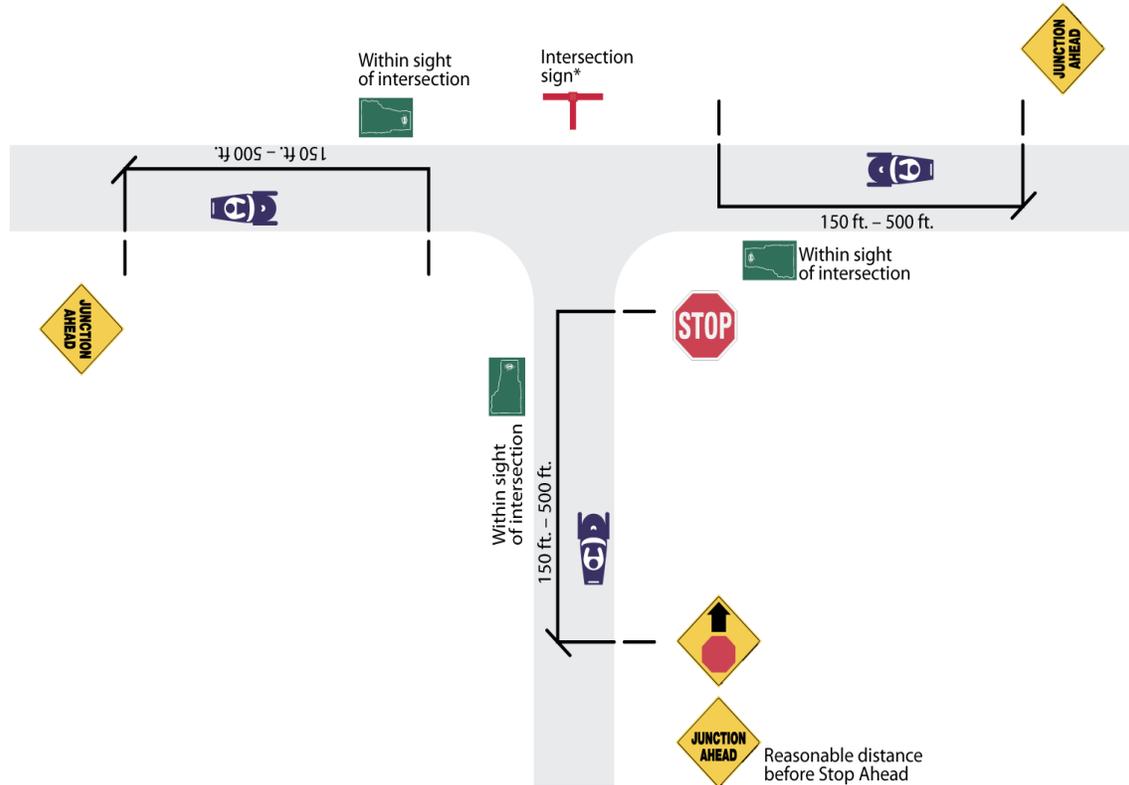
*Note: There are "Left" and "Right" Hazard Markers. The "Left" Hazard Markers are designated with a "BCL" and the "Right" Hazard Markers are designated with a "BCR" in very small letters on the bottom of the sign.*



## 6.4 Trail Intersection

Stop signs are used to regulate trail users at trail intersections where the normal right-of-way rule might not be readily apparent. Use Stop signs where users are required to stop before proceeding.

Stop signs are usually preceded by a Stop Ahead sign or symbol to alert the rider that they are approaching a stop.



