Traffic Manual:
Idaho Supplementary Guidance to the MUTCD

April 2019

Idaho Transportation Department

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IDAHO SUPPLEMENTARY GUIDANCE TO THE MUTCD
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PART 1
GENERAL

CHAPTER 1A. GENERAL

Section 1A.01 Purpose of Traffic Control Devices

No supplemental information.

Section 1A.02 Principles of Traffic Control Devices

The actions required of road users to obey regulatory devices are described in Idaho Statute, Title 49.

Section 1A.03 Design of Traffic Control Devices

No supplemental information.

Section 1A.04 Placement and Operation of Traffic Control Devices

No supplemental information.

Section 1A.05 Maintenance of Traffic Control Devices

No supplemental information.

Section 1A.06 Uniformity of Traffic Control Devices

No supplemental information.

Section 1A.07 Responsibility for Traffic Control Devices

ITD has responsibility for the design, placement, operation, maintenance, and uniformity of traffic control devices on Idaho highways unless otherwise arranged in an agreement with a local jurisdiction. In accordance with *Idaho Statute 40-310(12)* and *49-202(25)*, ITD is responsible for installing and maintaining STOP (R1-1) signs on streets intersecting with ITD highways at the intersection (see Section 2B.06) and STOP (R1-1) or YIELD (R1-2) signs on ITD highway approaches to passive highway-rail grade crossings (see Section 8B.04). Coordinate with local agencies to determine responsibility for Advance Traffic Control symbol signs (such as the Stop Ahead (W3-1) sign, see Section 2C.36) or pavement word markings on minor streets approaching intersections with ITD highways.

Section 1A.08 Authority for Placement of Traffic Control Devices

In addition to the devices described in paragraph 06 of the MUTCD, blue delineators used in advance of median crossovers that are restricted to authorized vehicles on a divided highway (see *Administrative Policy 5531 – Use of Median Crossovers on Interstates and Divided Highways*) are not considered traffic control devices. The devices are intended to communicate information only to the operators of authorized vehicles, a small and specific subset of road users, and not to the general traveling public. See Section 3F.03 for the size and application of the blue delineators.

Section 1A.09 Engineering Study and Engineering Judgment

No supplemental information.

Section 1A.10 Interpretations, Experimentations, Changes, and Interim Approvals

ITD headquarters will make requests to the Federal Highway Administration (FHWA), on behalf of ITD, for official interpretations, to experiment with non-MUTCD traffic control devices, or to use a traffic control device for which FHWA has issued an interim approval.

ITD will generally not make a request to FHWA on behalf of all jurisdictions in Idaho to use traffic control devices for which FHWA has issued an interim approval. ITD does not make such requests because the Department does not wish to maintain and continually update a list of locations where the device has been installed.

In accordance with ITD's commitment to maintain and update a list of locations of devices used under an interim approval, ITD districts will annually provide headquarters with a current list of devices installed under an interim approval.

FHWA maintains a list of granted interim approvals for use by ITD on the MUTCD website.

Section 1A.11 Relation to Other Publications

The ITD Traffic Manual provides supplemental information to the MUTCD and provides information on practices common in Idaho.

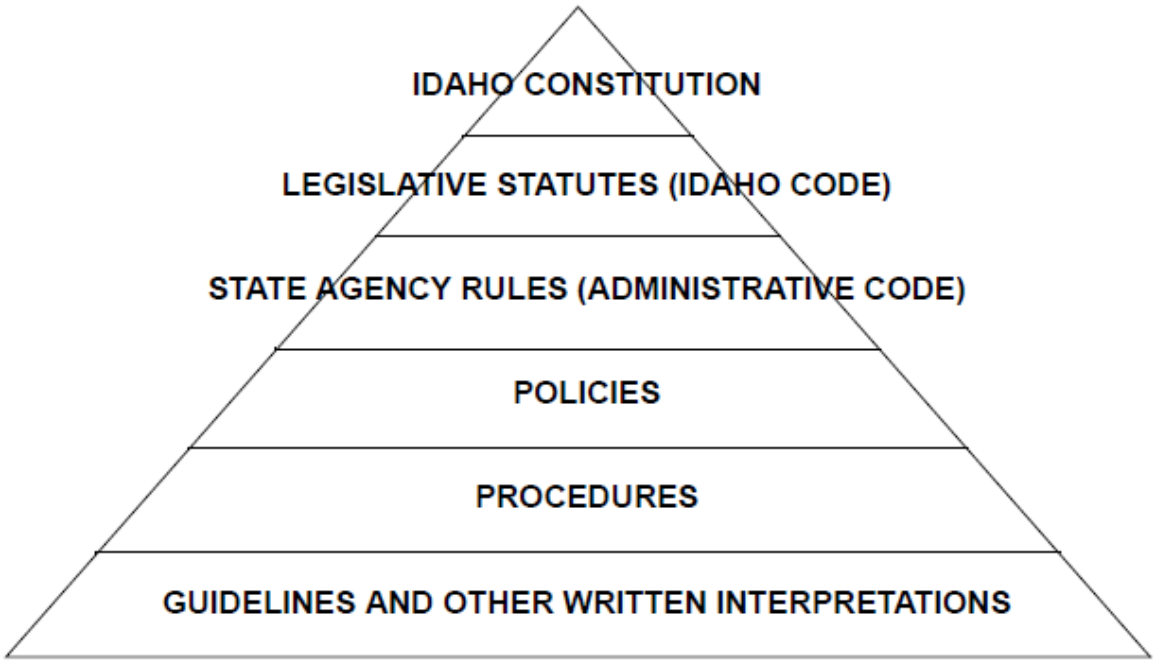
Figure 1A-1 shows the levels of precedent for state government documents. The highest levels of the pyramid in the figure have a broad scope, but limited amount of guidance whereas the bottom levels have a narrow scope, but detailed guidance.

Legislative statutes create the Idaho Transportation Board and the Idaho Transportation Department and direct the Transportation Board to "adopt a manual and specifications for a uniform system of traffic-control devices (see *Idaho Statute 49-201(3)*)." Through state agency rules, FHWA's "Manual on Uniform Traffic Control Devices" (MUTCD) is adopted for use in Idaho with some changes (see *IDAPA 39.03.41 – Rules Governing Traffic Control Devices*). Through legislative statutes and state agency rules, the MUTCD and the adopted changes have the force and effect of law.

