



MDOT SIGN HANDBOOK FOR GOLF CART CONNECTOR ROUTES ON STATE TRUNKLINE HIGHWAYS

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INTRODUCTION

This handbook applies only to Golf Cart Connector Route segments within the State Trunkline Highway right-of-way, that are specifically authorized by the Michigan Department of Transportation (MDOT) in accordance with The Michigan Vehicle Code, 1949, PA 300, as amended. Requirements for authorization can be found in MCL 257.657a.

This document was established to provide guidance for signing Golf Cart Connector route segments within the State Trunkline Highway.

The purpose of posting Golf Cart Route signs and highway advisory signs is to identify the limits of an authorized connector route, control and regulate the flow of Golf Cart traffic, inform Golf Cart users of route characteristics, and inform highway traffic of potential Golf Cart presence.

The guidance provided in this handbook is intended to assist Local Units of Government and MDOT staff in developing Golf Cart facilities using uniform and consistent signing practices in the interest of traffic safety and for the convenience and benefit of the public.

DEFINITIONS

1. **“Golf Cart Route sign”** means a sign or marker that is intended to be read by Golf Cart traffic to provide the Golf Cart operator with information such as route location, regulations, and safety advisories for upcoming conditions.
2. **“Highway Sign”** means a sign that is intended to read by read by normal highway vehicular traffic to advise motorists of the potential for Golf Cart traffic ahead.

GENERAL GUIDELINES

- All Highway and Golf Cart Route Regulatory and Warning signs shall conform to the guidelines and principles of the current editions of the Federal Manual on Uniform Traffic Control Devices (MUTCD) and the Michigan Manual on Uniform Traffic Control Devices (MMUTCD).
- All signs must be reflective and must be replaced as needed to maintain sign retroreflectivity at or above the minimum levels per (MMUTCD)
- Golf Cart route signs may 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 MMUTCD. Posts shall be appropriate for sign holding purposes.
- All proposed signs must be approved by MDOT including the sign legend, sign location, sign materials, and post type.
- All Golf Cart route signs shall be placed on the right side of the route. Exceptions to this guideline may be approved by MDOT as warranted to fit conditions.
- The minimum Golf Cart Route sign height is 5 feet above the tread measured to the bottom of the sign (exception Golf Cart reassurance markers).
- Golf Cart route signs and posts should be placed no more than 3 to 6 feet from the right side of the route.
- If two Golf Cart route signs are placed on one post, the sign with the message of highest importance shall be placed on top. For example, a STOP sign shall always be placed above any other sign.
- No signs shall be placed on utility poles.
- Golf Cart route signs shall not be placed on the posts of MDOT highway signs.

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 these guidelines the following definitions are given and are based on the MMUTCD.

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, with deviations allowed if engineering judgment or engineering study indicates the deviation to be appropriate. All Guidance statements are labeled and the text appears in unbold 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 unbold 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 unbold type. The verbs “shall,” “should,” and “may” are not used in Support statements.

Standard:

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

HIGHWAY SIGNS

VEHICULAR TRAFFIC WARNING SIGN



36" x 36" VEHICULAR TRAFFIC WARNING SIGN WITH FEDERAL GOLF CART SYMBOL
(W11-11)

Vehicular Traffic Warning Signs shall be used to inform normal highway vehicles (motorists) of the potential for Golf Cart traffic ahead.

Standard:

1. **One sign shall be installed at each end of the connector route segment in advance of the location where the incoming route enters MDOT right-of-way. MDOT may require additional signs if there are other locations of concern such as trail crossings that have limited sight distance**
2. **This sign shall be installed with a bottom height of 7 feet above the road surface.**
3. **Sign locations (length in advance and lateral offset) shall be determined by an MDOT Traffic and Safety Engineer for each sign location based on site specific conditions such as speed limit, sight distance, existing signs, etc.**
4. **Signs must be installed in accordance with the MMUTCD by a contractor or governmental agency approved by MDOT.**

GOLF CART ROUTE SIGN

Support:

Route signs are essential to identify authorized golf cart routes.



Standard:

- 1. Golf Cart Route signs shall be 18" x 18", white symbol and border on reflective green background.**

Guidance:

1. Golf Cart Route signs should be placed at intervals of 1/4 mile along the route. If the route is on a rural section of highway with a well defined path sign spacing can be increased to 1/2 mile.
2. Golf Cart Route signs should also be placed immediately beyond points of intersection with roads, streets or other routes, within a clear sight distance from the intersection or point where the Golf Cart operator is expected to stop.

