



Michigan Department of Natural Resources
www.michigan.gov/dnr

Michigan Motorized Trail Maintenance and Signing Handbook

Guidelines for Signing and Maintenance of Snowmobile and Off-Road Vehicle (ORV) Trails





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"The Michigan Department of Natural Resources is committed to the conservation, protection, management, use and enjoyment of the state's natural resources for current and future generations."

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This publication is available in alternative formats upon request.



Michigan Department of Natural Resources
Parks and Recreation Division

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This publication and forms needed for the program are available on the Department of Natural Resources website under Snowmobile Trail Improvement Fund or ORV Trail Improvement Fund.

Click here -> [Michigan Department of Natural Resources](#)

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FIND OUT THE LOCAL DNR CONSERVATION OFFICERS WHO ARE ASSIGNED TO YOUR TRAILS.



FIND OUT THE LOCAL COUNTY SHERIFF OFFICERS WHO ARE ASSIGNED TO YOUR TRAILS.

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SECTION I. INTRODUCTION TO HANDBOOK

➤ Click here → Trail Sign Order	PR1857:	Email to Trails Specialist by March 17th
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Forms and publications are available on the Department website. Go to www.michigan.gov/dnr and follow the prompts to recreation trail maintenance grant programs. Information is also available through the Michigan Relay Center (TTY/TDD) by calling 711.

- A.** The Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, mandates the Michigan Department of Natural Resources (DNR) to develop and provide facilities for outdoor recreation. Including snowmobile and off-road vehicle (ORV) trails. The DNR is responsible for assuring the motorized trail system is appropriately signed.
- B.** The purpose of posting trail signs is to control and regulate the flow of traffic, inform users of trail characteristics, and provide information necessary for a safe and enjoyable experience.
- C.** This handbook is intended to assist trail sponsors, DNR, United States Department of Agriculture, and Forest Service employees with trail signing responsibilities in developing trail facilities. Proper trail signing is for the benefit and convenience of the public.

SECTION II. GENERAL GUIDELINES

- A.** All trail signs shall conform to the guidelines and principles of both of the following:
- **Manual on Uniform Traffic Control Devices (MUTCD)**
<https://mutcd.fhwa.dot.gov/>
 - **Sign and Poster Guidelines for the Forest Service**
https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3810021.pdf
- B.** Before you dig contact MISS DIG - IT IS THE LAW! <http://www.missdig.org/>



MISS DIG
PUBLIC ACT 174 OF 2013
Effective April 1, 2014

“UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT”

Requires anyone who engages in or is responsible for the planning or performance of any type of excavation to provide advance notice of this work of at least three full business days, but not more than 14 days

MISS DIG: Dial **811** OR **800-482-7171** OR www.missdig.net

Call Center OPEN 24 hours a day, 365 days a year.

- Utilize the **Remote Ticket Entry** -place as many tickets as needed without being told that there is a limit on new locate requests of 3 per call.
- **To place tickets using Remote Ticket Entry**, you must attend a 90 minute online training session.

Michigan Motorized Trail Maintenance and Signing Handbook

GENERAL GUIDELINES (CONTINUED)

- C. All trail signs shall be reflective.
- D. Signs that are located on an improved shared use trail may use metal signs with reflective lettering. Signs will be available at regional offices as needed.
- E. All trail signs shall be placed on wooden posts no larger than 4 x 4 inches, flexible composite type posts or "yielding" type metal posts as defined in the MUTCD. Posts shall be appropriate for sign holding purposes. Signs that are being replaced on an improved shared use non-motorized/snowmobile trail shall use the same type of post that previously existed.
- F. All regulatory and warning signs shall have a minimum size of 18 inches.
- G. All signs shall be placed on the right side of the trail. Exception to this guideline will be discussed in the handbook.
- H. The minimum sign height is 5 feet from the ground measured to the bottom of the sign (exception ORV reassurance markers).
 - o Unless specific exemption has been approved in writing, specifying the trail area and grant sponsor responsible, by the snowmobile grant sponsor's FRD Unit Contact and/or regional Trail Specialist. For example: In regions where snowfall is inconsistent, and posts are installed and taken down each season.
- I. Signs and posts should be placed no more than 3 to 5 feet from the right side of the trail or groomed surface.
- J. All signs placed on state funded trails shall be approved by the DNR.
- K. Signs provided by the DNR are to be used only on designated state funded trails and facilities.
- L. Signs not needed for the safe use of a trail during the non-snowmobiling season may be taken down at the end of each season. Signs may be left up at the discretion of the land owner. If a sign is removed the post shall also be removed.
- M. Avoid overuse of all signs.
- N. NO other signs are to be placed on the STOP sign. The only exceptions are for confidence markers approved by the DNR on the BACK of the post visible to oncoming traffic. Road identification signs may be placed on the front of the post below the stop sign.
- O. NO signs shall be placed in between the STOP AHEAD and STOP signs. The only exception would be the LARGE DIRECTIONAL ARROW sign between the STOP and STOP AHEAD Signs as needed, see illustration pages 20 and 31.

- P. If two signs are placed on one post, the sign with the message of highest importance shall be placed on top.
- Q. Brush shall be removed from around all signs to ensure clear visibility in all seasons and from all reasonable angles
- R. No signs shall be placed on utility poles. Object markers may be placed if within one foot of the groomed trail and with permission of the utility company.
- S. No signs shall be posted on trees on state trails.

SECTION II. MEANING OF STANDARD, GUIDANCE OPTION, AND SUPPORT

In this handbook sections dealing with design and application of traffic control devices the words “Standard,” “Guidance,” “Option,” and “Support” are used to describe specific conditions concerning the use of signs. To clarify the meanings intended in this handbook the following definitions are given and are based on the MUTCD.

Excerpt:

1. **Standard** - a statement of required, mandatory or specifically prohibitive practice regarding a traffic control device. All standards are labeled, and the text appears in bold type. The verb “shall” is typically used. Standards are sometimes modified by Options.
2. **Guidance** - a statement of recommended but not mandatory practice in typical situations. All Guidance statements are labeled, and the text appears in un-bold type. The verb “should” is typically used. Guidance statements are sometimes modified by Options.
3. **Option** - a statement of practice that is a permissive condition and carries no requirement or recommendation. Options may contain allowable modifications to a Standard or Guidance. All Option statements are labeled, and the text appears in un-bold type. The verb “may” is typically used.
4. **Support** - an informational statement that does not convey any degree of mandate, recommendation, authorization, prohibition or enforceable condition. Support statements are labeled, and the text appears in un-bold type. The verbs “shall,” “should,” and “may” are not used in Support statements.

This handbook describes the application of traffic control devices but shall not be a legal requirement of their installation.

A. TRAIL CLEARANCE STANDARDS

1. Standard:

- a. Trails/routes shall be cleared of brush, branches, and obstructions within dimensions according to the diagrams under illustrations at the back of this manual.
- b. ORV trails include three categories: *Motorcycle Trails* are to be cleared to 24 inches width at ground level and 40 inches at handlebar level up to 8 feet. *ATV Trails* are to be cleared to 50 inches width up to 8 feet. *ORV Routes* are to be cleared to 72 inches width up to 8 feet.
- c. Snowmobile trails are to be cleared to a minimum groomed surface width of 8 feet, with a width of 12 feet to 16 feet desirable and a minimum height of 12 feet above the expected groomed trail snow depth.
- d. Each program (ORV and Snowmobile Trail Grant Sponsors) is responsible for meeting the highest common denominator for Trail Clearance Standards.
- f. Clear trails of all trees, brush, stumps, and rocks within one foot of either side of the groomed surface. The trail sponsor is responsible for removing all obstructions located within the above clearance specifications. No brush or debris shall protrude into the trail so that they may cause injury. Trees, logs, foliage, branches, brush and other debris shall be pruned back flush to the main branch, trunk, or cut flush with ground level. Fallen trees and logs shall be removed to maintain specified trail width. Ground logs shall be cut "bucked" at 30 degrees, or as otherwise directed by the jurisdictional agency. All debris resulting from the clearing activity shall be removed from the trail and disposed of in a manner that will not cause harm. The trail sponsor shall brush all trail intersections to maintain clear view of all traffic control devices.

2. Guidance:

Cut branches flush with the trunk or main branch as not to leave projecting pickets.

3. Support:

- a. Personal Protective Equipment (PPE) is recommended when operating equipment.
- b. Cutting during dormant season and disinfecting tools for reducing the spread of invasive species is recommended.

SECTION III. AUTHORIZED TRAIL SIGNS

A. TRAIL REASSURANCE MARKERS

1. Support:

Trail reassurance markers are essential to identify designated state motorized trail facilities.

2. Guidance:

- a. No signs shall be posted on trees on state trails.
- b. When ORV trails, routes, and Snowmobile trails are combined, confidence markers for each will be posted at regular spacing intervals and appropriately on directional arrows. Snowmobile will be above ORV on multi-use trails.
- c. Trail reassurance markers and travel management signs should be used to designate all state funded motorized trail facilities. All trail reassurance markers and travel management signs should be installed on wooden posts not larger than 4 x 4 inches or on approved flexible type composite posts.
- d. Combination Snowmobile and ORV routes shall utilize plastic backed reassurance markers placed under snowmobile reassurance marker and stand-alone ORV trail and routes shall utilize decals on composite posts as provided by the DNR.
- e. All trailheads should have travel management signs clearly displayed and follow the responsible agencies manual direction on proper wording, icons, abbreviations, and layout/design.

B. SNOWMOBILE TRAIL REASSURANCE MARKERS



1. Standard:

Snowmobile trail reassurance markers are 9 x 7 inches, reflectorized orange diamonds. A diamond marker is used to reassure the snowmobiler that they are on a designated snowmobile trail or community snowmobile route.

2. Guidance:

Snowmobile trail reassurance markers should be placed at intervals of 1/4 to 1/2 mile along the trail, except on multi-use linear trails where they can be placed at 1/2 mile intervals. On improved multi-use non-motorized trails, it is suggested that the markers be co-located on the existing mile marker posts (under the mile number)

3. Option:

Snowmobile trail reassurance markers may be placed at closer intervals on both sides of the trail when entering, leaving or crossing open areas or farm fields to identify a clear line-of-sight trail corridor.

C. SNOWMOBILE TRAIL NUMBER MARKERS



1. **Standard:**

Snowmobile trail number markers are 9 x 7 inches, reflectorized orange diamonds with black trail numbers. This marker is used to inform the snowmobiler of the specific trail they are on.

2. **Guidance:**

Snowmobile trail number markers should be spaced at approximate two-mile intervals along the trail. The snowmobile trail number markers should correspond to maps showing the same trail numbers. This marker should also be used at all trail junctions and intersections and should be posted within a clear sight distance from the junction or intersection.



D. SNOWMOBILE TRAIL 'STAY RIGHT' MARKERS

1. **Standard:**

a. Snowmobile trail STAY RIGHT markers are 9 x 7 inches, reflectorized orange diamonds with black lettering.

b. This marker is used to remind the snowmobiler to ride on the right side of the trail to avoid oncoming traffic.

c. Grant sponsor clubs may use the STAY RIGHT markers more often in areas where blind corners and hills are more prevalent.

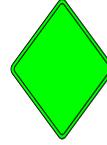
2. **Guidance:**

a. Snowmobile trail STAY RIGHT markers should be spaced at approximate two-mile intervals along the trail.

b. The snowmobile trail STAY RIGHT markers should be used at trail junctions and intersections and should be posted within a clear sight distance from the junction or intersection.

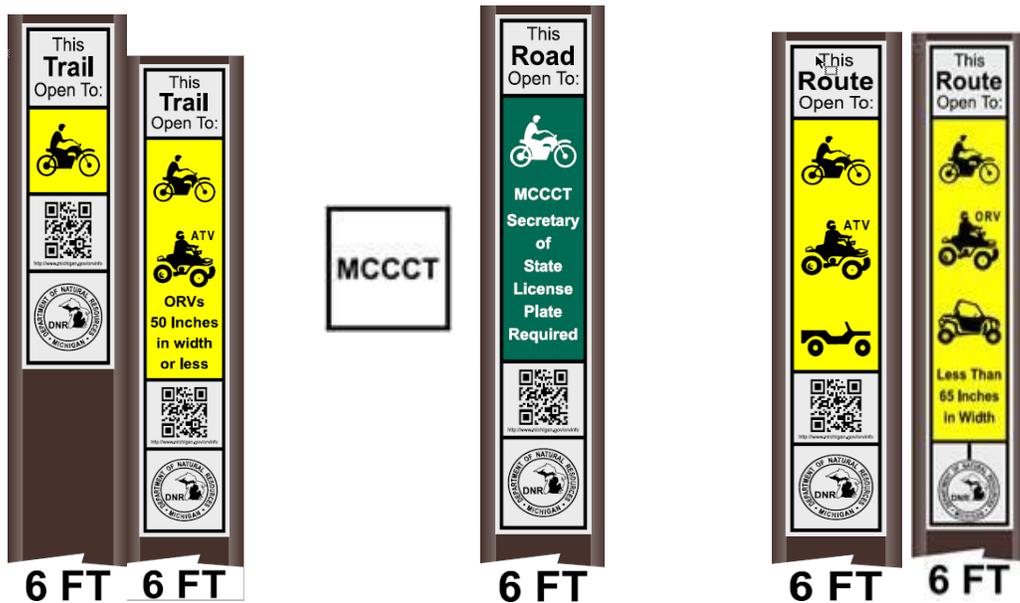
c. The markers may also be used at trailhead and warming shelter kiosks or displays, and where highly visible to the riding public.