The Traffic Manual, at the guidelines level, does not have the force and effect of law and does not replace or supersede the MUTCD. Legislative statutes, state agency rules (IDAPA), and ITD policies are referenced in the Traffic Manual when applicable.

The Traffic Manual is organized like the MUTCD for cross-referencing purposes. Standards, Guidance, Options, and Support stated in the MUTCD are not repeated in the Traffic Manual. The Traffic Manual is not separated into Standards, Guidance, Options, and Support, but instead gives information about common ITD practices and is intended to allow the reader to use engineering judgment. When no supplementary guidance is added for a section of the MUTCD, the section heading is included in this Manual with supporting text stating, "no supplementary information." References to Figures and Tables are to Figures and Tables in this Manual unless stated otherwise.

Figure 1A-1 Hierarchy of State Documents



In addition to the publications listed in the MUTCD, the following publications are referenced in this Manual:

1. "Standard Highway Signs and Markings," 2004 Edition with 2012 Supplement (Federal Highway Administration – FHWA)
2. "ITD Supplement to the Standard Highway Signs and Markings," most recent edition (ITD)
3. "Traffic Control Devices Handbook," 2013 Edition (ITE)
4. "Standard Specifications for Highway Construction," most recent edition (ITD)
5. "Standard Drawings," most recent edition (ITD)
6. "Roundabouts: An Informational Guide," (NCHRP Report 672), 2010 Edition (TRB)
7. "AASHTO Guidelines for Supplemental Guide Signing," 2016 Edition (AASHTO)
8. "Left-Turn Accommodations at Unsignalized Intersections," (NCHRP Report 745), 2013 Edition (TRB)
9. "Transportation Research Record: Journal of the Transportation Research Board," Volume 2023 (TRB)
10. "Crosswalk Marking Field Visibility Study (FHWA-HRT-10-068)," 2010 Edition (Federal Highway Administration – FHWA)
11. "Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations Final Report and Recommended Guidelines (FHWA-HRT-04-100)," 2005 Edition (Federal Highway Administration – FHWA)
12. "Signal Timing Manual," (NCHRP Report 812), 2015 Edition (TRB)
13. "Signalized Intersections Informational Guide," 2013 Edition (Federal Highway Administration – FHWA)
14. "Traffic Detector Handbook," 2006 Edition, (Federal Highway Administration – FHWA)
15. A Guide for Reducing Collisions at Signalized Intersections," (NCHRP Report 500, Volume 12), 2004 Edition (TRB)

16. "Work Zone Safety and Mobility Program," most recent edition, (ITD)
17. "Operations Manual," most recent edition, (ITD)
18. "Quality Guidelines for Temporary Traffic Control Devices and Features," 2017 Edition (ATSSA)
19. "A Policy on Geometric Design of Highways and Streets," 2018 Edition (AASHTO)
20. "Crash Cushion and Roadside Terminal Categorization Charts," most recent edition, (ITD)
21. "Railroad Guide," most recent edition (ITD)
22. "Railroad-Highway Grade Crossing Handbook," 2007 Edition (Federal Highway Administration – FHWA)
23. "Guide for the Development of Bicycle Facilities," 2012 (4th) Edition (AASHTO)
24. "Roadway Lighting Design Guide," 2018 Edition (AASHTO)
25. "Roadway Lighting," 2014 Edition (ANSI/IES)
26. "Tunnel Lighting," 2011 Edition (ANSI/IES)
27. "FHWA Lighting Handbook," 2012 (Federal Highway Administration – FHWA)
28. "Guidelines for Nighttime Visibility of Overhead Signs," (NCHRP Report 828), 2016 Edition (TRB)
29. "Roadside Design Guide," 2011 Edition (AASHTO)
30. "Regional ITS Architecture Guidance Document," 2006 Edition (FHWA)
31. "Systems Engineering Guidebook for Intelligent Transportation Systems," 2009 Edition (FHWA California Division)
32. "Idaho Statewide ITS Strategic Plan Update," 2011 Edition (ITD)
33. "Manual of Transportation Engineering Studies," 2010 (2nd) Edition (ITE)
34. "Traffic Engineering Handbook," 2016 (7th) Edition (ITE)
35. "Methods and Practices for Setting Speed Limits: An Informational Report," 2012 Edition (Federal Highway Administration – FHWA)
36. "Road Safety Audit Manual," most recent edition, (ITD)
37. "Transportation Impact Analyses for Site Development," 2010 Edition (ITE)

Section 1A.12 Color Code

No supplemental information.

Section 1A.13 Definitions of Headings, Words, and Phrases in this Manual

No supplemental information.

Section 1A.14 Meanings of Acronyms and Abbreviations in this Manual

CCTV – Closed Circuit Television
DSRC – Dedicated Short Range Communication
DMS – Dynamic Message Signs
HAR – Highway Advisory Radio
IDAPA – Idaho Administrative Procedures Act
RWIS – Road Weather Information Systems

Section 1A.15 Abbreviations Used on Traffic Control Devices

No supplemental information.

PART 2
SIGNS

CHAPTER 2A. GENERAL

Section 2A.01 Function and Purpose of Signs

Some signs that are required by or emphasize Idaho Statutes are not covered by the Chapters and Sections of Part 2. Additional Sections, not in the MUTCD, have been added to the ends of Chapters 2B and 2M.

Section 2A.02 Definitions

No supplemental information.

Section 2A.03 Standardization of Application

No supplemental information.

Section 2A.04 Excessive Use of Signs

No supplemental information.

Section 2A.05 Classification of Signs

No supplemental information.

Section 2A.06 Design of Signs

In addition to the FHWA's "Standard Highway Signs and Markings" (SHSM) book, signs that are specific to Idaho highways are detailed in the "ITD Supplement to the Standard Highway Signs and Markings" (Idaho SHSM) book (see Section 1A.11). Standard signs that are shown in the MUTCD, but are not detailed in the SHSM are also detailed in the Idaho SHSM supplement.