ROUTE ARROWS



M5-1



M5-2



M6-1



M6-2



M6-3



M6-4



M6-5



M6-6



M6-7

ROUTE ARROW SIGNS (M5-1, 2; M6-1, 2, 3, 4, 5, 6, 7)

Standard:

1. 12" x 9" reflectorized green sign with white arrow and border. This sign shall be used to direct Golf Cart riders at trail junctions, intersections, and turns.
2. Signs shall be rotated so that the arrow points in the appropriate direction.
3. Golf Cart Route signs shall be placed above the route arrows to clarify the purpose of the directional arrow for the benefit of Golf Cart traffic and the general public .

Examples of commons uses:



REGULATORY AND WARNING SIGNS FOR GOLF CART ROUTES

Support:

1. When an Golf Cart route is designated for Golf Cart traffic to operate on the highway with the flow of highway traffic, it is not feasible to post certain regulatory and warning signs (such as stop signs) that would apply to Golf Cart traffic, without causing potential confusion and safety hazards if highway motorists perceive that those signs apply to highway traffic.
2. For Golf Cart routes that are designated for Golf Cart traffic to operate on the highway with the flow of highway traffic, the MDOT regulatory and warning signs that are in place shall apply to all traffic. (Exception: Golf Cart Speed Limit)
3. At highway crossings, route connections, or on routes that are established outside of the maintained highway shoulder with adequate separation between highway traffic and Golf Cart traffic, all applicable regulatory and warning signs, may be used.

Standard:

1. **Regulatory and Warning signs that are in conflict with MDOT highway signing shall not be placed adjacent to the highway in a position that is readable to normal highway traffic.**
2. **When an Golf Cart route enters the highway from a local road or street no Golf Cart route signs shall be posted that are in conflict with existing road signs controlling traffic at the highway intersection**



Examples of signs with restricted allowable use



STOP SIGN (R1-1)

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

Standard:

1. **18" x 18" sign (background and lettering are reflectorized)**
2. **Stop signs shall be placed at all intersections with improved state roads, county roads, plowed roads or other locations that warrant stopping. Stop signs shall be placed only on the right side of the trail.**

Guidance:

Stop signs should be placed as close as possible to the intended stopping point.

Option:

1. Stop signs may be placed on both the right and left side of the route, by exception for added emphasis. Exception to be approved by MDOT.



YIELD SIGN (R1-2)

Yield signs should be used where Golf Cart traffic is required to yield to cross traffic.

Support:

Yield signs assign rights-of-way to traffic on certain approaches to an intersection. Vehicles controlled by a yield sign need to stop only when necessary to avoid interference with other traffic that has been given the right-of-way.

Standard:

1. **18" x 18" x 18" sign (background and lettering are reflectorized).**
2. **Yield signs shall be used where Golf Cart traffic should be cautioned to slow down and be prepared to stop.**

Guidance:

If used, yield signs should be used where cross traffic has the right-of-way. Examples include intersections with other roads open to highway traffic.

Option:

1. Yield signs may be used on Golf Cart routes where they roads that have minimal use with approval of MDOT
2. Yield signs may be used on heavily used driveways with approval of MDOT

REGULATORY/SELECTIVE EXCLUSION SIGNS



Support:

The figures above illustrate some examples of the use of the word text and prohibitive slashes.

1. Regulatory and selective exclusion signs convey to the Golf Cart user specific restrictions on the route, road or support facilities.
2. These signs should be used sparingly and only in areas with a compelling or demonstrated need to restrict use.
3. Other regulatory and selective exclusion signs may be approved for special circumstances by MDOT.

Standard:

12" x 18" reflectorized white sign with black lettering or symbols, or recreation symbol with red slash.

Stay on Path Sign (12" x 18")

If used, Stay on Trail signs should be posted on the route where there is demonstrated evidence of off route operation by motorized vehicles.

Golf Cart Prohibition Sign (18" x 18")

If needed, these signs should be posted in locations where Golf Cart operation is prohibited. This sign should be used sparingly. Examples of where this sign may be used include damage restoration sites or nonmotorized trails where illegal Golf Cart use is a continuous problem.

WARNING SIGNS

Support:

1. Warning signs call attention to unexpected conditions on or adjacent to the route, and to situations that might not be readily apparent to Golf Cart users.
2. Warning signs alert route users to conditions that might call for a reduction of speed or an action in the interest of safety.