### 6.4 (2) Trail Intersection (Required Information)

(Post Design Can Vary) (see section 4.4, Page 5, above)

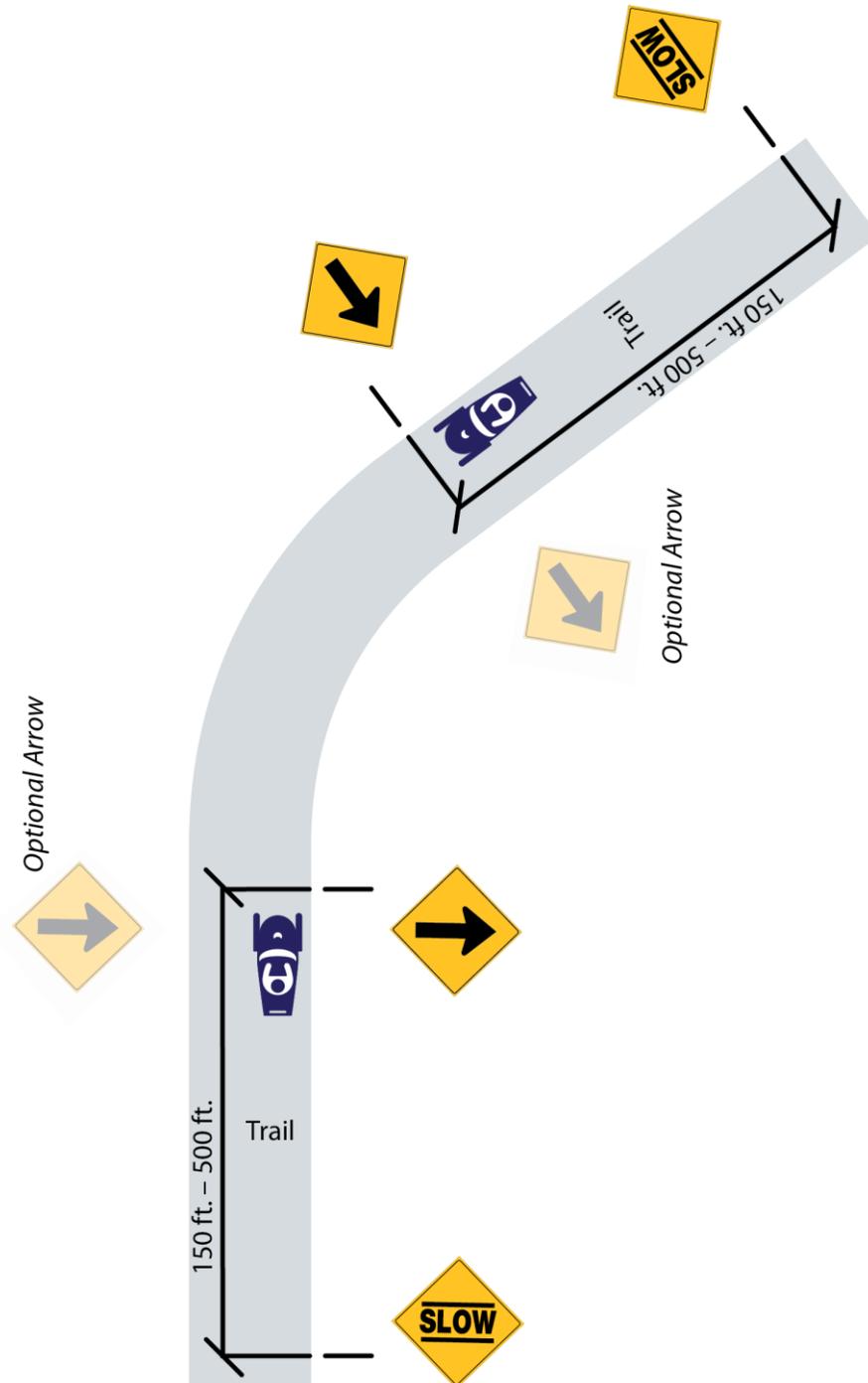


**All Corridor Trail Intersections on the Statewide Snowmobile Trail System (SSTS) shall include the following signage:**

1. A sign(s) that is durable and can accommodate the proper directional and informational signage to be posted on and/or hung from it.
2. Intersection number (as shown on the latest edition of the VAST Trail Map). The intersection number shall be displayed at the top of the sign/post and shall be constructed of a white reflective material displayed on a black background.
3. Corridor route number and direction (N, E, S, W) accompanied by a directional arrow (as shown on the latest edition of the VAST Trail Map).
4. Next trail intersection number along the anticipated route of travel accompanied by a directional arrow (as shown on the latest edition of the VAST Trail Map).
5. Route Logo sign posted along the side of each trail leaving from the intersection, but within sight of the intersection, to assure riders they are interpreting the intersection signs correctly. (Reassurance sign)