Section 2A.07 Retroreflectivity and Illumination

Refer to the ITE Traffic Control Devices Handbook for information about the ASTM types of retroreflective sign sheeting. Subsection 712.02 – Retroreflective sheeting – of the "Standard Specifications for Highway Construction" specifies the ASTM D4956 types of sheeting to be used for new signs, temporary traffic control devices, and delineators and snow pole reflectors.

Refer to Part 15 for overhead sign lighting information.

Section 2A.08 Maintaining Minimum Retroreflectivity

ITD has created training materials to prepare sign inspectors to conduct visual nighttime inspections. The training is titled "Conducting Sign Retroreflectivity Inspections" and the training materials are available from the ITD Design/Traffic Services Section.

In 2012, the FHWA provided revised recommended minimum maintained retroreflectivity levels for blue and brown traffic signs. The retroreflectivity of signs with blue and brown backgrounds

does not need to be assessed or managed, but if assessed, use the minimum maintained retroreflectivity levels shown in Table 2A-1.

Table 2A-1 Minimum Maintained Retroreflectivity Levels for Blue and Brown Signs

Sign Color	Sheeting Type (ASTM D4956-11a**)				Additional Criteria
	Beaded Sheeting			Prismatic Sheeting	
	I	II	III	III, IV, VIII, IX, XI	
White on Blue	W*; B ≥ 3	W*; B ≥ 5	W*; B ≥ 12	W ≥ 250; B ≥ 12	Overhead
	W*; B ≥ 3	W ≥ 120; B ≥ 7			Post-mounted
White on Brown	W*; Br ≥ 1	W*; Br ≥ 5	W*; Br ≥ 10	W ≥ 350; Br ≥ 10	Overhead
	W*; Br ≥ 1	W ≥ 150; Br ≥ 5			Post-mounted

The minimum retroreflectivity levels shown in this table are in units of cd/lx/m^2 measured at an observation angle of 0.2° and an entrance angle of -4.0°.

* This sheeting type should not be used for this color for this application.

** The current version of the specification ASTM D4956-11a combined Types VII, VIII and X as Type VIII.

Section 2A.09 Shapes

No supplemental information.

Section 2A.10 Sign Colors

No supplemental information.

Section 2A.11 Dimensions

The "ITD Supplement to the Standard Highway Signs and Markings" book (see Section 1A.11) prescribes design details for signs that are specific to Idaho highways.

Section 2A.12 Symbols

No supplemental information.

Section 2A.13 Word Messages

Use word messages for signs specific to Idaho highways as shown in the "ITD Supplement to the Standard Highway Signs and Markings" book (see Section 1A.11).

Section 2A.14 Sign Borders

See the blank standards and design guidelines sections of the "Standard Highway Signs and Markings" book (See Section 1A.11) for guidance on border widths and radii.

See Section 2D.43 for sign borders on Street Name signs on the State Highway System or related highways.

Section 2A.15 Enhanced Conspicuity for Standard Signs

No supplemental information.

Section 2A.16 Standardization of Location

See the ITE "Traffic Control Devices Handbook" for a discussion on primacy of signs and sign spacing.

Section 2A.17 Overhead Sign Installations

No supplemental information.

Section 2A.18 Mounting Height

No supplemental information.

Section 2A.19 Lateral Offset

Table 2A-2 shows which sign posts have breakaway features.

Section 2A.20 Orientation

No supplemental information.

Section 2A.21 Posts and Mountings

Table 2A-2 indicates the post types that have breakaway features. When signs are replaced, the sign posts should be replaced with current sign post designs if necessary.

Signs wider than 8 feet should be installed on more than one post. When multiple posts are used, the space between posts should be approximately sixty percent of the sign width. Separate multiple sign post installations using A-3, A-4, A-8, A-9, D-3, or D-4 post types by at least seven feet to reduce the likelihood of an errant vehicle colliding with more than one post. Use the same post type on signs or sign assemblies with multiple posts. Table 2A-2 indicates which posts types can be used for single post installations, multiple post installations, or both.

The ITD Bridge Section assigns maximum loads to each post type. These loads include wind loading using a 31.27 lb./sf. load. The calculations for determining the sign load are shown in Figure 2A-1. The maximum sign loads for each post type are shown in Table 2A-2.

Standard Drawings show foundation details, breakaway feature details, and sign mounting braces and hardware.

Section 2A.22 Maintenance

No supplemental information.

Section 2A.23 Median Opening Treatments for Divided Highways with Wide Medians

No supplemental information.

Table 2A-2 Sign Post Design Information

Post Type	Post Description	Breakaway	Number of Posts	Post Size (in)	Post Weight (lbs / ft)	Maximum Sign Load Per Post (sf x ft)
A-1	Wide Flange	Yes	Multiple	W6x9	9	620
A-2	Wide Flange	Yes	Multiple	W8x10	10	870
A-3	Wide Flange	Yes	Multiple	W8x13	13	1,100
A-4	Wide Flange	Yes	Multiple	W8x18	18	1,700
A-8	Wide Flange	Yes	Multiple	W12x19	19	2,370
A-9	Wide Flange	Yes	Multiple	W14x22	22	3,200
B-2	Steel Tube	Yes	Single	3 x 4	8.15	250
B-3	Steel Tube	Yes	Single	5 x 5	11.96	517
B-4	Steel Tube	Yes	Single	6 x 6	14.54	760
D-1	Wood	Yes	Single or Multiple	4 x 4	N/A	47
D-2	Wood	Yes	Single or Multiple	4 x 6	N/A	111
D-3	Wood	Yes	Single or Multiple	6 x 6	N/A	162
D-4	Wood	Yes	Single or Multiple	6 x 8	N/A	302
D-5	Wood	**No**[1]	Single or Multiple	8 x 8	N/A	412
E-1	Perforated Steel	Yes[2]	Single or Multiple	2 x 2	2.42	43
E-2	Perforated Steel	Yes[3]	Single or Multiple	2½ x 2½	4.01	91