E. SNOWMOBILE COMMUNITY ROUTE MARKERS



1. **Standard:**
Snowmobile community route markers are 5 x 7 inches, reflectorized green diamonds with white borders. This marker is used to inform the snowmobiler of local snowmobile routes within a community.
2. **Guidance:**
Snowmobile community route markers should only be used within the limits of cities, towns, and villages to designate locally approved community snowmobile routes

F. OFF-ROAD-VEHICLE (ORV) TRAIL AND ROUTE REASSURANCE MARKERS



1. **Standard:**
 - a. ORV trail and route reassurance marker icons shall be 3 x 3 inches, displayed vertically at various lengths, reflective black on yellow using federal recreational symbols.
 - b. To show the travel modes allowed, the words “Open To” shall
 - c. be placed above the appropriate recreational symbol or combination of symbols.
 - d. ORV trail and route reassurance markers shall be placed on the same sign post as snowmobile trail reassurance markers on state trails designated for both motorized trail uses. The snowmobile trail reassurance marker shall be placed above the ORV trail or route reassurance marker for shared trails.
2. **Guidance:**
 - a. ORV trail reassurance markers should be placed at intervals of 1/4 mile along the trail or route.
 - b. They should also be placed immediately beyond points of intersection with roads or other trails, within a clear sight distance from the intersection or point where the ORV operator is expected to stop.

REASSURANCE MARKERS (CONTINUED)

3. **Options:**
In dense woods ORV trails may require more frequent line-of-sight reassurance marking interval.

(SPECIFICATIONS: From left to right in illustration on previous page (12))

G. MOTORCYCLE TRAIL REASSURANCE MARKERS

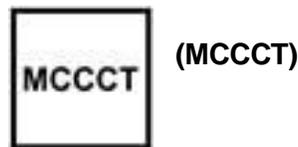
1. **Standard:**
This sign shall be posted on designated state trails open to motorcycle travel where secretary of state license is not required.
2. **Guidance:**
Mark trails at 1/4-mile intervals or 0.1-mile intervals in dense cover areas or as recommended by DNR.

H. MOTORCYCLE/ORV TRAIL REASSURANCE MARKERS

1. **Standard:**
This sign shall be posted on designated state trails open to both motorcycle and ATV travel.
2. **Guidance:**
 - e. Mark trails at 1/4-mile intervals or 0.1-mile intervals in dense cover areas or as recommended by DNR.
 - f. This sign shall be posted on designated state forest roads or other road open to ORVs of all sizes including but not limited to trucks, side-by-side utility vehicles (UTV), motorcycles, and ATVs.
3. **Option:**
Mark routes at 1/4-mile intervals, however; on railroad grades, reassurance markers may be placed at 1/2 mile intervals.

I. MICHIGAN CROSS COUNTRY CYCLE TRAIL

J. RV ROUTE REASSURANCE MARKERS



1. **Standard:**
 - g. This sign shall be used in conjunction of other posted ORV reassurance markers on a state designated motorcycle/ATV route.
 - h. Place stickers where needed over the QR code or under DNR or USFS logo on composite post to assure long distance riders that they are on the MCCCT.
 - i. This sign shall be posted on state designated county roads or other roads where a Secretary of State license is required.
2. **Option:**
On designated ORV routes located on roads, reassurance markers may be placed at intervals of 1/2 mile along the Cycle Touring route.

SECTION IV. REGULATORY SIGNS

A. REGULATORY GUIDELINES

1. Standard:

- a. Regulatory signs shall be used to inform trail users of selected traffic laws or regulations and indicate the applicability of the legal requirements.
- b. Regulatory signs shall be installed at or near where the regulations apply.
- c. The signs shall clearly indicate the requirements imposed by the regulations and shall be designed and installed to provide adequate visibility and legibility to obtain compliance.

B. STOP SIGN

Stop signs are intended for use where trail traffic is required to stop.



1. Standard:

- a. Stop signs shall be placed at all trail intersections with improved state roads, county roads, plowed roads or other locations that warrant stopping.
- b. Stop signs shall be placed only on the RIGHT side of the trail.
- c. NO other signs are to be placed on the STOP sign. The only exceptions are for confidence markers approved by the DNR on the BACK of the post visible to oncoming traffic. Road identification signs may be placed on the front of the post below the stop sign.
- d. Stop signs should be placed as close as possible to the intended stopping point.

2. Option:

- a. Larger stop signs may be used.
- b. Stop signs may be placed on both the right and left side of the trail, by exception for added emphasis. Exception to be approved by DNR.
- c. Stop ahead signs may be used temporarily in an emergency situation where needed to inform riders of an upcoming temporary obstacle, i.e., washout, accident on trail, or large trail obstruction has occurred.
- d. Diligent monitoring will be required, and signs removed when emergency situation is corrected.

REGULATORY SIGNS (CONTINUED)

C. YIELD SIGN

Yield Signs should be used where trail traffic is required to yield to cross traffic.



1. **Standard:**

Yield signs shall be used where trail traffic should be cautioned to slow down and be prepared to stop.

2. **Guidance:**

If used, yield signs should be used where cross traffic is present and a stop sign is not warranted

3. **Option:**

- a. Larger yield signs may be used.
- b. Yield signs may be used on ORV trails where they cross forest roads that have minimal use with approval of the DNR.
- c. Yield signs may be used on heavily used driveways with approval of the DNR.
- d. In instances where there are multiple driveways within a relatively short distance, the Private Drives Ahead sign should be used in conjunction with a Yield sign.

4. **Support:**

- a. The YIELD sign assigns right-of-way to traffic on certain approaches to an intersection.
- b. Vehicles controlled by a YIELD sign need to slow down or stop when necessary to avoid interfering with conflicting traffic

SECTION V. REGULATORY/SELECTIVE EXCLUSION SIGNS



Regulatory and selective exclusion signs convey to the trail user specific restrictions on the trail, road or support facilities such as trailheads. Selective exclusion signs are typically 12 x 18 inches, reflective white signs with black lettering or symbols, or recreation symbol with red slash. Exception: 6 x 18-inch ORV selective exclusion signs may be used.

1. **Support:**
The figures above illustrate some examples of the use of the word text and prohibitive slashes.
2. **Standard:**
Regulatory and Selective Exclusion signs shall be used along or adjacent to the trail or road where there is a need to restrict use. Where it is necessary to indicate a restriction, word text or a red diagonal slash shall be used to indicate that an activity is prohibited.

A. STAY ON TRAIL SIGN

If used, Stay-on-Trail signs should be posted on designated state trails where there is demonstrated evidence of off-trail operation by motorized vehicles.



B. PRIVATE PROPERTY NO WHEELED VEHICLES SIGN

If needed, this sign should be posted on designated state snowmobile trails located on private property where public ORV operation is prohibited.

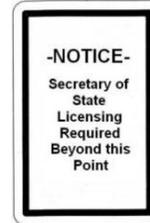


SELECTIVE EXCLUSION SIGNS (CONTINUED)



C. SNOWMOBILE PROHIBITION SIGN

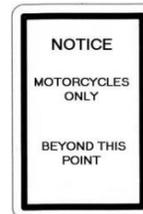
If needed, this sign should be posted in locations where snowmobile operation is prohibited.



B. SECRETARY OF STATE LICENSING NOTICE SIGN

Standard:

- a. This sign shall be posted to emphasize when a street license from the Secretary of State is required.
- b. This sign shall be posted just prior to the point where the Michigan Cross County Cycle Trail (MCCCT) enters a public road upon which vehicular use requires such licensing.



E. MOTORCYCLE ONLY NOTICE SIGN

Guidance:

- a. This sign may be posted to emphasize state trails designated and maintained for motorcycle use only.
- b. If used, this sign should be posted at trailheads and road intersections as directed by the DNR.



F. TRAIL CLOSED SIGN

1. **Standard:**

This sign shall be posted on designated state trails that are temporarily closed to public use.

2. **Guidance:**

If used, these signs will be furnished by the DNR.



G. TRAIL CLOSED TO WHEELED MOTORIZED VEHICLES AHEAD SIGN

1. **Standard:**
This sign should be placed on state or federal land prior to the point where a designated state snowmobile trail enters private property where wheeled motorized vehicle use is prohibited.
2. **Guidance:**
If used, it is preferable to install this sign at an intersection where the trail user can turn or turn around prior to entering the private property where wheeled motorized use is prohibited.



H. NO ORV SIGN

1. **Standard:**
If needed, these signs should be posted in locations where ORV operation is prohibited.
2. **Support:**
Examples of where this sign may be used include ORV damage restoration sites or nonmotorized trails where illegal ORV use is a continuous problem.



I. NO WHEELED MOTOR VEHICLES SIGN

1. **Standard:**
On all snowmobile/non-motorized trail corridors which prohibit wheeled motorized use, this sign shall be placed on the back side of every stop sign.
2. **Guidance:**
If used, these signs shall be approved and furnished by the DNR.

SECTION VI. WARNING SIGNS

1. **Support:**
 - a. Warning signs call attention to unexpected conditions on or adjacent to a trail, and to situations that might not be readily apparent to trail users.
 - b. Warning signs alert trail users to conditions that might call for a reduction of speed or an action in the interest of safety.
2. **Guidance:**
 - b. The use of warning signs should be kept to a minimum as the unnecessary use of warning signs tends to breed disrespect for all signs.
 - c. In situations where the condition or activity is seasonal or temporary, the warning sign should be removed or covered when the condition or activity does not exist.
3. **Option**

When used, warning signs should be placed to provide the trail user sufficient time to react to a hazard or unexpected condition.

A. STOP AHEAD SIGN



1. **Standard:**
 - a. Stop Ahead signs shall be installed approximately 350 feet in advance of all Stop signs on all snowmobile trails and combined use ORV routes
 - b. Stop Ahead signs shall be placed on an approach to a Stop sign that is not visible for a sufficient distance to permit the trail user to respond to the stop sign on designated state ORV trails.
 - c. A STOP sign shall follow ALL Stop Ahead signs, but all STOP signs may not require a Stop Ahead
 - d. Permanent obstructions causing limited visibility might include trail alignment or structures. Intermittent obstructions might include foliage and vegetation.

STOP AHEAD SIGN (continued...)

1. **Guidance:**
For permanent obstructions, consult with DNR.
2. **Option:**
 - a. On ORV trails and routes, Stop Ahead signs may be used only in special cases for additional emphasis before a Stop sign, even when the visibility distance to the stop sign is satisfactory.
 - b. Stop Ahead sign may be used above the Trail-Railroad Grade Crossing Advance Warning signs when STOP is being used at the crossing.
 - c. Stop Ahead may be used above Sharp Turn, CHAS and intersection signs as long as the lower sign remains at 5'
 - d. Stop Ahead signs may be used temporarily in an emergency situation where needed to inform riders of an upcoming temporary obstacle, i.e., washout, accident on trail, or large trail obstruction has occurred.
 - e. Diligent monitoring will be required, and signs removed when emergency situation is corrected.



B. OBJECT/HAZARD MARKER

1. Object markers may be used to mark obstructions within or adjacent to the trail. Object markers are 6 x 24 inches, reflectorized yellow signs with black diagonal markings.
2. **Support:**
Object markers with stripes that begin at the upper right side and slope downward to the lower left side are designated as right object markers. Object markers with stripes that begin at the upper left side and slope downward to the lower right side are designated as left object markers.
3. **Standard:**
 - a. Object markers shall be used to mark the four (4) corners of a bridge located on designated trails. The inside edge of the marker shall be in line with the inner edge of the object, and the black diagonals shall always slope down and inward towards the trail.
 - b. When a potential hazard is located on one side of the trail, an object marker shall be placed on each side of the hazard with the black diagonals sloping down and inward towards the trail.
4. **Option:**
Object markers may also be used to mark the ends of culverts, culvert headwalls, utility poles and guide wires or other obstructions within one foot of the trail.