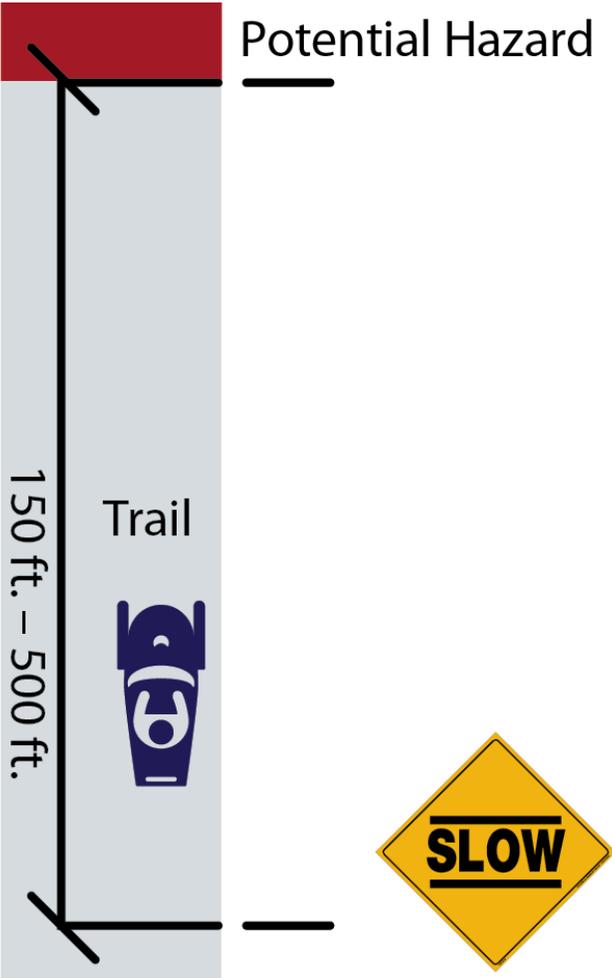
## 6.5 Curve

Directional Arrows should be placed on either the right or left side of the trail depending upon direct line of site from the slow sign. Directional arrows should be placed just before the entrance to the corner and not in the middle of the corner.