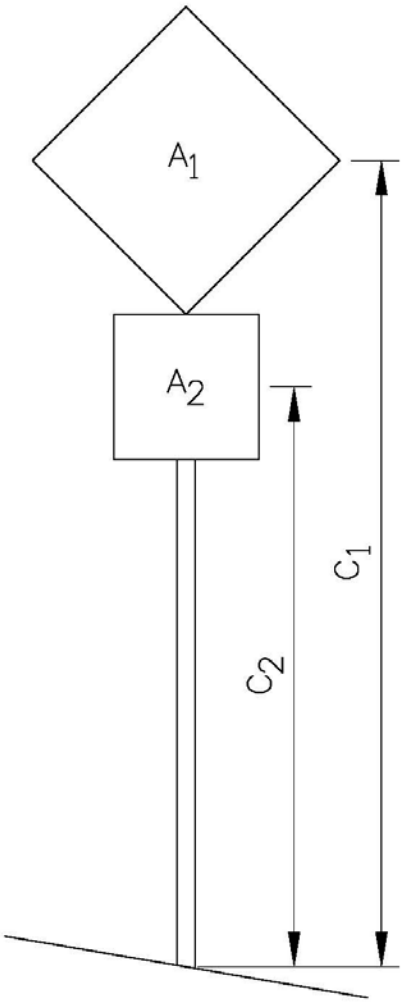
[1] Post type D-5 does not have breakaway features and must be shielded by a roadside barrier or installed outside of the roadway clear zone.

[2] One or two E-1 posts may be used as shown on the E post Standard Drawing. A breakaway device must be installed if three E-1 posts are used.

[3] One E-2 post may be used as shown on the E post Standard Drawing. A breakaway device must be installed if two or three E-2 posts are used.

Figure 2A-1 Sign Load Calculation

(Sheet 1 of 2)



$$L = A_1C_1 + A_2C_2 + A_nC_n$$

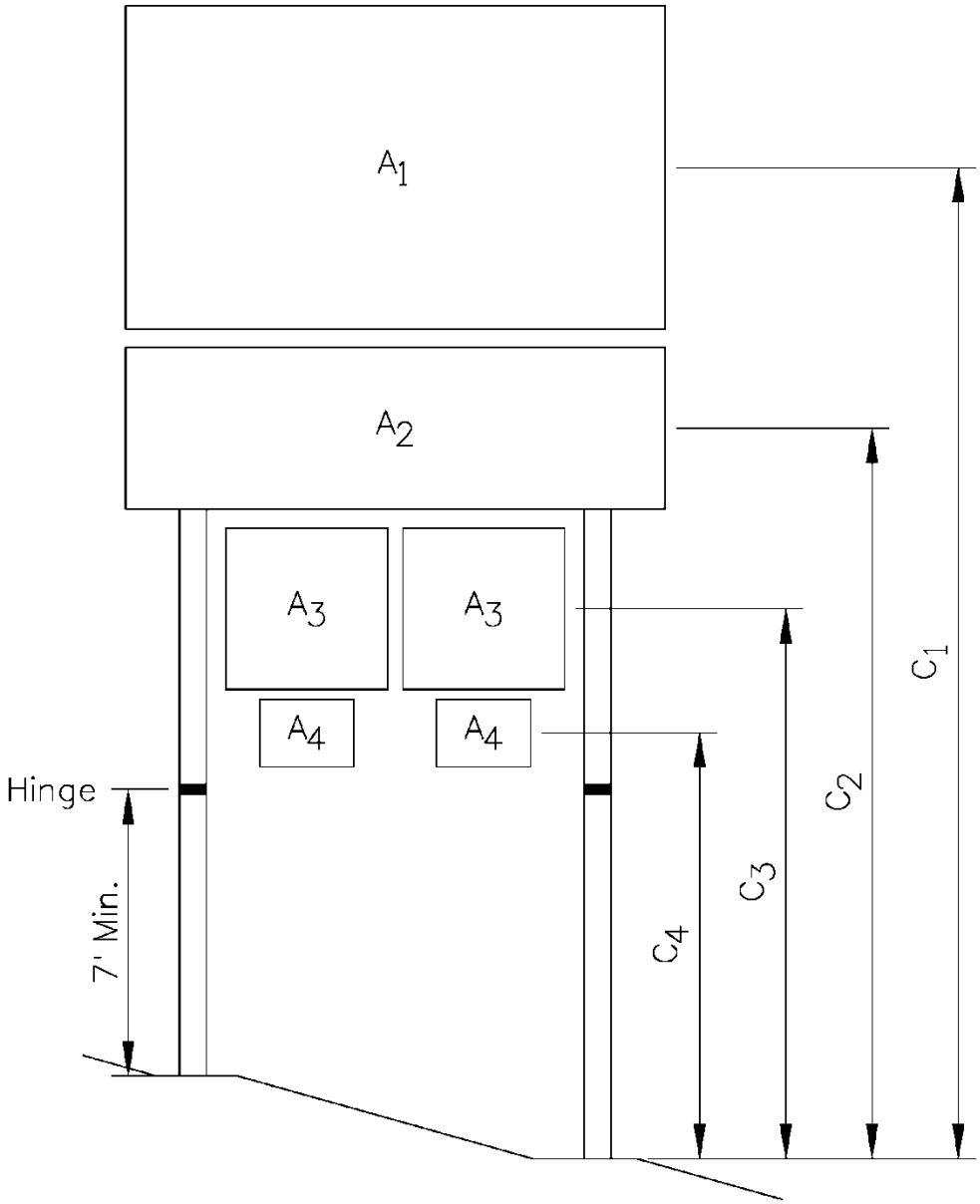
L: Sign load (sq. ft. x ft.)

A: Area of the sign face (sq. ft.)

C: Distance from the sign post base to the centroid of the sign

Figure 2A–1 Sign Load Calculation

(Sheet 2 of 2)



$$L = \frac{A_1C_1 + A_2C_2 + A_nC_n}{P}$$

L: Sign load (sq. ft. x ft.)

A: Area of the sign face (sq. ft.)