WARNING SIGNS (continued)

C. SHARP TURN ARROW (LEFT & RIGHT) SIGNS



1. **Standard:**
 - a. Sharp Turn Arrow (Left and Right) signs shall be used on snowmobile trails and combined use ORV routes to give notice of changes in horizontal trail alignment of 90 degrees or greater.
 - b. These signs are not used to sign curves that may reach 90 degrees or greater over a longer distance.
 - c. The key in determining whether a curve or turn is that a turn is an immediate change of direction.
 - d. The Sharp Turn Arrow (Left and Right) sign shall be installed approximately 350 feet in advance of all 90 degree or greater turns on snowmobile trails.
 - e. The Sharp Turn Arrow (Left and Right) sign shall be used in conjunction with the One-Direction (Left and Right) sign.
 - f. The Sharp Turn Arrow (Left and Right) shall not be used on corners or sweeping curves of less than 90 degrees.
2. **Guidance:**
 - a. If used, Sharp Turn Arrow sign should be placed approximately 350 feet in advance of the turn and be visible for a sufficient distance to provide the snowmobile trail user with adequate time to react to the change in alignment.
 - b. Snowmobile trail reassurance markers should also be placed within line of sight upon completion of the turn.

D. COMBINATION HORIZONTAL ALIGNMENT/INTERSECTION SIGN (LEFT & RIGHT) "CHAS" SIGN



1. **Standard:**
 - a. Combination Horizontal Alignment/Intersection (Left and Right) signs may be used on snowmobile trails and combined use ORV routes to give notice of changes in horizontal trail alignment less than 90 degrees where an intersection occurs within or immediately adjacent to a turn
 - b. . Examples include where a snowmobile trail exits a public roadway, power line right-of-way or other travel corridor open to vehicular traffic.
 - c. The Combination Horizontal Alignment/Intersection (Left and Right) sign shall be installed approximately 350 feet in advance of all turns where an intersection occurs within or immediately adjacent to a turn on snowmobile trails.

COMBINATION HORIZONTAL ALIGNMENT/INTERSECTION SIGN (CONTINUED)

d. The Combination Horizontal Alignment/Intersection (Left and Right) sign shall be used in conjunction with the One-Direction (Left and Right) sign.

2. **Guidance:**

- a. If used, the Combination Horizontal Alignment/Intersection (Left and Right) sign should be placed where an intersection occurs within or immediately adjacent to a turn.
- b. It should be visible for a sufficient distance to provide the snowmobile trail user with adequate time to react to the change in alignment.
- c. Snowmobile trail reassurance markers should be placed within line of sight upon completion of the turn.

E. ONE DIRECTION LARGE ARROW SIGNS (LEFT & RIGHT)



1. **Standard:**

a. One-Direction Large Arrow signs (Left and Right) shall be used on snowmobile trails and combined use ORV routes to give notice of changes in horizontal trail alignment of 90 degrees or greater.

b. One-Direction Large Arrow signs are 10 x 20 inches, yellow reflective sign with black arrow and border.

c. The One-Direction Large Arrow sign may be a horizontal rectangle with an arrow pointing to the left or right.

d. The One-Direction Large Arrow sign shall be installed on the outside of a turn in line with and at approximately a right angle to approaching traffic.

e. The One-Direction Large Arrow sign may be used in conjunction with the Turn Arrow (Left and Right) sign.

2. **Guidance:**

a. If used, the One-Direction Large Arrow sign should be visible for a sufficient distance to provide the snowmobile trail and/or ORV user with adequate time to react to the change in alignment.

b. The One Direction Large Arrow sign should be used in conjunction with Turn Arrow sign.

c. Snowmobile trail and/or ORV reassurance markers should also be placed within line of sight upon completion of the turn.

d. If used, the One-Direction Large Arrow sign should be rotated so that the arrow points in the appropriate direction, but NOT be posted upward or downward.

WARNING SIGNS (continued)

F. OFF ROAD VEHICLE (ORV) DIRECTIONAL GUIDE ARROW SIGN



1. **Standard:**

- a. This is an 8 x 8-inch reflectorized white sign with black arrow and border.
- b. This sign may be used to direct ORV riders at trail junctions, intersections, 90 degree turns, and trailheads.
- e. This sign may be labeled “ORV TRAIL,” “ORV ROUTE,” “CYCLE TRAIL,” or “MCCCT” according to which facility they apply.
- f. This label will be a 1 x 6-inch adhesive decal attached at the time of posting.
- g. Use of handwritten legends is NOT acceptable.
- h. The OFF-ROAD Vehicle (ORV) Directional Guide Arrow Sign shall be used on ORV 50” trails, motorcycle trails and some individual ORV routes.

2. **Guidance:**

- a. This sign may be used to direct ORV riders at trail junctions, intersections, turns, and trailheads.
- b. If used, ORV Directional Guide Arrow signs should be rotated so that the arrow points in the appropriate direction, generally NOT be posted upward or downward.
- c. ORV Directional Guide Arrow signs may only be used in the upward position when used with the 1X6 label at intersections.
- d. When trails, routes and/or MCCCT are combined, directional arrows should be posted in the following hierarchy:
 - i. Trail above Route,
and
 - ii. Route above MCCCT.

WARNING SIGNS (continued)

G. SINGLE SIDE INTERSECTION SIGN (RIGHT OR LEFT)



1. **Standard:**
 - a. This intersection sign should be used whenever there are designated snowmobile trails and combined use ORV route junctions from either the right or the left.
 - b. Single Side Intersection signs shall be placed approximately 350 feet in advance of all single side intersections on all designated snowmobile and combined use ORV routes.
2. **Guidance:**
 - a. A Snowmobile Trail Number Sign reassurance marker should be placed at all trail junctions and intersections and should be posted within a clear sight distance from the junction or intersection.
 - b. The Single Side Intersection sign should NOT be used when the designated snowmobile trail makes a T intersection with another trail or road, since a Stop and Stop Ahead sign would be used in this instance.
3. **Option:**
 - a. Congested area signs may be used at side trail intersections where traffic congestion warrants.
 - b. Snowmobile trail number markers may be placed on this sign to specify trail number direction.

H. CONGESTED AREA SIGN



1. **Standard:**

Congested area signs may be used on snowmobile trails and combined use ORV routes in areas that require special precautions on the part of trail users.
2. **Guidance:**

If used, congested area signs may be used in cities, villages, towns or other locations where the occurrence of vehicular traffic, and/or pedestrians warrant slowing motorized vehicles to slow down. Congested area signs may also be used at staging areas, trailheads or other congregation points where traffic congestion warrants.

WARNING SIGNS (continued)

I. TRAIL-RAILROAD GRADE CROSSING ADVANCE WARNING SIGN



1. **Standard:**
 - a. Trail-Railroad Grade Crossing Advance Warning signs is used on snowmobile trails and combined use ORV routes to give notice to all active railroad crossings.
 - b. Except as noted in the option, the Trail-Railroad Grade Crossing Advance Warning sign shall be placed approximately 350 feet in advance of every active trail-railroad grade crossing.
 - c. If the active trail-railroad grade crossing does not have any other warning device a Stop sign shall be placed at the crossing.
2. **Option:**
 - a. If the active trail-railroad grade crossing has standard “highway” warning lights and barricades or other traffic control device, the Trail-Railroad Grade Advance Warning sign may not be necessary.
 - b. STOP AHEAD sign may be used in conjunction with this sign underneath when STOP is being used at the crossing.



J. LOGGING AHEAD SIGN



1. **Standard:**

Logging ahead signs may be used on trails to give notice to trail users of active logging operations along or adjacent to the trail.
2. **Guidance:**
 - a. Logging ahead signs should be used whenever an active logging operation is being conducted along, adjacent to or which crosses a trail.
 - b. The sign should be placed at a reasonable distance in advance of the logging operation to allow trail user to react to conditions.

WARNING SIGNS (continued)

K. MIXED TRAFFIC SIGN



1. Standard

a. Mixed Traffic signs may be used where a state designated ORV trail or route share a road open to conventional highway traffic (i.e. where concurrent coincident use occurs simultaneously and is managed for mixed traffic).

b. Mixed Traffic signs are 24 x 24 inches with a yellow reflective background and black recreational symbol, lettering, and border.

c. Mixed Traffic signs shall be placed at the beginning of a road designated open to multiple modes of motorized travel.

L. PRIVATE DRIVE SIGN

M. PRIVATE DRIVES AHEAD SIGN

N. SUPPLEMENTAL PLAQUE



1. Standard:

Private Drive and Private Drives Ahead signs may be used to warn trail users where driveways cross snowmobile trails and combined use ORV routes.

2. Guidance:

a. If used, Private Drive and Private Drives Ahead signs should be placed at a reasonable distance (suggested 350 feet) in advance of a driveway crossing to allow trail users to react to conditions.

b. A Yield sign may be used at the individual crossing. However, in instances where there are multiple driveways within a relatively short distance, the Private Drives Ahead sign should be used in place of multiple Private Drive or Yield signs.

3. Option:

A supplemental plaque with legend NEXT XX MILES may be installed below a Private Drives Ahead sign.

WARNING SIGNS (continued)

O. WET AREA SIGN



Standard:

- a. This sign may be used in areas where low swampy areas adjacent to the trail do not freeze up.
- b. It should also be used in areas where early and late winter weather would cause wet holes or low spots on or adjacent to the trail.

P. NOTICE GROOMED SNOWMOBILE SEASON SIGN



This sign may be used at trailhead, trail entrance locations, trail junctions and intersections as a courtesy reminder to non-snowmobile traffic who may be entering the trail unaware that it is a designated seasonal snowmobile trail.

SECTION VII. GUIDE/INFORMATION SIGNS

Snowmobile and Combined Use (ORV) Trails and Routes

A. INFORMATION ARROW/GUIDE SIGN



1. Standard:

- a. This is a 10 x 20-inch reflectorized orange sign with black arrowhead.
- b. This sign may be used for directing users to cities, towns, villages, and other points of interest.
- c. The name of the city, town, village or point of interest and mileage shall be stenciled, adhesive labeled, or painted on the sign.
- d. Use of hand-written legends is NOT acceptable.
- e. Individual business names shall NOT be identified on this sign.

2. Guidance:

- a. If used, Information Arrow/Guide signs should be placed along the trail to inform trail users of destinations such as cities, towns, and villages.
- b. When applicable, Information Arrow/Guide signs should be used in conjunction with Service Information signs.
- c. Service information signs are not necessary if wayfinding signs are in a place on multiuse (motorized/non-motorized) linear trails.

B. SERVICE INFORMATION SIGNS



Standard:

- a. Standard recreation symbols may be used to show gas, food, and lodging locations.
- b. These signs shall be reflectorized blue with white lettering and border and shall be 12 x 12 inches.
- c. Since these signs are for the information and convenience of the trail user, they should be used in conjunction with the Information Arrow/Guide sign and/or ORV Directional Guide Arrow sign.
- d. Service information signs are not necessary if wayfinding signs are in a place on multiuse (motorized/non-motorized) linear trails.

GUIDE/INFORMATION SIGNS (CONTINUED)

C. ROAD IDENTIFICATION SIGN *(Not a required program sign.)*



1. Standard:

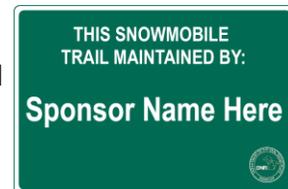
- a. Road Identification Signs may be used to identify roads at trail crossing points.
- b. This sign should be no larger than necessary for the road name or number but should not exceed 6 x 18 inches.
- c. The road name/number may be routed into wood or stenciled on sign approved sign backing.
- d. Use of handwritten legends is NOT acceptable.
- e. Due to variation in road names around the state, the DNR will not furnish these signs.
- f. Material for constructing these signs will be considered under special maintenance grant requests and funded on a case by case basis if funds are available.
- g. If needed the road name signs shall be replaced using the same existing sign format on the trail system.

2. Guidance:

- a. If used, these signs should be used to identify primary roads with regional significance. T
- b. The sign may be placed on the same post of a Stop sign, as long as it is posted either below the Stop sign or on the back side of the Stop sign.
- c. Road Identification signs may be placed on a separate post.

D. SNOWMOBILE/ORV TRAIL SPONSOR RECOGNITION SIGN

(Not a required program sign.)



Standard:

Trail Sponsor Recognition signs may be used on trails to acknowledge the trail sponsor responsible for maintaining the trail. These signs shall be reflectorized green with white lettering and border and shall be 12 x 18 inches.

Guidance:

If used, Trail Sponsor Recognition signs may be placed at trailheads, staging areas, and at locations along the trail where there is a change in trail maintainer responsibility.