### 6.6 Potential Hazard

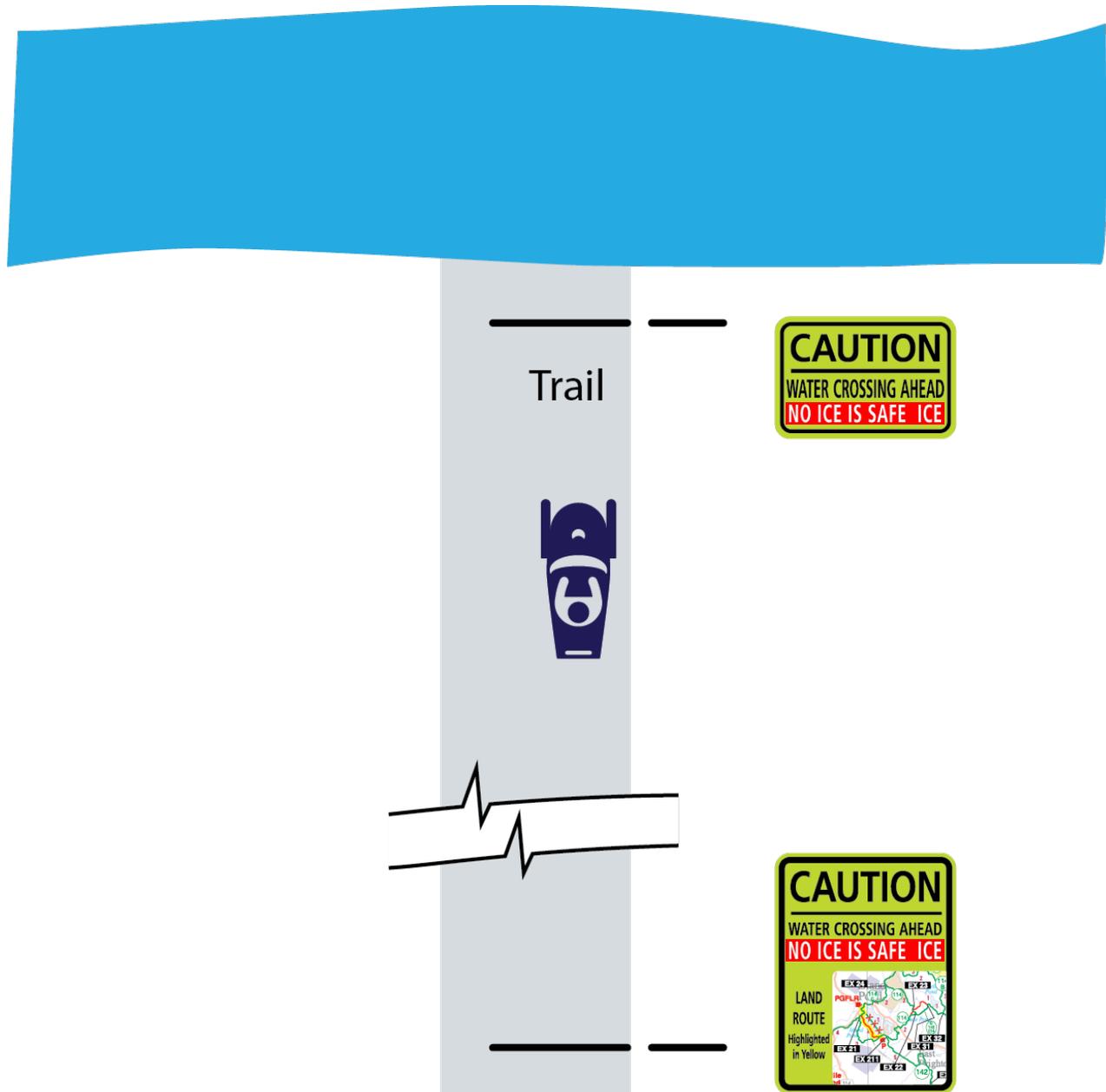
Slow signs are installed to inform riders to slow down as they may have to take corrective action.



## 6.7 Water Crossing

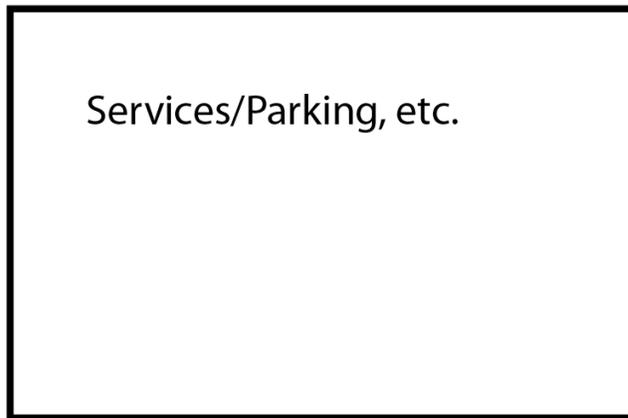
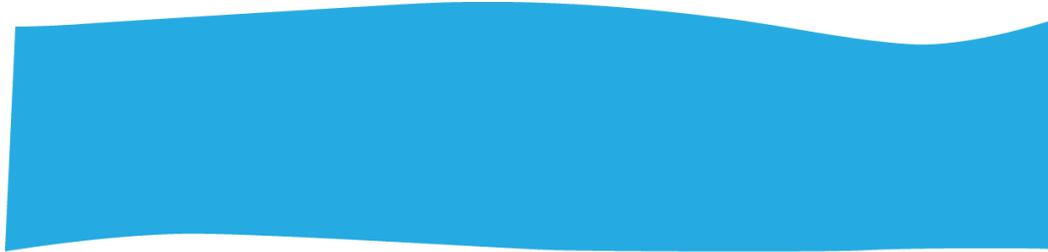
All trails that cross bodies of water should be signed accordingly. Riders should be warned ahead of time. The larger signs should be placed at trail intersections closest to the body of water to inform riders that the trail they are traveling on crosses a body of water. The sign provides riders with a map showing the trail along the land route that leads to the same destination.