C: Distance from the sign post base to the centroid of the sign

P: Number of Posts

CHAPTER 2B. REGULATORY SIGNS, BARRICADES, AND GATES

Section 2B.01 Application of Regulatory Signs

No supplemental information.

Section 2B.02 Design of Regulatory Signs

No supplemental information.

Section 2B.03 Size of Regulatory Signs

STOP signs may be oversized when facing traffic on exit ramps.

Section 2B.04 Right-of-Way at Intersections

In accordance with *Idaho Statute 40-310(11)* and *40-310(12)*, the traffic on state highways has the right of way over intersecting roads. Where two state highways intersect, the Idaho Transportation Board determines which highway has right-of-way.

Section 2B.05 STOP Sign (R1-1) and ALL WAY Plaque (R1-3P)

Idaho Statute 49-720 allows a bicyclist approaching a STOP (R1-1) sign to slow down and proceed through the intersection without stopping after yielding to other traffic (see Section 9B.03).

Section 2B.06 STOP Sign Applications

Install and maintain STOP (R1-1) signs on streets that intersect with ITD highways in accordance with *Idaho Statute 40-310(12)* (see Section 1A.07). Install and maintain STOP signs on ITD highways at passive highway-rail grade crossings (see Sections 1A.07 and 8B.04) in accordance with *Idaho Statute 49-202(25).*

Section 2B.07 Multi-Way Stop Applications

No supplemental information.

Section 2B.08 YIELD Sign (R1-2)

No supplemental information.

Section 2B.09 YIELD Sign Applications

Install and maintain YIELD (R1-2) signs on ITD highways at passive highway-rail grade crossings when through an engineering study it is determined that STOP signs at a given crossing would constitute a greater hazard than the presence of YIELD signs (see *Idaho Statute 49-202(25)).*

Section 2B.10 STOP Sign or YIELD Sign Placement

No supplemental information.

Section 2B.11 Yield Here to Pedestrians Signs and Stop Here For Pedestrians Signs (R1-5 Series)

Do not use STOP HERE FOR PEDESTRIANS (R1-5b, R1-5c) signs at uncontrolled marked crosswalks. In accordance with *Idaho Statute 49-702*, drivers must yield to a pedestrian crossing the highway within a crosswalk. However, the STOP HERE FOR PEDESTRIAN signs can be used at controlled marked crosswalks, such as at a pedestrian hybrid beacon.

Section 2B.12 In-Street and Overhead Pedestrian Crossing Signs (R1-6, R1-6a, R1-9, and R1-9a)

Do not use the STOP FOR (R1-6a, R1-9a) legend on In-Street Pedestrian Crossing signs or Overhead Pedestrian Crossing signs. In accordance with *Idaho Statute 49-702*, drivers must yield to a pedestrian crossing the highway within a crosswalk.

Section 2B.13 Speed Limit Sign (R2-1)

A Traffic Minute Entry must be prepared and approved prior to posting or changing Speed Limit signs. Traffic Minute Entries are described in *IDAPA 39.03.65 "Rules Governing Traffic Minute Entries"* and *Administrative Policy 5016 – Traffic Regulation*.

If a city has an ordinance establishing a statutory speed limit for its local roads, a CITYWIDE (R2-5aP) plaque or other R2-5 series plaque may be mounted above a Speed Limit sign indicating the city's statutory limit with an UNLESS OTHERWISE POSTED (R2-5P) plaque and a plaque indicating the ordinance number mounted below the Speed Limit sign (see Figure 2B-1). The city must provide the ordinance and ordinance number. Signs indicating a different speed should be posted behind the citywide speed limit sign assembly. Discontinue the use of the SPEED LIMIT XX UNLESS OTHERWISE POSTED sign.

See the "Traffic Control Devices Handbook" for Speed Limit sign placement and spacing.

Use engineering judgment to determine if two speed limit reductions should be used when a speed limit is reduced by 20 mph or more.

In addition to paragraphs 19 through 20, see Section 2C.100 for the design and application of radar speed feedback changeable message signs.

Figure 2B-1 Citywide Speed Limit Sign Assembly

R2-5aP, R2-1, R2-5P, and R2-501P

Section 2B.14 Truck Speed Limit Plaque (R2-2P)

The use of the stand-alone TRUCK SPEED sign should be discontinued in favor of the Truck Speed Limit Plaque (R2-2P).

If an engineering study or engineering judgment indicate that trucks are consistently exceeding the posted truck speed limit, the 5 AXLES OR MORE OVER 26,000 (R2-201P) plaque (see Figure 2B-2) may be used beneath the Truck Speed Limit Plaque (R2-2P) to reiterate the statutory definition of trucks (see *Idaho Statute 49-654(3)*).

Figure 2B-2 Truck Speed Limit Definition Plaque

R2-201P

See Section 6F.10 for the use of red, yellow, or green markers when the speed of some vehicles is restricted due to climatic or other conditions.

Section 2B.15 Night Speed Limit Plaque (R2-3P)

No supplemental information.

Section 2B.16 Minimum Speed Limit Plaque (R2-4P)

No supplemental information.

Section 2B.17 Higher Fines Signs and Plaque (R2-6P, R2-10, and R2-11)

See Section 6F.12 for information about *Idaho Statute 49-657* which allows for higher fines in work zones.

Section 2B.18 Movement Prohibition Signs (R3-1 through R3-4, R3-18, and R3-27)

The No U-Turn (R3-4) sign may be used below the AUTHORIZED VEHICLES ONLY (R5-11) sign at median crossover locations (see Section 2B.39).

Section 2B.19 Intersection Lane Control Signs (R3-5 through R3-8)

No supplemental information.

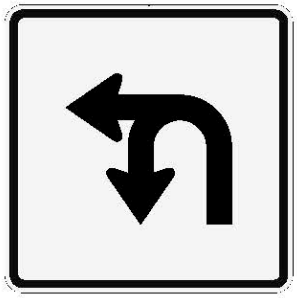
Section 2B.20 Mandatory Movement Lane Control Signs (R3-5, R3-5a, R3-7, and R3-20)

No supplemental information.