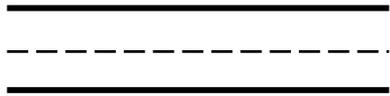
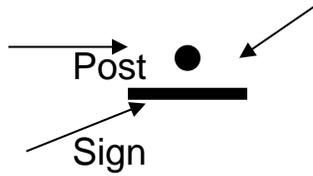
SECTION VIII. ILLUSTRATIONS

LEGEND

Type of sign and orientation



Example:



Plowed Road



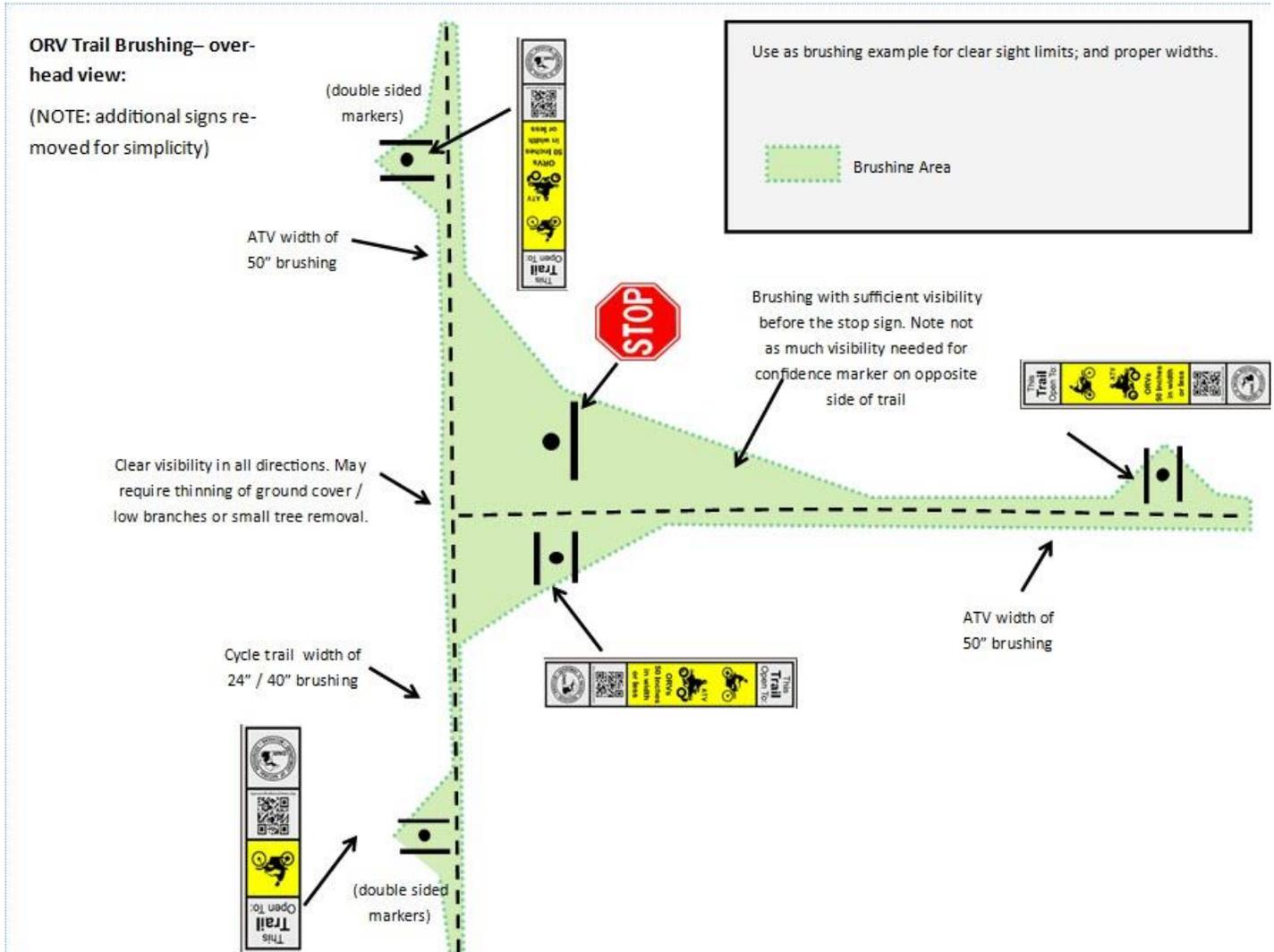
Snowmobile Trail or ORV Trail / Route.



Road or Power Line

Note: Drawings are not to scale.

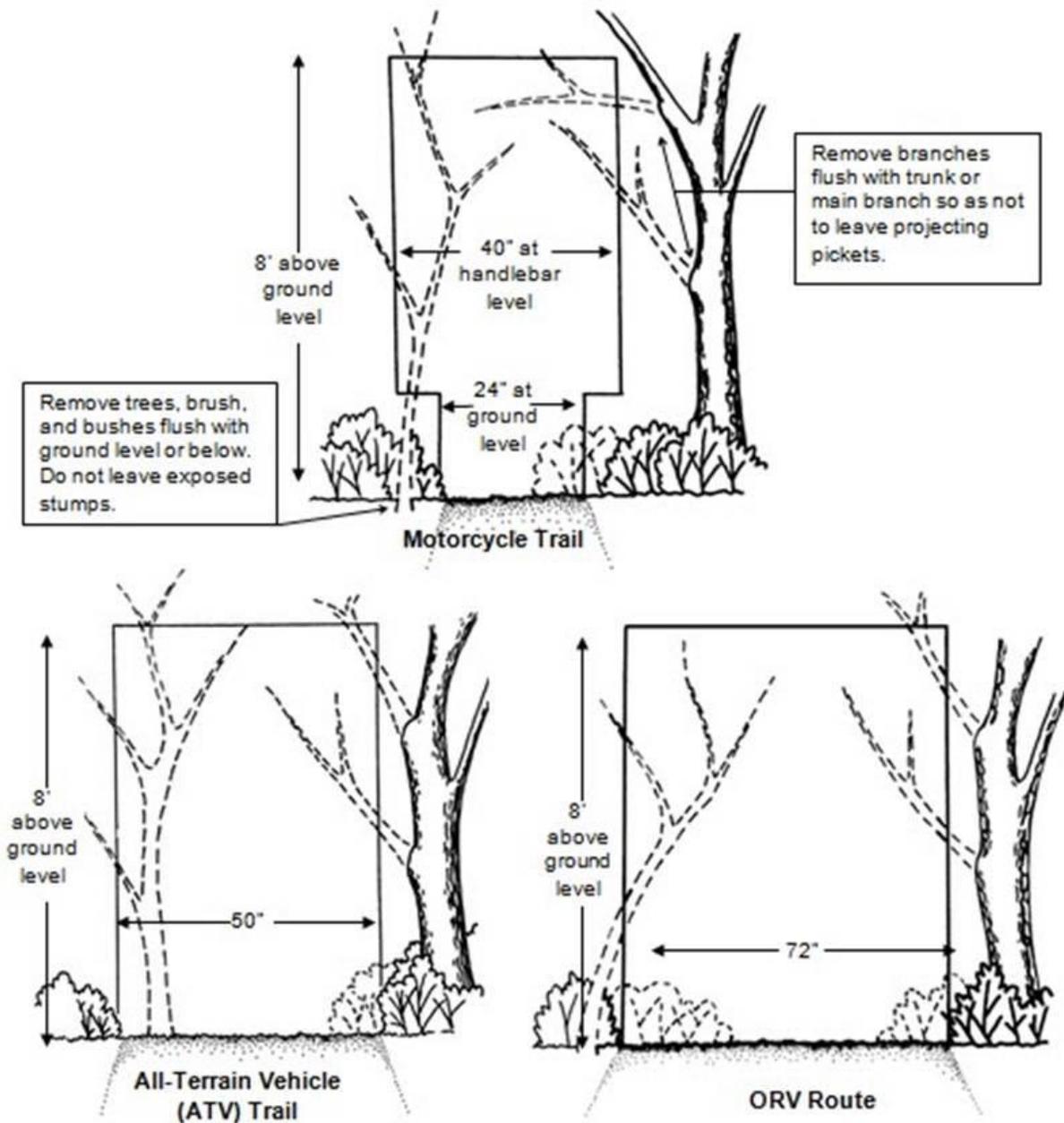
A. ORV TRAIL BRUSHING CYCLE TRAIL WIDTH & ATV WIDTH



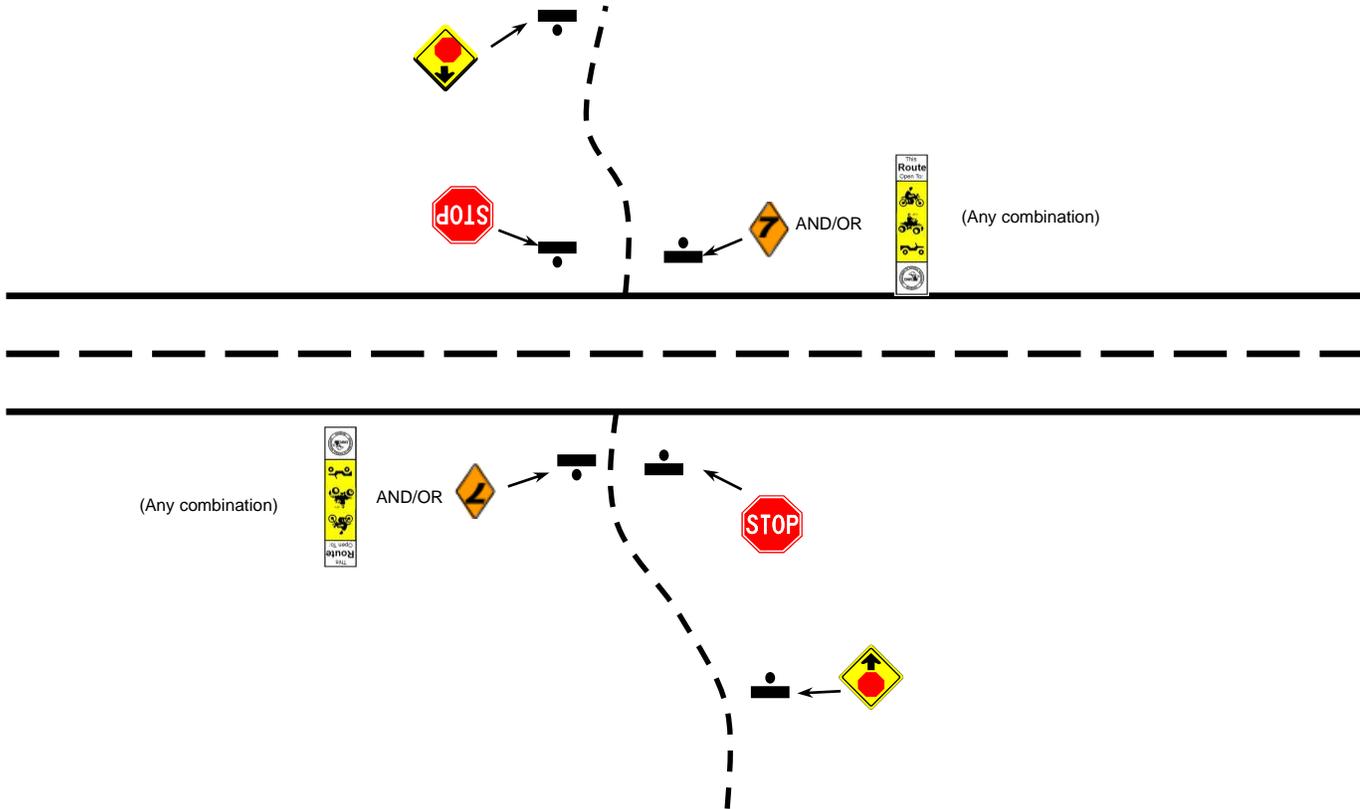
C. BRUSHING/TRAIL CLEARANCE

This illustration is in revision to include snowmobile trail designation. The new artwork will be included in the FY 2022 release of this manual.

1. Snowmobile trails are to be cleared to a minimum groomed surface width of 8 feet, with a width of 12 feet to 16 feet desirable and a minimum height of 12 feet above the expected groomed trail snow depth.
2. Each program (ORV and Snowmobile Trail Grant Sponsors) is responsible for meeting the highest common denominator for Trail Clearance Standards.