Guidance:

1. 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.
2. When used, warning signs should be placed to provide the route user sufficient time to react to a hazard or unexpected condition.



STOP AHEAD SIGN (W3-1)

Standard:

1. **18" x 18" Sign (background and symbol are reflectorized)**
2. **Stop Ahead signs shall be placed approximately 350 feet in advance of a Stop sign that is not visible for a sufficient distance to permit the Golf Cart user to respond to the stop sign on the Golf Cart route.**

Support:

Permanent obstructions causing limited visibility might include route alignment or structures. Intermittent obstructions might include foliage and vegetation.

Option:

1. On Golf Cart routes, Stop Ahead signs may be used for additional emphasis before a Stop sign even when the visibility distance to the stop sign is satisfactory.



OBJECT MARKER (OM3)

Support:

Object markers may be used to mark obstructions within or adjacent to the route.

Guidance:

1. 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.
2. 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.

Standard:

- 1. Object markers are 12" x 36" roadway, 6" x 18" route in right of way, reflectorized yellow signs with black diagonal markings.**
- 2. Object markers shall be used to mark the four (4) corners of a bridge located on a designated route.**
- 3. The inside edge of the marker shall be inline with the inner edge of the object, and the black diagonals shall always slope down and inward towards the route riding surface.**
- 4. When a potential hazard is located on one side of the route, an object marker shall be placed on each side of the hazard with the black diagonals sloping down and inward towards the route riding surface.**

Option:

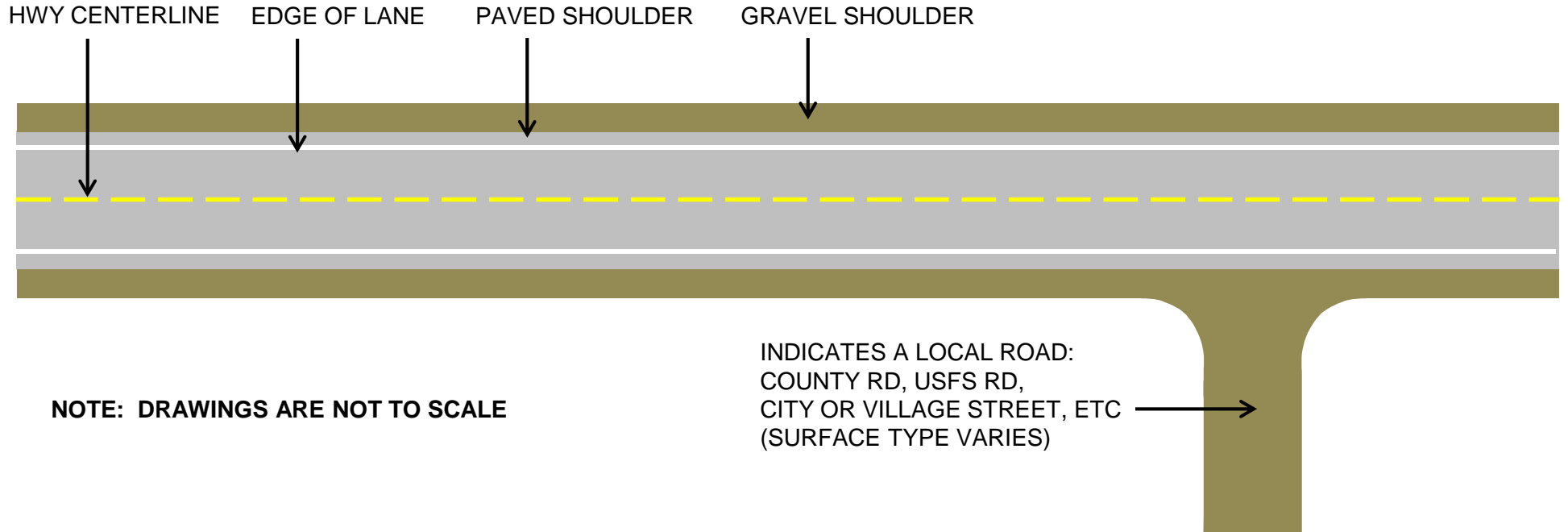
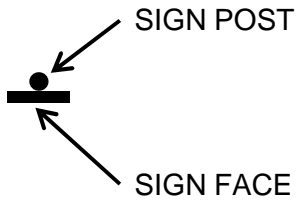
Object markers may also be used to mark the ends of culverts, culvert headwalls or other obstructions along the route.