The second sign should be placed within sight of body of water to inform riders that the trail they are traveling on crosses a body of water. This sign also provides riders that may have accessed the trail beyond the location of the first sign fair warning about the body of water.



## 6.7 (2) Water Crossing

Trails that lead to a dead end near a body of water should be signed to inform riders that the trail ends and there are no trails across or on the other side of the body of water. Dead End signs should be placed at the junction where the dead end trail leaves the main trail.



## **7.0 Staking**

In forested areas, following the trail may be a fairly obvious and straightforward task. When trails cross fields or other large cleared areas, trail routing may not be at all obvious. Relying on the groomed track for trail routing information is not adequate since even a well established trail can be quickly obscured by a heavy snowfall.

Both snowmobilers and groomer operators need continuous reference points to navigate the trail confidently. A simple method of identifying trail routing in open areas is to use wooden stakes driven into the ground along the edge of the trail.

### **7.1 Stake Construction**

A typical stake is a 2" x 2" piece of inexpensive lumber sharpened at one end to facilitate installation. A minimum of 16" at the top of the stake is painted red for visibility, or if a club prefers green to indicate a corridor trail. High impact colors are preferred to improve visibility at a distance.

At least three square inches of reflective material should be attached on both sides of the stake at a point four inches down from the top of the stake. This will make the stake more visible at night from both directions of travel. The length of the stake is selected so that when it is driven into place, a minimum of 42" of stake remains visible above the top of the snow with the reflective surface being as close to the eye level of the riders as possible. Stake lengths of 5' are typical. Figure 4 shows a recommended configuration for a standard stake.

### **7.2 Stake Installation**

Stakes are driven into the snow or ground within the sign location window previously defined in Figure 3. A commercial post driver is a simple and inexpensive tool that makes this task much easier.

Since they identify trail routing, stakes need to be driven in pairs at right angles to the trail so that riders know they are to pass between them. Figure 5 illustrates this basic concept. The next pair should be easily visible immediately after passing through a stake pair.

The frequency of stakes should be increased significantly to indicate a turn. If the turn is sharp, the signing requirements for curves shown in pictograms 6.4 or 6.5 should be used.