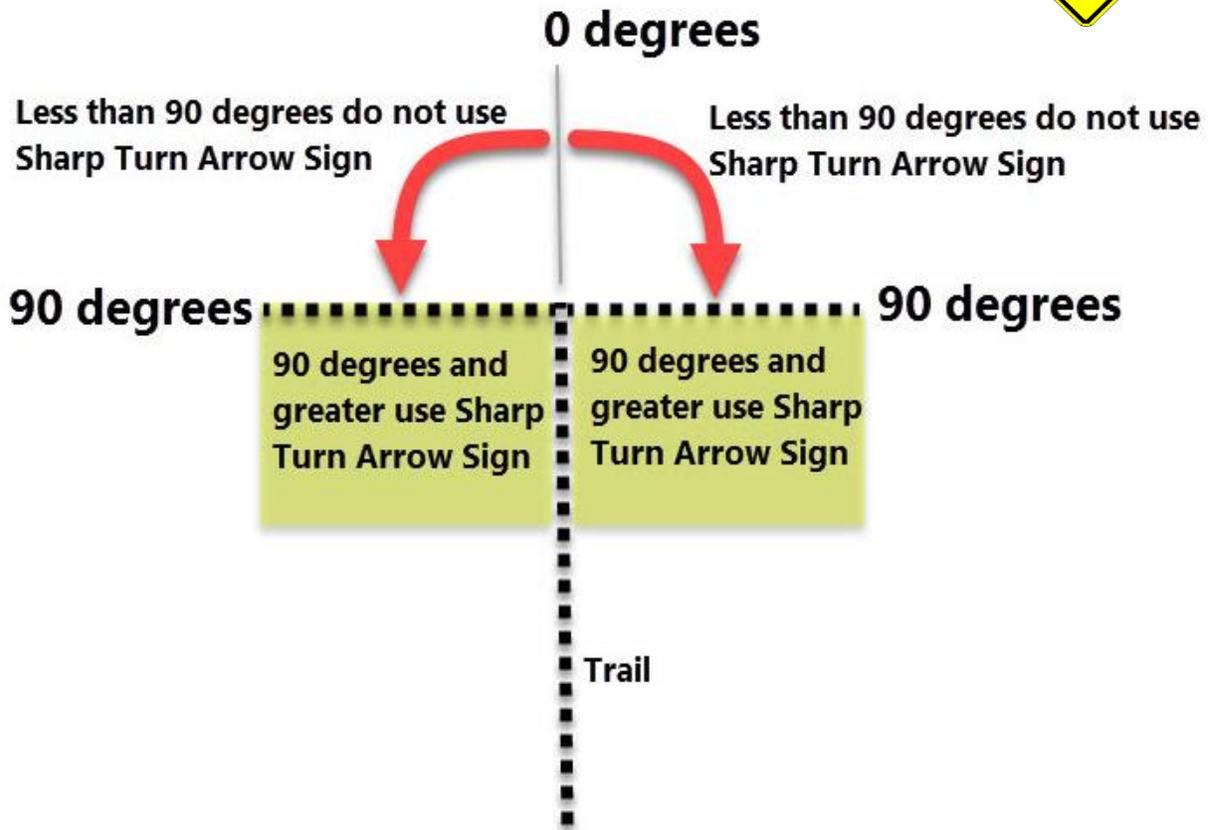
D. TYPICAL TRAIL/ROAD CROSSING



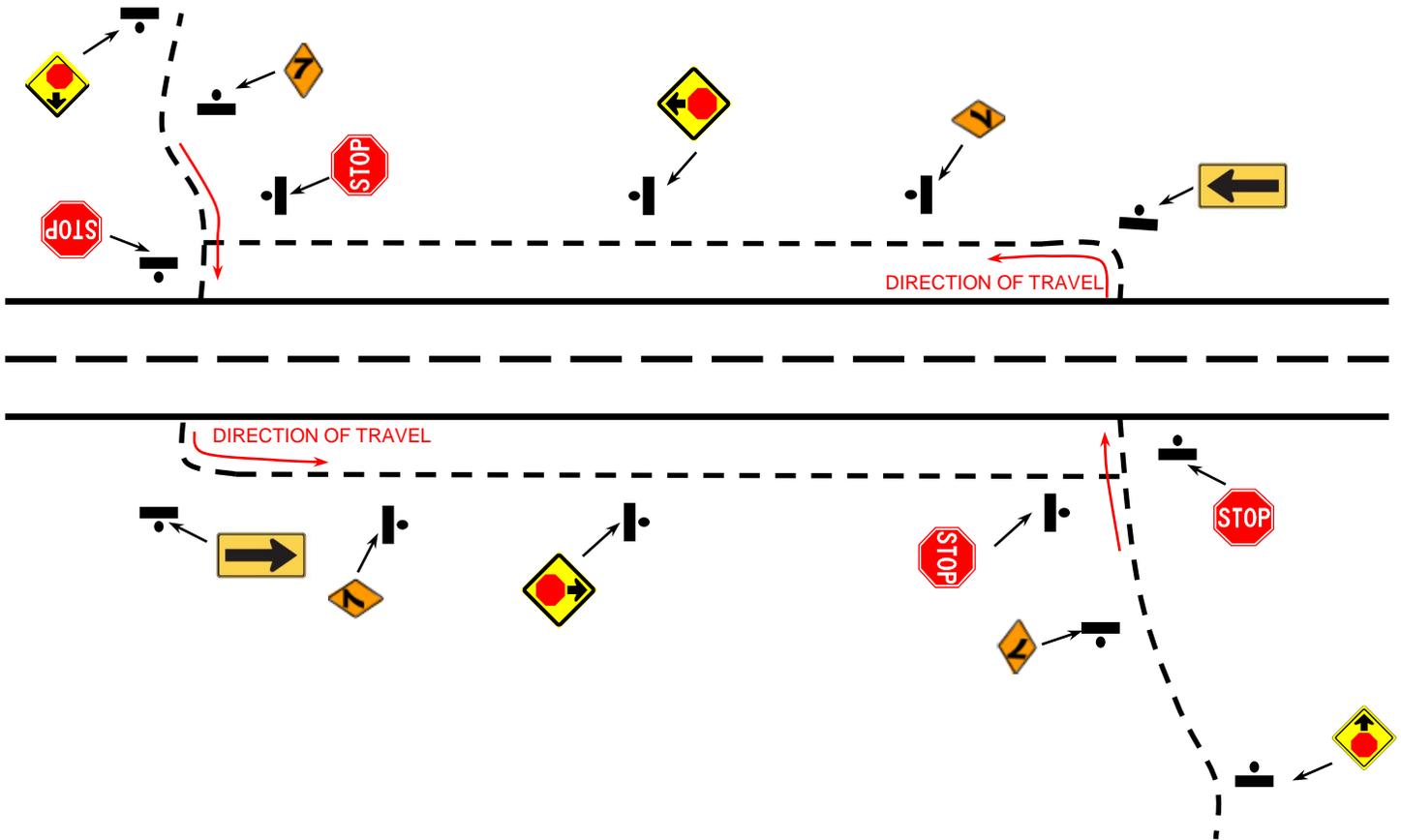
ROAD CROSSING:

Stop signs shall be placed at all trail intersections with improved state roads, county roads, plowed roads, and other locations that warrant stopping. On ORV trails and routes, Stop Ahead signs should be installed on an approach to a Stop sign that is not visible for a sufficient distance to permit the trail user to respond to the Stop sign. A Stop Ahead sign shall be placed approximately 350 feet in advance of all Stop signs on snowmobile trails and ORV routes. STOP signs shall be placed only on the right side of trail.

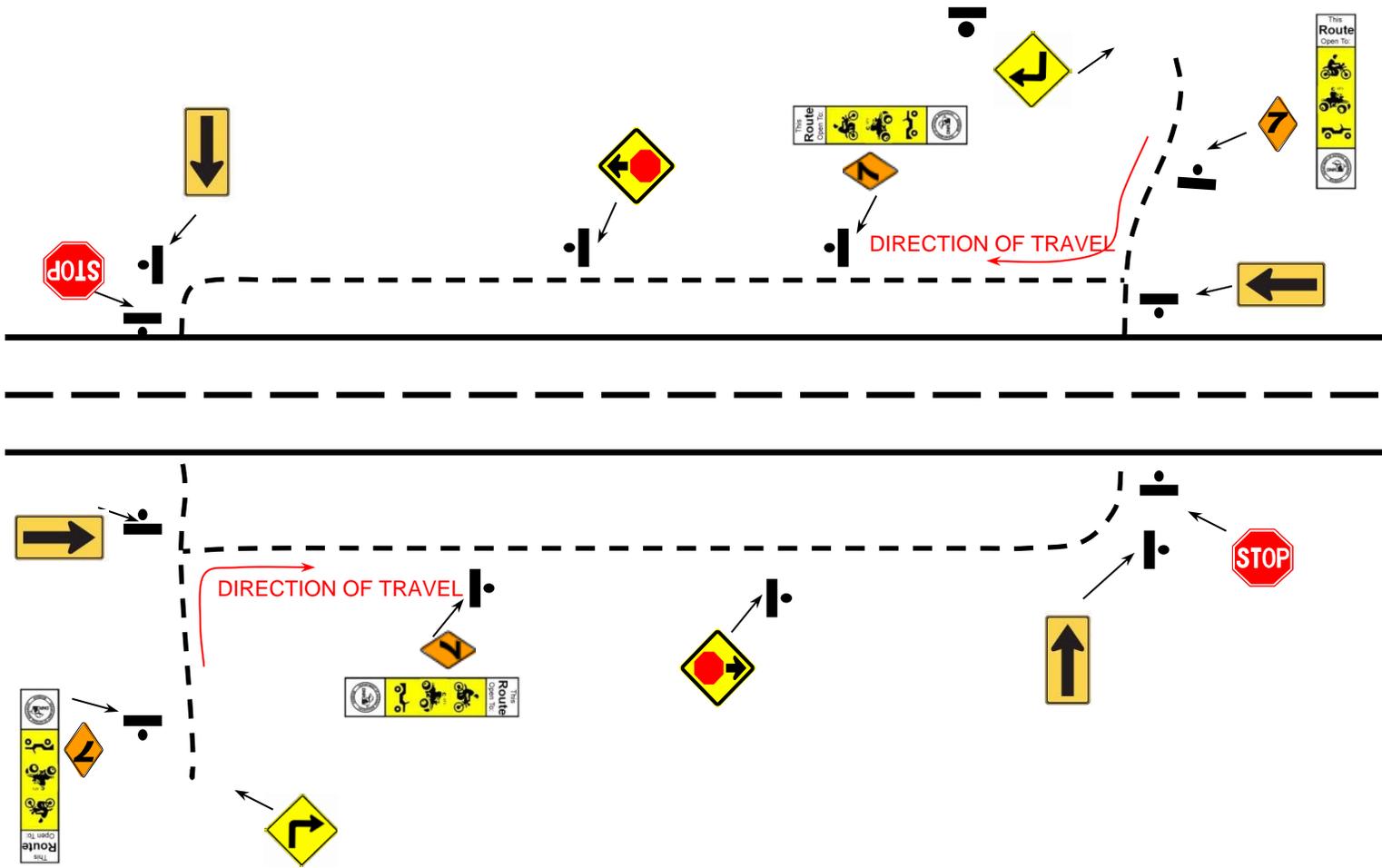
E. SHARP TURN ARROW SIGN (Left and Right)



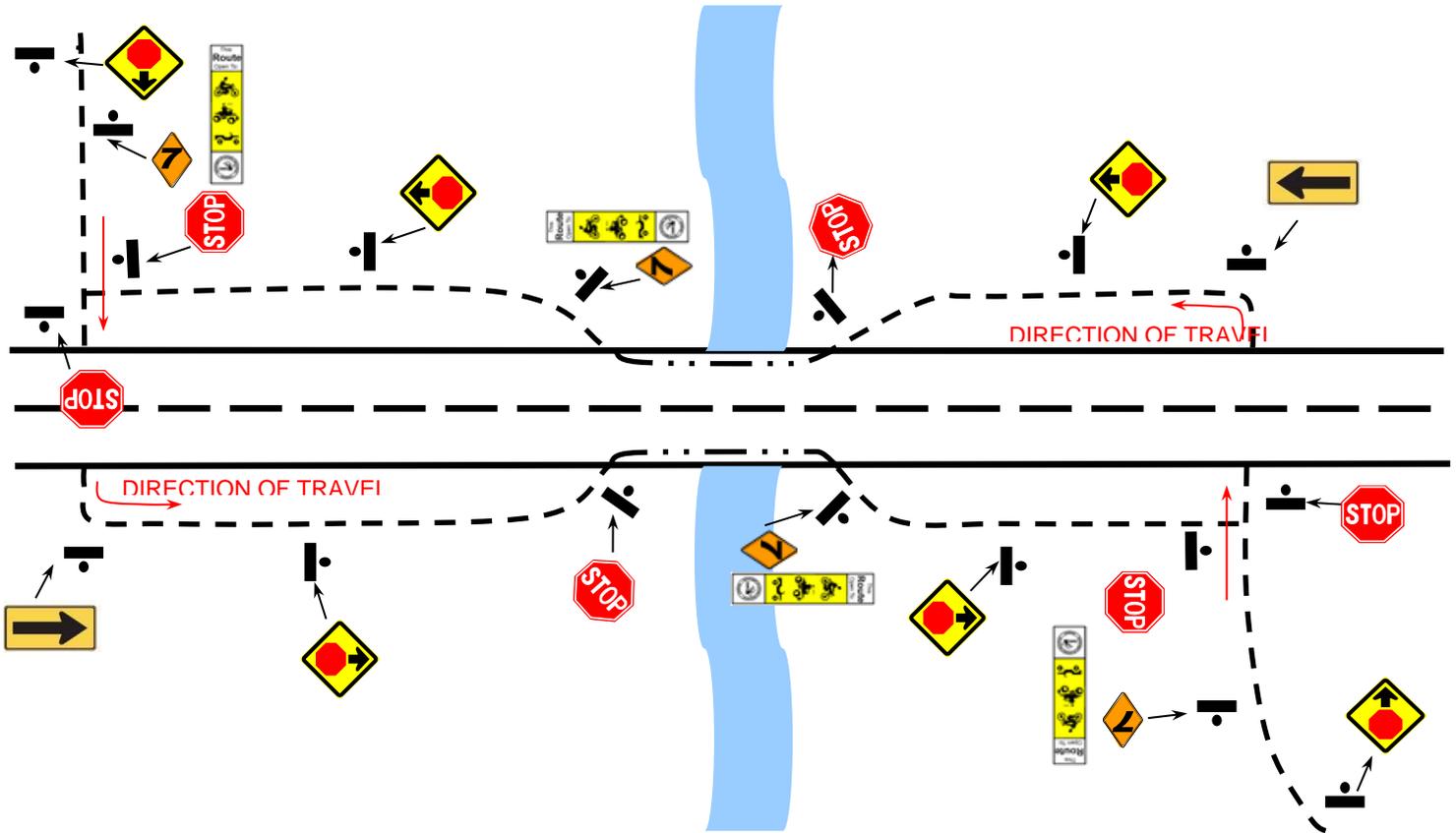
F. SNOWMOBILE TRAIL TRAVELING ADJACENT TO ROADWAY (DITCH RUNNING)