ROUTE LEGEND

EXISTING GOLF CART ROUTES
(ROUTES THAT ARE REQUESTED TO BE CONNECTED)

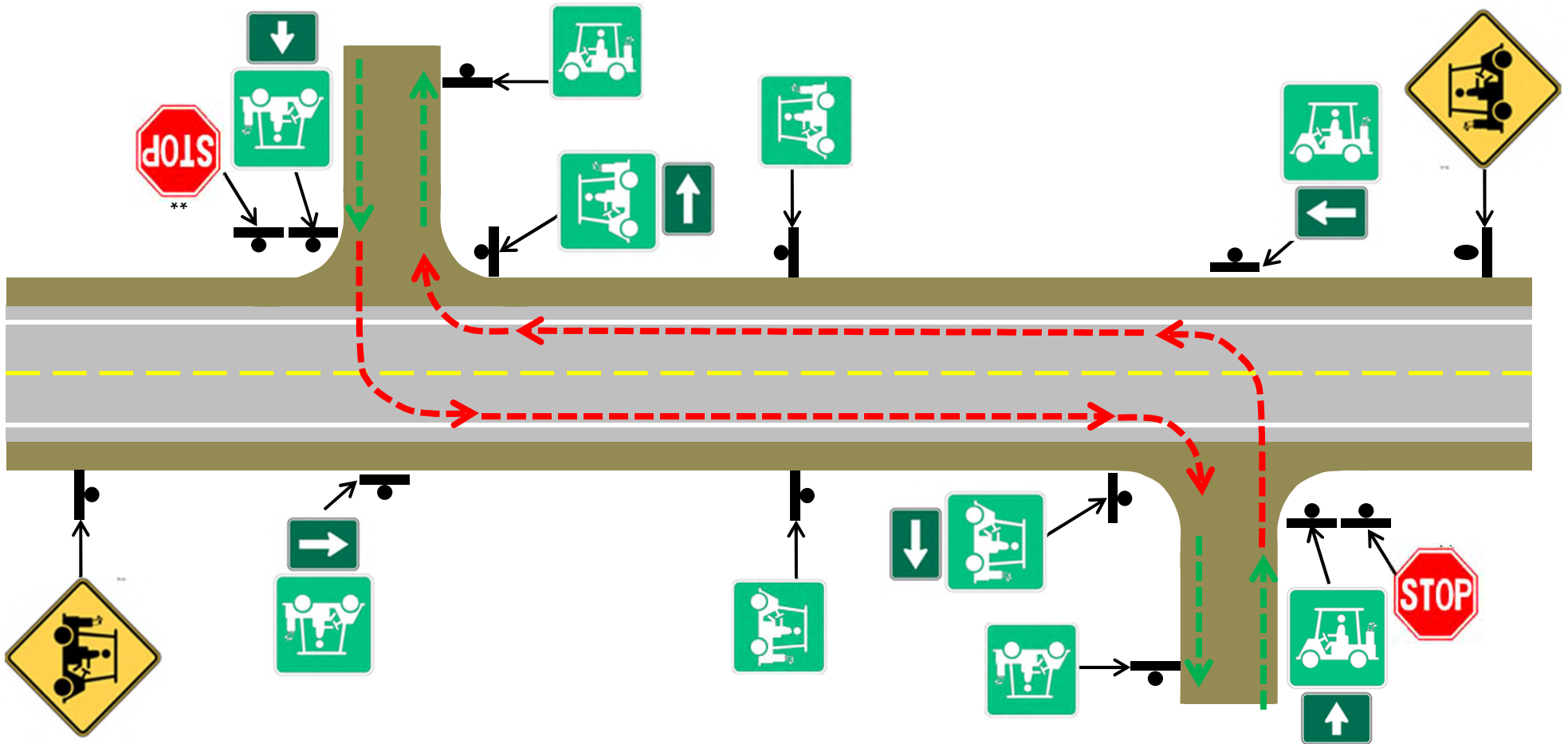


PROPOSED GOLF CART CONNECTOR ROUTES
(USING STATE TRUNKLINE HIGHWAY)



ILLUSTRATIONS

EXAMPLE CONNECTOR ROUTE USING ROADWAY



** EXISTING STOPS SIGNS AT ROAD INTERSECTIONS SHALL CONTROL ALL TRAFFIC INCLUDING GOLF CART (DO NOT PLACE ROUTE STOP SIGNS WHERE ROAD STOP SIGNS ARE PRESENT)