Section 2B.21 Optional Movement Lane Control Sign (R3-6)

Sign shape and arrow configuration may be modified to better depict turning movements. Figure 2B-3 shows an example of an alternate legend on an intersection lane control sign.

Figure 2B-3 Example of Alternate Intersection Lane Control Sign Legend



R3-6 Series

Section 2B.22 Advance Intersection Lane Control Signs (R3-8 Series)

Advance Intersection Lane Control (R3-8 series) signs that differ from those shown should be designed and detailed.

Section 2B.23 RIGHT (LEFT) LANE MUST EXIT Sign (R3-33)

No supplemental information.

Section 2B.24 Two-Way Left Turn Only Signs (R3-9a, R3-9b)

No supplemental information.

Section 2B.25 BEGIN and END Plaques (R3-9cP, R3-9dP)

No supplemental information.

Section 2B.26 Reversible Lane Control Signs (R3-9e through R3-9i)

No supplemental information.

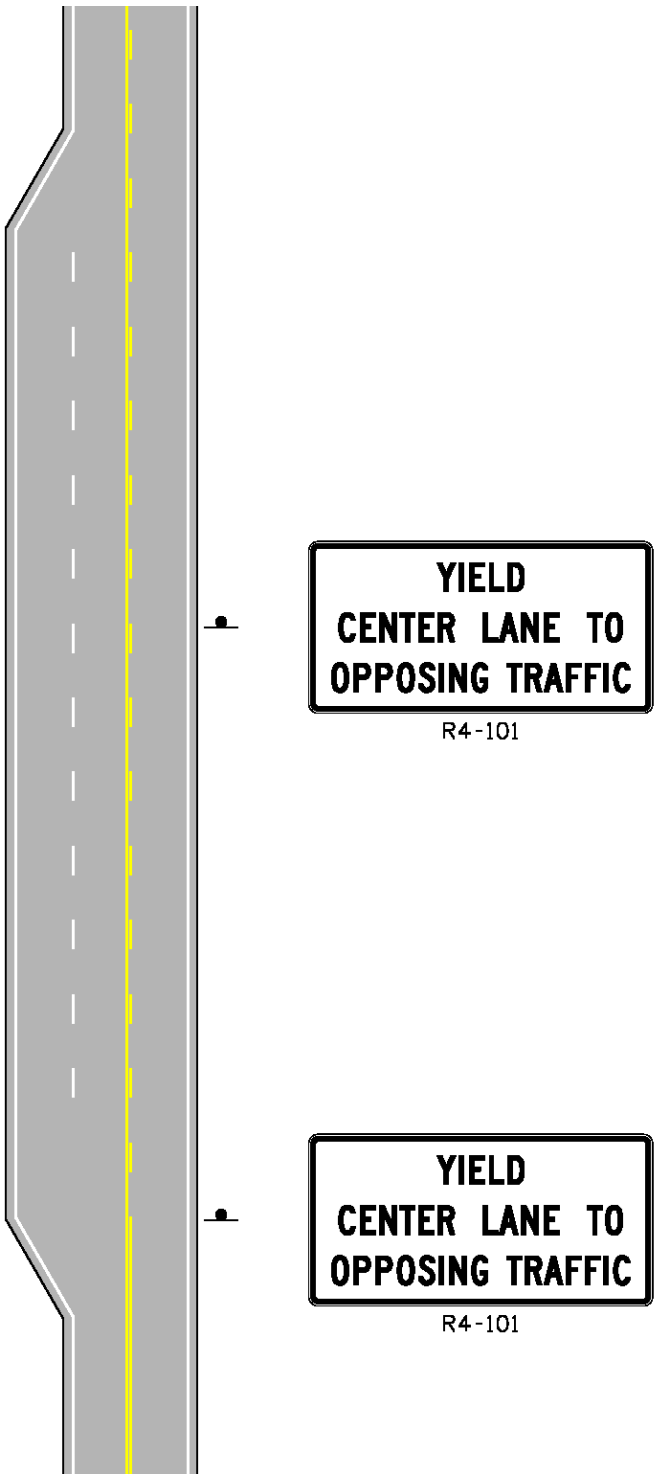
Section 2B.27 Jughandle Signs (R3-23, R3-24, R3-25, and R3-26 Series)

No supplemental information.

Section 2B.28 DO NOT PASS Sign (R4-1)

When a highway has pavement markings to indicate three-lane, two-way marking with passing permitted in the single-lane direction (see MUTCD Figure 3B-3 example A), a YIELD CENTER LANE TO OPPOSING TRAFFIC (R4-101) sign may be used at the beginning of, and at intermittent intervals within, the permitted passing zone (see Figure 2B-4).

Figure 2B-4 Yield Center Lane Sign



Section 2B.29 PASS WITH CARE Sign (R4-2)

No supplemental information.

Section 2B.30 KEEP RIGHT EXCEPT TO PASS Sign (R4-16) and SLOWER TRAFFIC KEEP RIGHT Sign (R4-3)

The KEEP RIGHT EXCEPT TO PASS (R4-16) sign can be used at the beginning of a passing lane. The KEEP RIGHT EXCEPT TO PASS sign can be used on passing lanes instead of the SLOWER TRAFFIC KEEP RIGHT (R4-3) or TRUCKS USE RIGHT LANE (R4-5) signs. See Figure 2D-4 for the use of the KEEP RIGHT EXCEPT TO PASS sign at passing lanes.

Section 2B.31 TRUCKS USE RIGHT LANE Sign (R4-5)

On a multi-lane highway, the TRUCKS USE RIGHT LANE (R4-5) sign may be used in advance of weigh station signs. Use the TRUCKS USE RIGHT LANE (R4-5) sign in advance of a weigh-in-motion system. See Section 2B.60.

Section 2B.32 Keep Right and Keep Left Signs (R4-7, R4-8)

No supplemental information.

Section 2B.33 STAY IN LANE Sign (R4-9)

No supplemental information.

Section 2B.34 RUNAWAY VEHICLES ONLY Sign (R4-10)

No supplemental information.