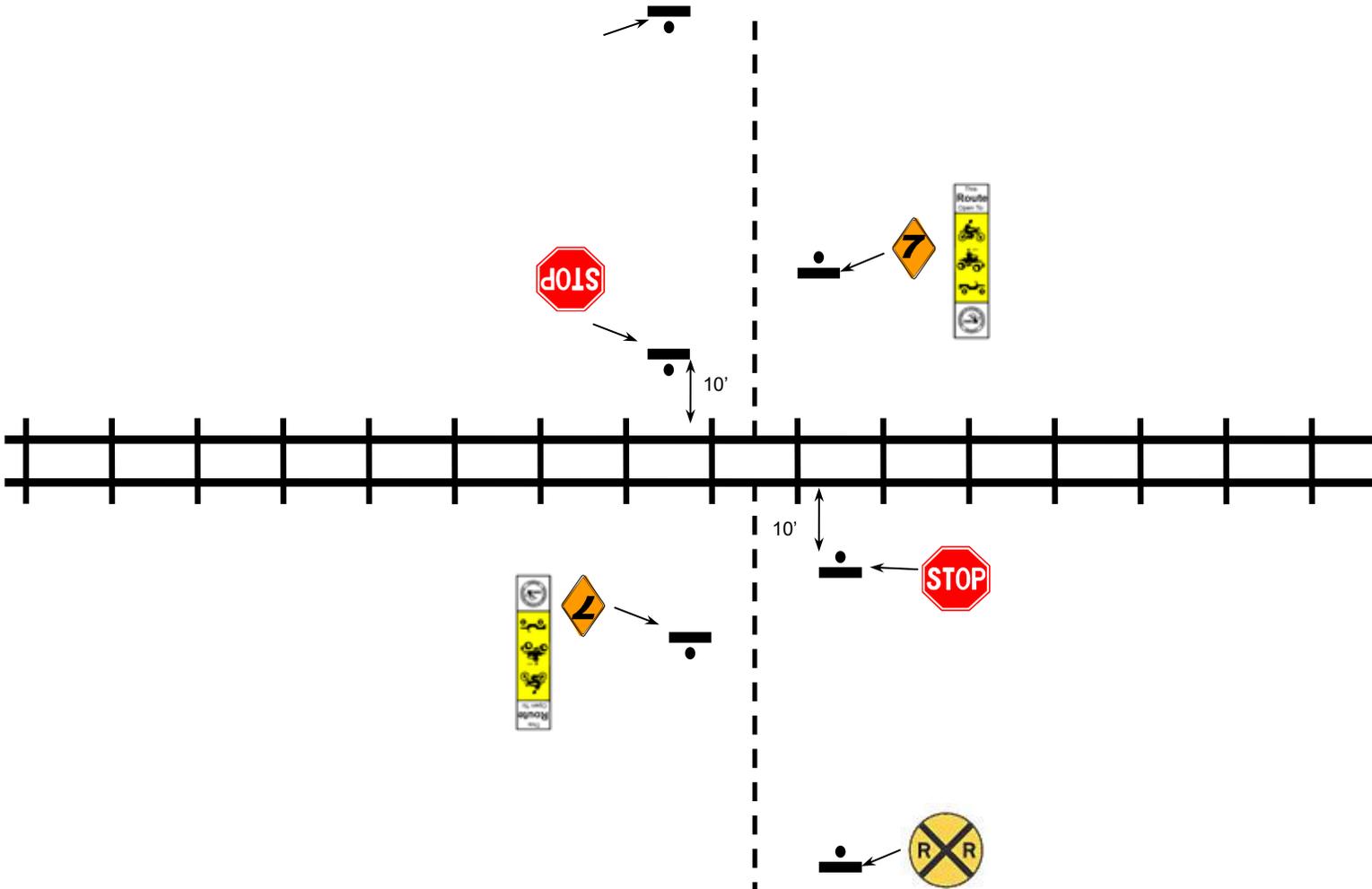
G. TRAIL ADJACENT TO ROADWAY



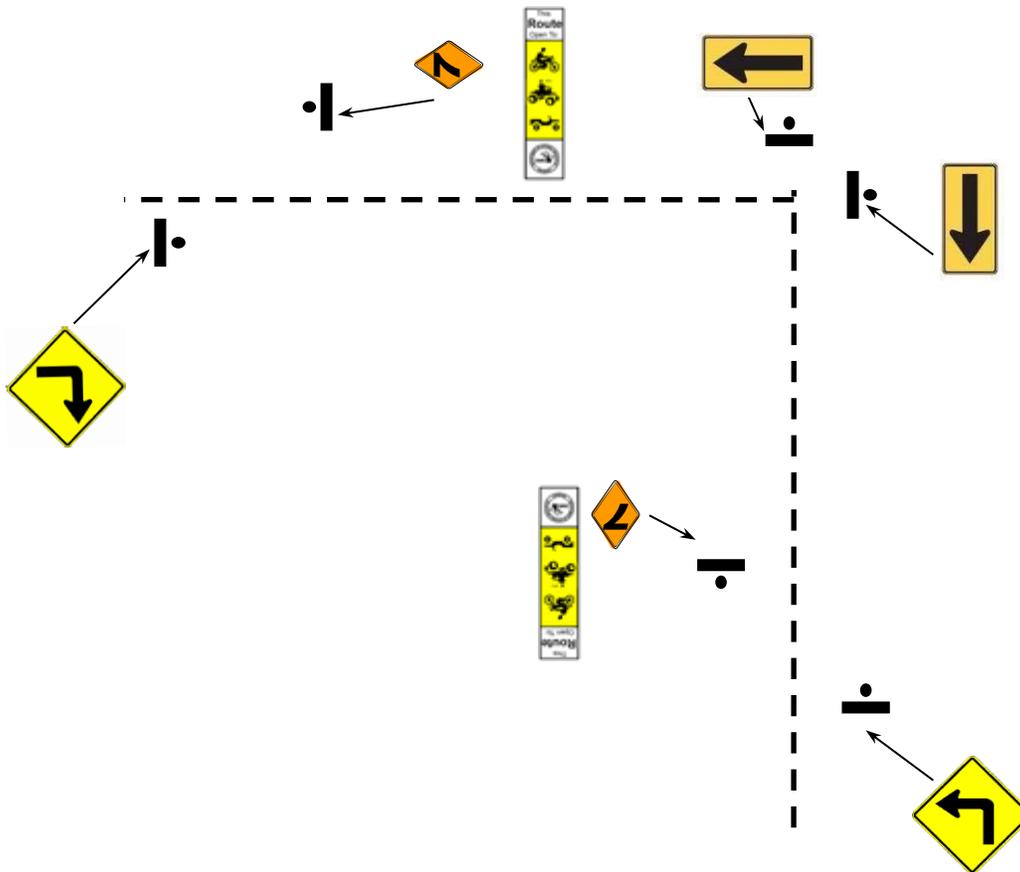
H. CROSSING EXISTING ROADWAY BRIDGE WITH DITCH RUNNING
*(RR GRADE CROSSING SIGNED SIMILARLY EXCEPT TRAIL-RAILROAD
GRADE ADVANCE WARNING SIGN IS USED INSTEAD OF STOP AHEAD
SIGN)*