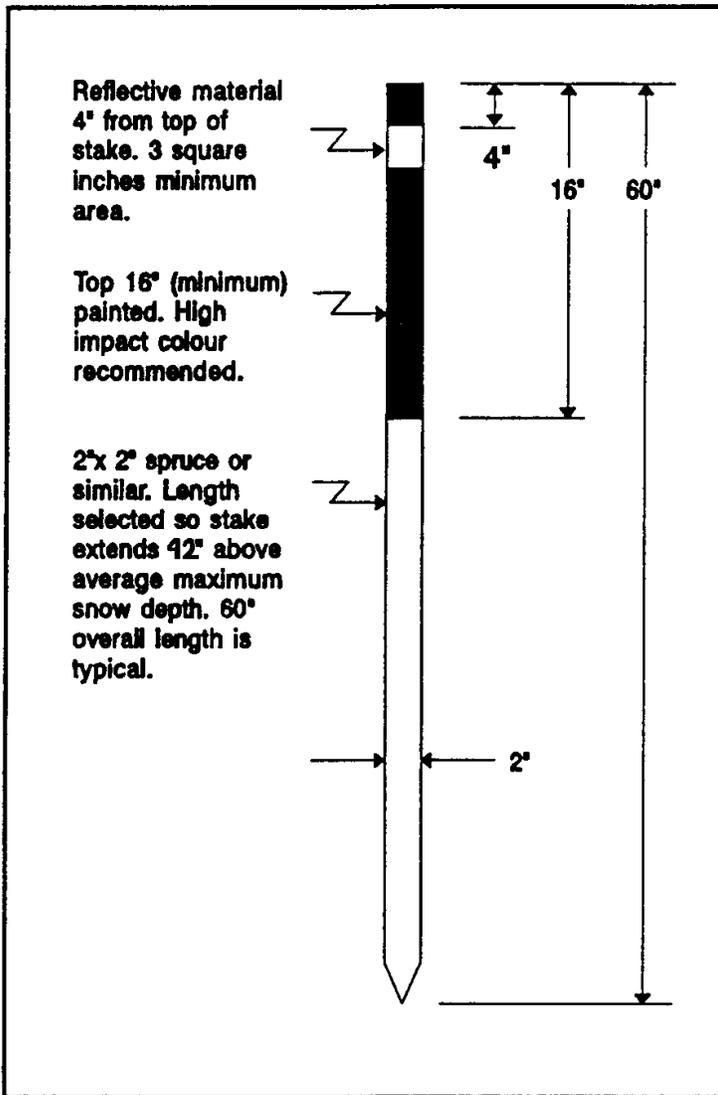


Figure 4 - Recommended Stake

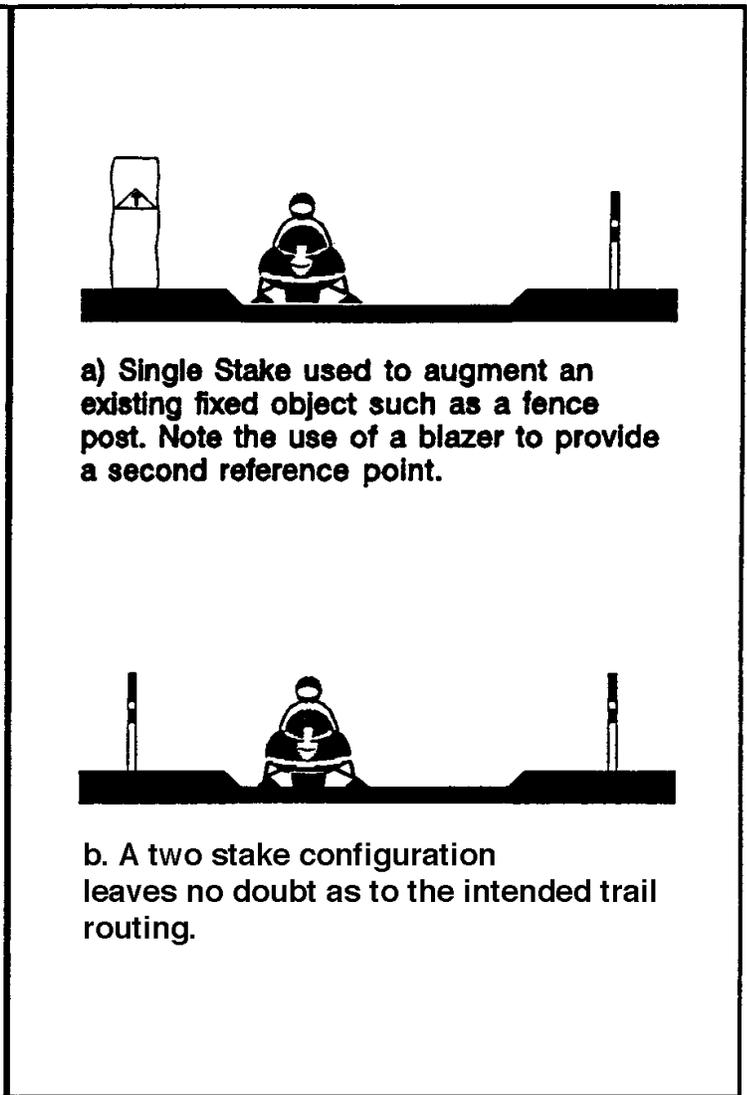


Figure 5 - Examples of Staking

**Notes:** \_\_\_\_\_

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