Section 2B.35 Slow Vehicle Turn-Out Signs (R4-12, R4-13, and R4-14)

Idaho Statute 49-639 requires that vehicles with three or more following vehicles must turn off the roadway at designated turnout. Three vehicles is the specific number of vehicles to display on the R4-12 sign. The 72 x 42 sign size shown in the 2012 Supplement to "Standard Highway Signs and Markings" book is typically used on numbered highways with posted speeds of 45 mph or higher. See Figure 2B-5.

Discontinue the use of the SLOW TRAFFIC DELAYING 3 VEHICLES MUST TURN OUT sign.

Section 2B.36 DO NOT DRIVE ON SHOULDER Sign (R4-17) and DO NOT PASS ON SHOULDER Sign (R4-18)

No supplemental information.

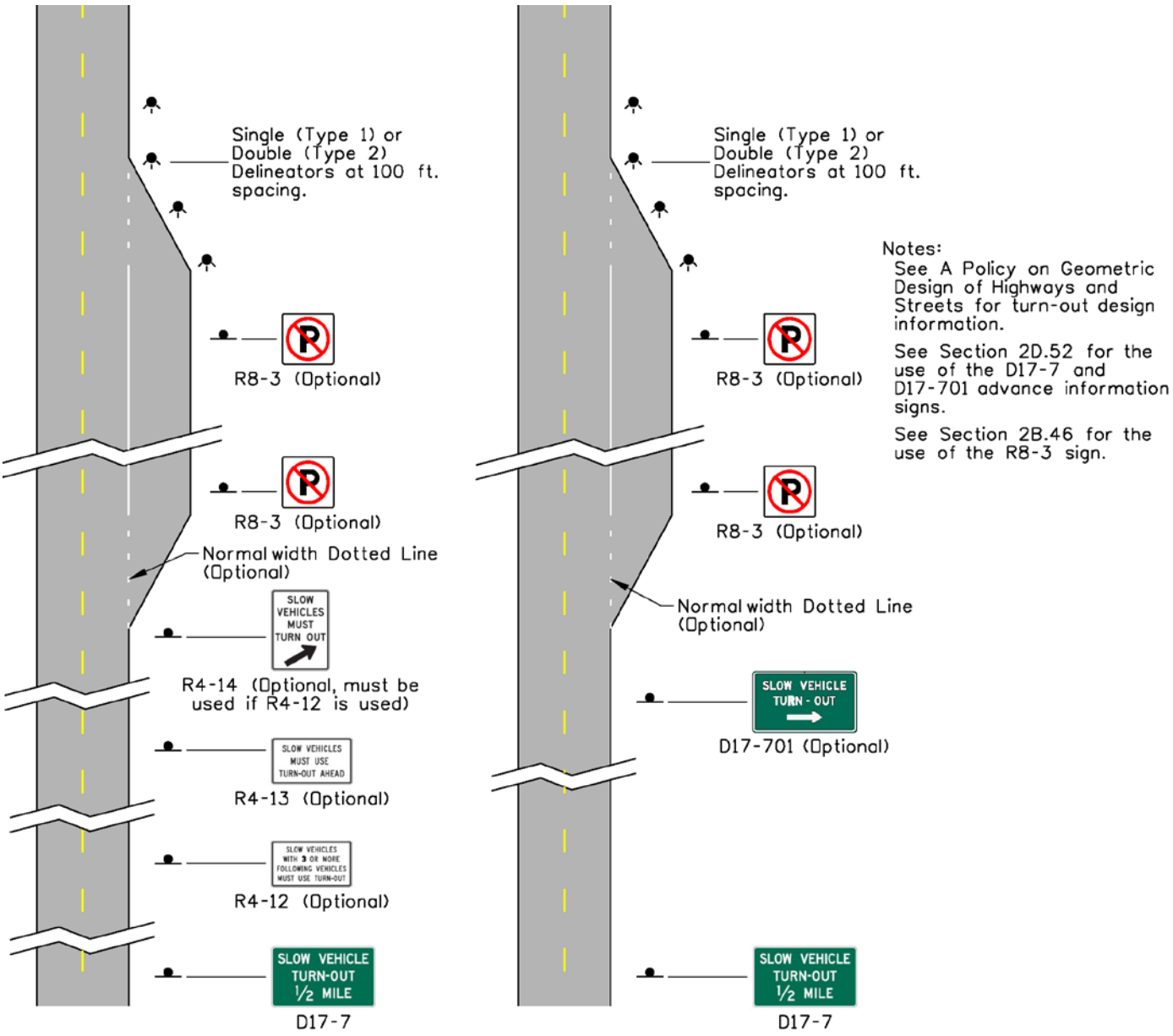
Section 2B.37 DO NOT ENTER Sign (R5-1)

No supplemental information.

Section 2B.38 WRONG WAY Sign (R5-1a)

The WRONG WAY sign may be installed 200 to 250 feet further from the crossroad than the DO NOT ENTER sign.

Figure 2B-5 Example Applications of SLOW VEHICLE TURN-OUT Signs



Section 2B.39 Selective Exclusion Signs

In accordance with *Idaho Statute 49-1421*, median openings can be used without penalty unless specifically prohibited by a public authority. Use the AUTHORIZED VEHICLES ONLY (R5-11) sign to prohibit median opening use except by vehicles that are authorized to do so. *Administrative Policy 5531* – Use of Median Crossovers on Interstates and Divided Highways – outlines which vehicles are authorized. These include:

- ITD and FHWA vehicles
- Law enforcement vehicles
- Fire and rescue vehicles, ambulances, and EMS vehicles
- Military division vehicles in emergencies

- Wrecker and tow trucks responding to crashes
- Emergency utility company and government vehicles responding to critical public service problems
- Contractor vehicles and POE employee personal vehicles if authorized by the appropriate District Engineer

Emergency vehicles are included in the list of authorized vehicles and so it is not necessary for the sign to explicitly allow emergency vehicles.