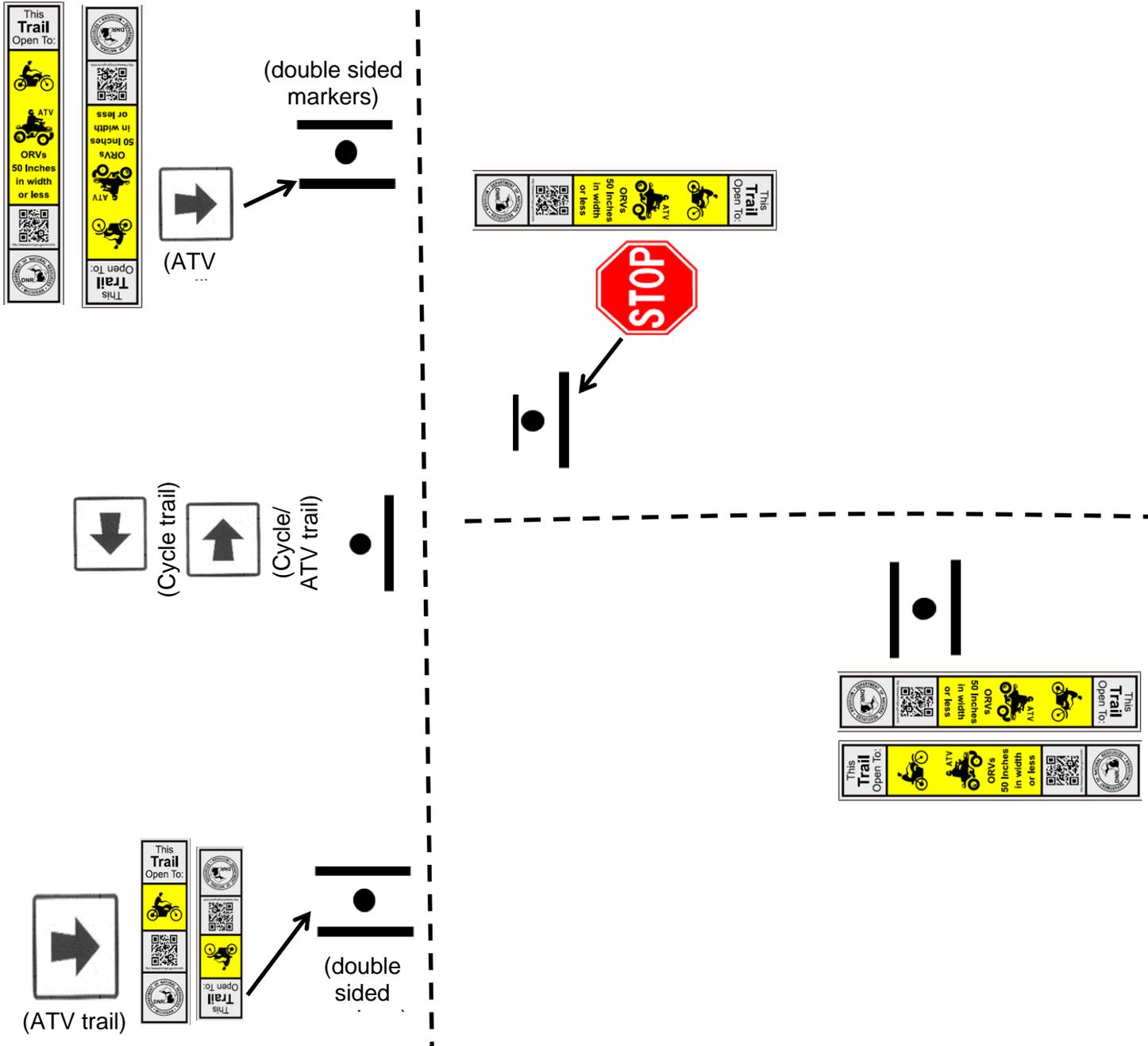
I. TRAIL APPROVED NON-ROADWAY RAILROAD CROSSING



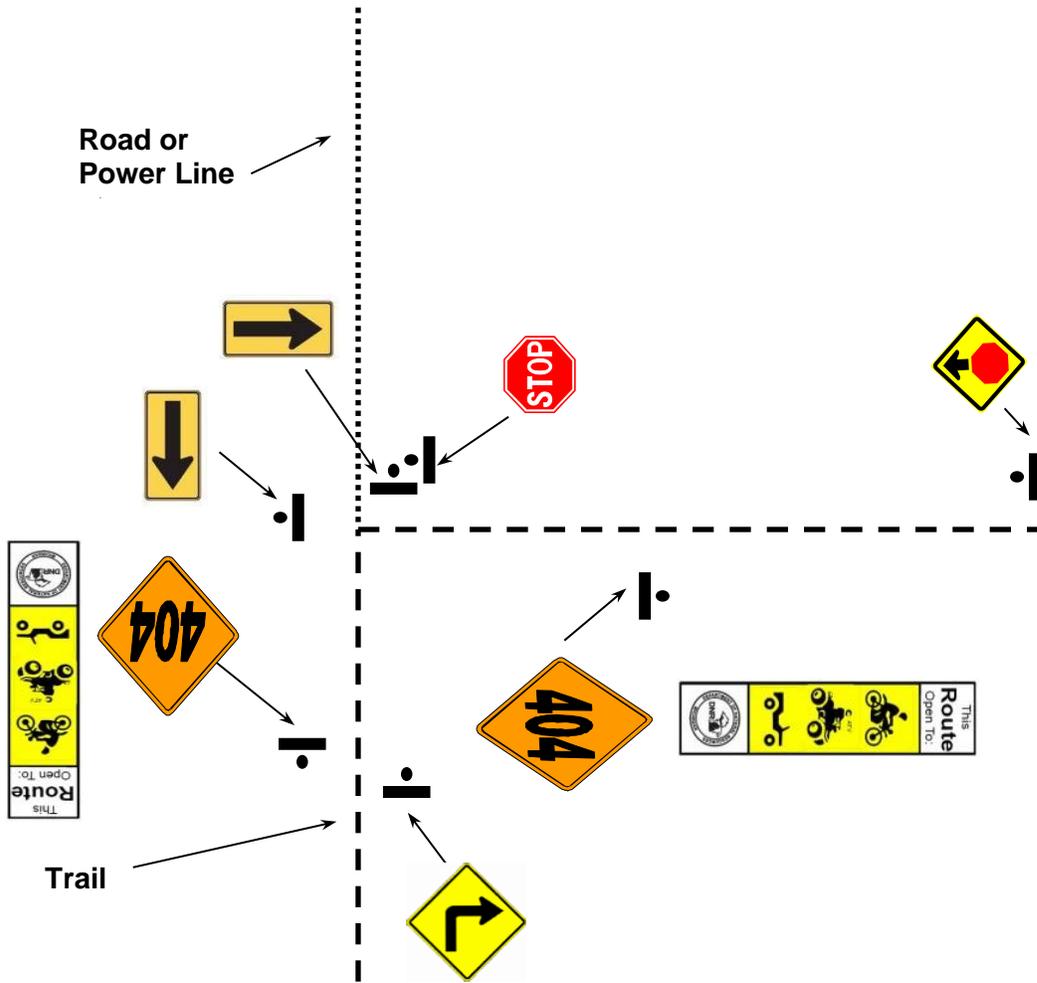
J. TRAIL SHARP TURN (LEFT OR RIGHT)
(> = 90 Degrees)



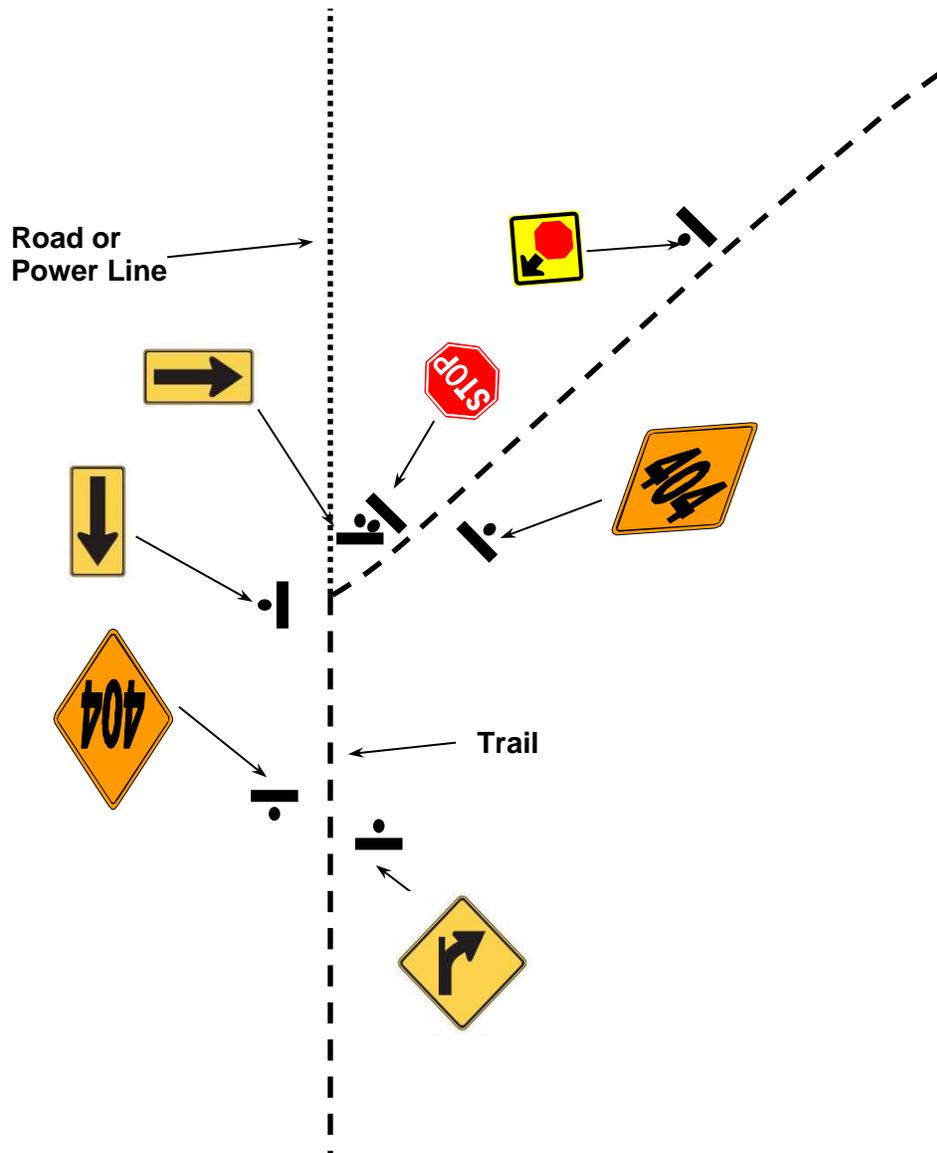
K. ORV TRAIL DEVIATION



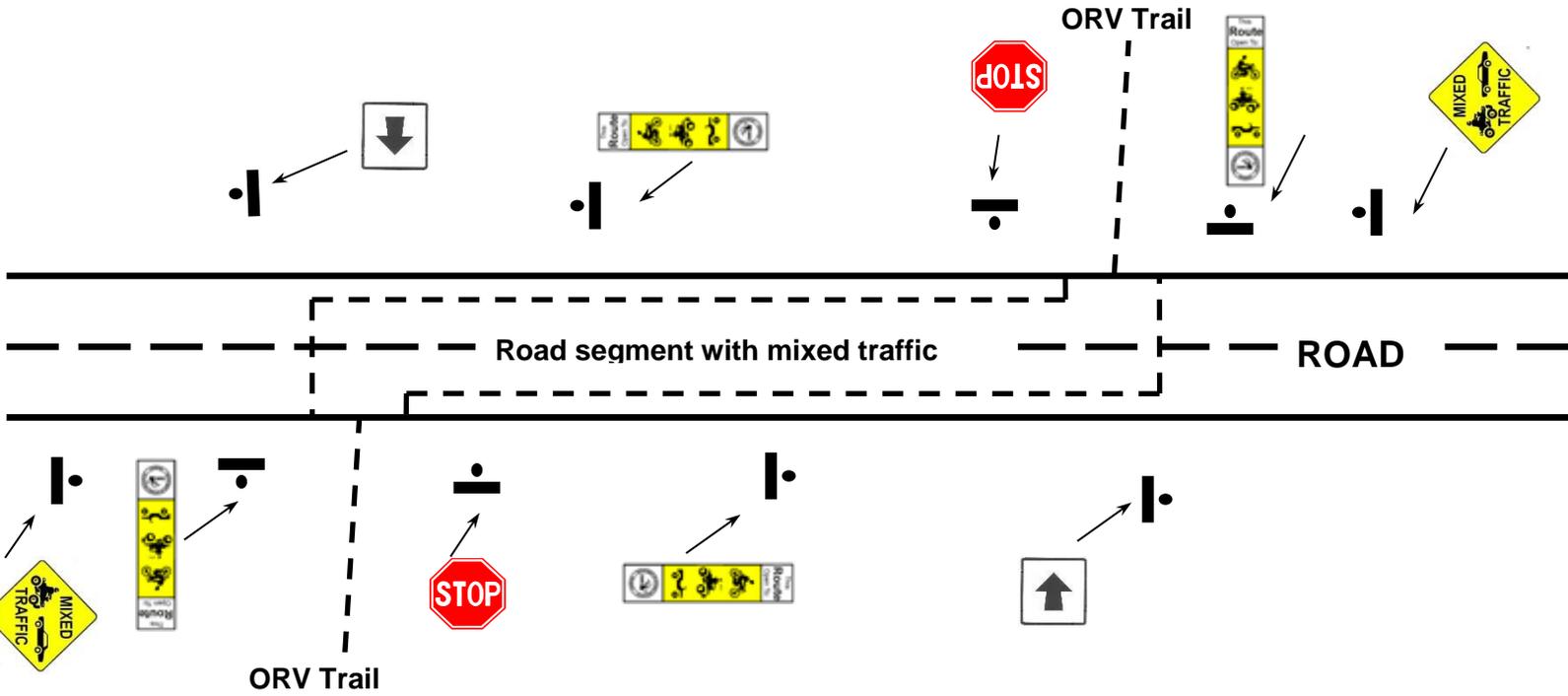
L. TRAIL SIDE 90 DEGREE INTERSECTIONS



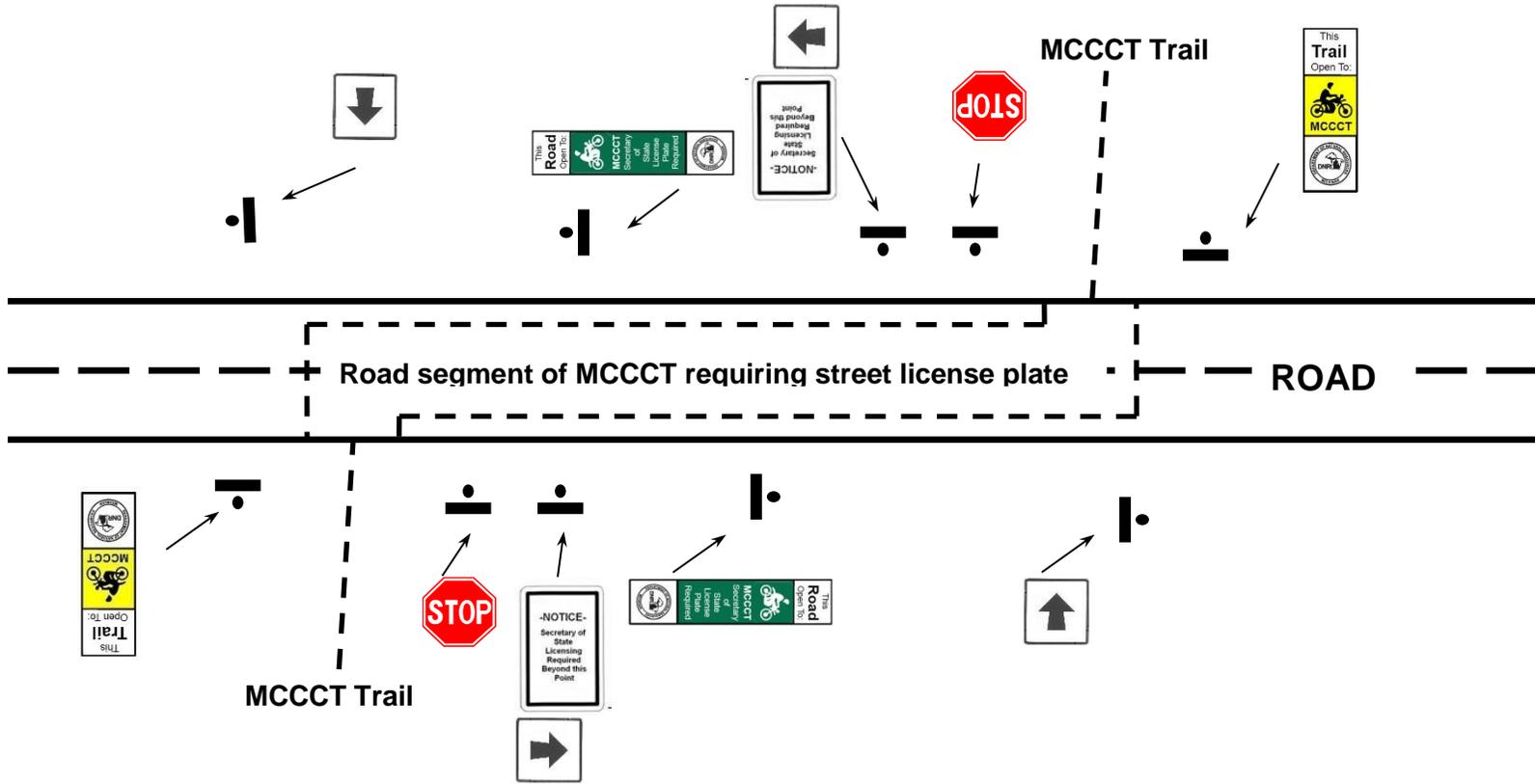
M. TRAIL SIDE 45 DEGREE INTERSECTIONS



N. ORV TRAIL/MIXED TRAFFIC

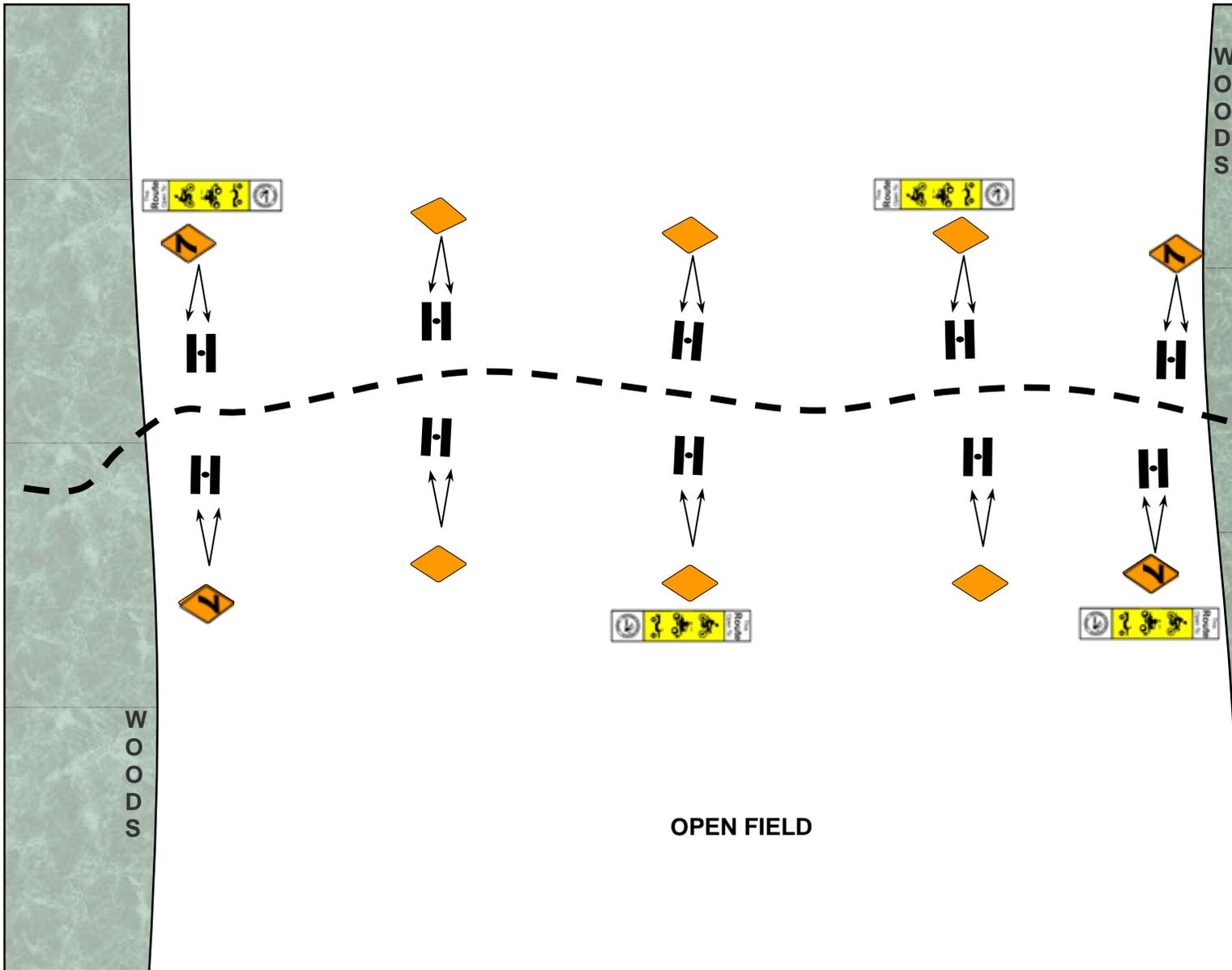


O. MICHIGAN CROSS COUNTRY CYCLE TRAIL (MCCCT) STREET LICENSING NOTICE

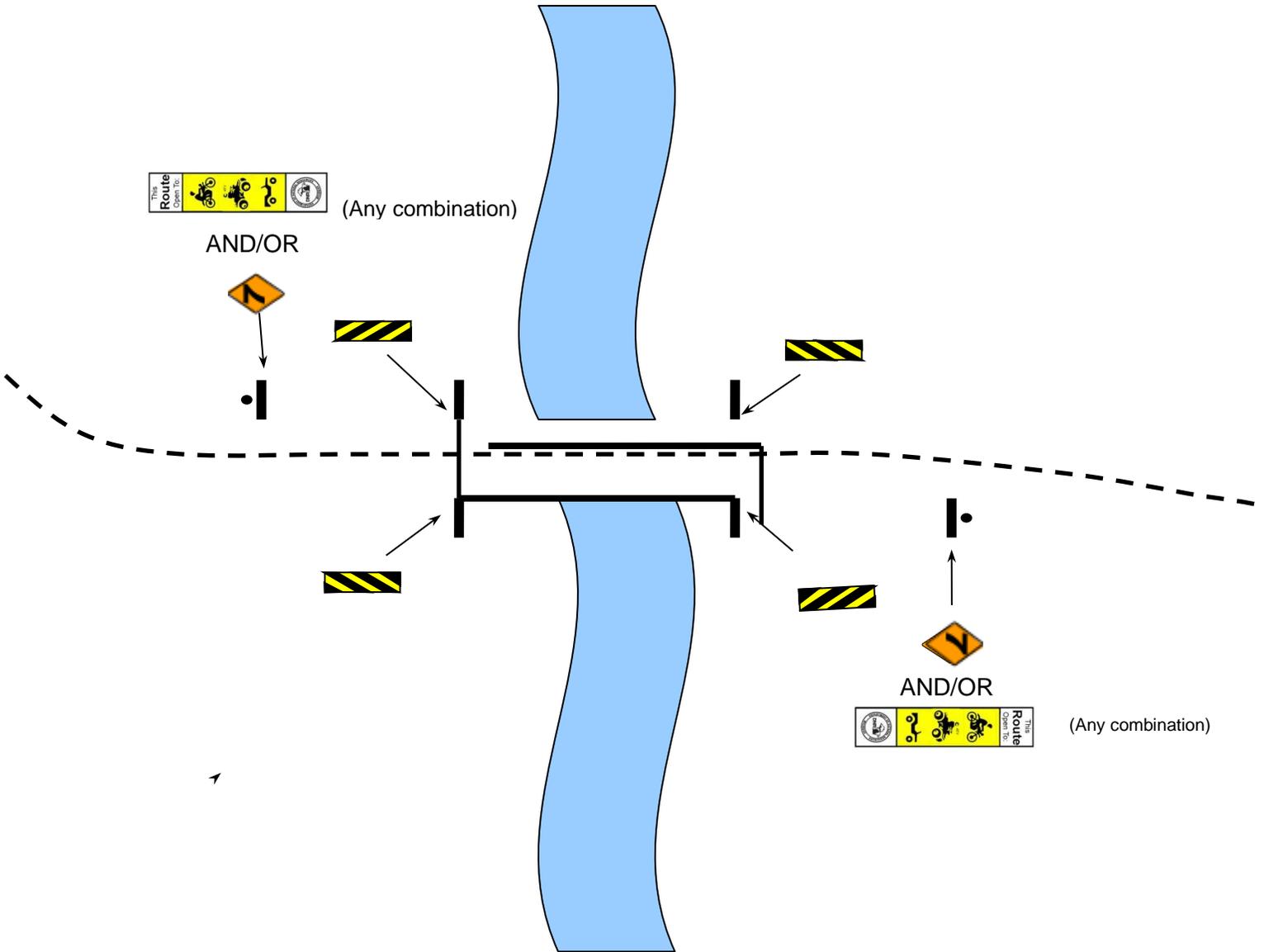


P. OPEN FIELD – CLEAR CUT

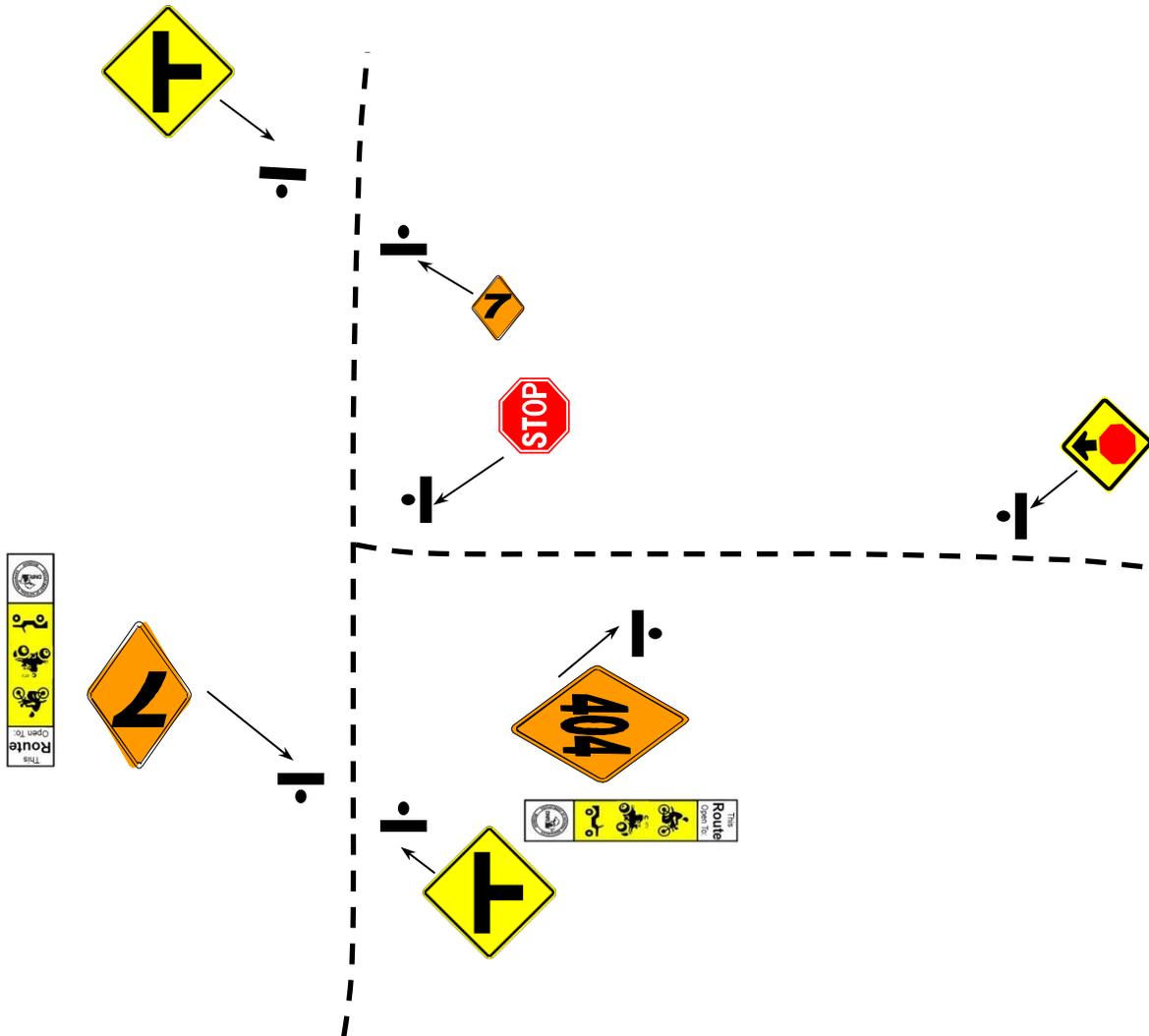
Place snowmobile reassurance markers on both sides of the trail, or stagger ORV reassurance markers, in both directions, to designate a corridor. For this use, reassurance markers may be placed less than 1/4 mile apart for visibility and to regulate use in the field. Use in conjunction with Stay-on-Trail signs as necessary.



Q. BRIDGE CROSSING



R. TRAIL SIDE INTERSECTION





FIND OUT THE LOCAL DNR CONSERVATION OFFICERS WHO ARE ASSIGNED TO YOUR TRAILS.



FIND OUT THE LOCAL COUNTY SHERIFF OFFICERS WHO ARE ASSIGNED TO YOUR TRAILS.

Tell us about your projects!



- We want to share and feature your projects.
- Show off ANY projects being completed on our Snowmobile Trails!
- Take pride in your hard work!
- Take photos from a club workday, or a major construction project – send them in to the DNR Motorized Trails Program Analyst
- If your Grant Sponsor Organization puts out a newsletter, please include the DNR Motorized Trails Program Analyst on your mailing list!