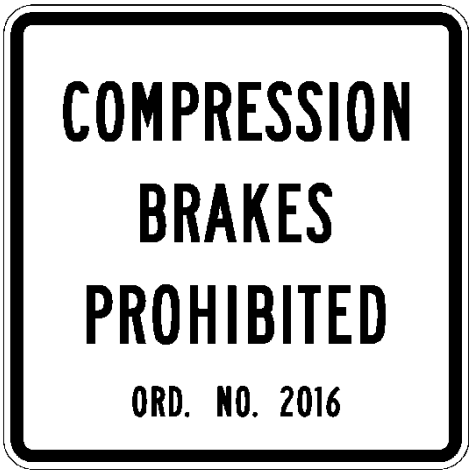
Install AUTHORIZED VEHICLES ONLY (R5-11) signs back to back and perpendicular to the direction of travel at median openings.

Based on engineering judgment, the No U-Turn (R3-4) sign may be used below the AUTHORIZED VEHICLES ONLY (R5-11) sign at median openings (see Section 2B.18) to enhance the meaning of the R5-11 sign.

If a city or county has an ordinance prohibiting compression brakes, a NO UNMUFFLED COMPRESSION BRAKES (R5-201) sign, COMPRESSION BRAKES PROHIBITED (R5-201a) sign, or sign with a similar legend, may be used when requested (See Figure 2B-6). The city or county must provide the ordinance and ordinance number. Show the ordinance number on the sign.

Figure 2B-6 Compression Brake Signs

R5-201



R5-201a

Section 2B.40 ONE WAY Signs (R6-1, R6-2)

No supplemental information.

Section 2B.41 Wrong-Way Traffic Control at Interchange Ramps

No supplemental information.

Section 2B.42 Divided Highway Crossing Signs (R6-3, R6-3a)

No supplemental information.

Section 2B.43 Roundabout Directional Arrow Signs (R6-4, R6-4a, and R6-4b)

No supplemental information.

Section 2B.44 Roundabout Circulation Plaque (R6-5P)

No supplemental information.

Section 2B.45 Examples of Roundabout Signing

Refer to "NCHRP Report 672 – Roundabouts: An Informational Guide."

Section 2B.46 Parking, Standing, and Stopping Signs (R7 and R8 Series)

Parking may be restricted in accordance with *Idaho Statute 49-202(28)*. Prepare a Traffic Minute Entry as in accordance with *IDAPA 39.03.65 "Rules Governing Traffic Minute Entries"* and *Administrative Policy 5016 – Traffic Regulation*.

Section 2B.47 Design of Parking, Standing, and Stopping Signs

In parking lots and where on-street parking is permitted and designated by signs or pavement markings, ensure that parking spaces that are reserved for persons with disabilities in accordance with *Idaho Statute 49-213*.

The legend on Parking and Standing Signs and Plaques (R8 Series) may be modified to convey messages such as NO PARKING CHAIN UP AREA, NO PARKING SNOWPLOW TURNAROUND, NO PARKING RUNAWAY VEHICLES ONLY, NO FISHING FROM BRIDGE, NO LOITERING ON BRIDGE, or other similar messages if justified by engineering judgment. Signs with custom legends should follow the design principles of parking, standing, and stopping signs (see Figure 2B-7).

Figure 2B-7 Example Parking Signs

R8 Series

Section 2B.48 Placement of Parking, Stopping, and Standing Signs

No supplemental information.

Section 2B.49 Emergency Restriction Signs (R8-4, R8-7, R8-8)

No supplemental information.

Section 2B.50 WALK ON LEFT FACING TRAFFIC and No Hitchhiking Signs (R9-1, R9-4, R9-4a)

No supplemental information.

Section 2B.51 Pedestrian Crossing Signs (R9-2, R9-3)

No supplemental information.

Section 2B.52 Traffic Signal Pedestrian and Bicycle Actuation Signs (R10-1 through R10-4, and R10-24 through R10-26)

No supplemental information.

Section 2B.53 Traffic Signal Signs (R10-5 through R10-30)

No supplemental information.

Section 2B.54 No Turn on Red Signs (R10-11 Series, R10-17a, and R10-30)

No supplemental information.

Section 2B.55 Photo Enforced Signs and Plaques (R10-18, R10-19P, R10-19aP)

No supplemental information.

Section 2B.56 Ramp Metering Signs (R10-28 and R10-29)

No supplemental information.

Section 2B.57 KEEP OFF MEDIAN Sign (R11-1)

No supplemental information.

Section 2B.58 ROAD CLOSED Sign (R11-2) and LOCAL TRAFFIC ONLY Signs (R11-3 Series, R11-4)

No supplemental information.

Section 2B.59 Weight Limit Signs (R12-1 through R12-5)

Use weight limit signs in advance of structures that have been identified as weight restricted bridges through the Bridge Inspection Program. Coordinate with the ITD Bridge Section for the appropriate weight limits. Prepare a Traffic Minute Entry as in accordance with *IDAPA 39.03.65 "Rules Governing Traffic Minute Entries"* and *Administrative Policy 5016 – Traffic Regulation*.

See Section 6F.10 for the use of Weight Limit (R12 series) signs when the weight of some vehicles is restricted due to climatic or other conditions.

Section 2B.60 Weigh Station Signs (R13 Series)

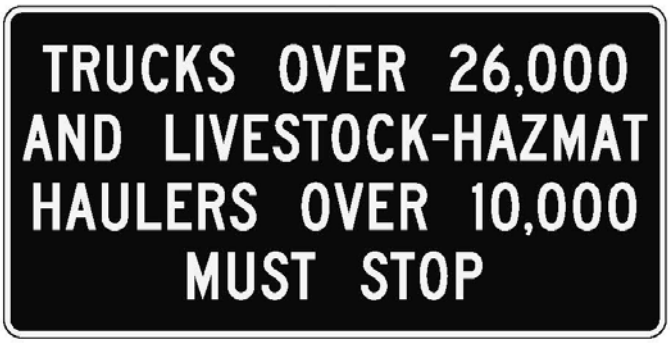
Use the TRUCKS OVER 26,000 AND LIVESTOCK-HAZMAT HAULERS OVER 10,000 MUST STOP (R13-101) in place of the R13-1 sign. The R13-101 sign typically has a white legend and border on a black background as shown in Figure 2B-8. The reverse color combination, a black legend and border on a white background, may be used. Use engineering judgment to decide whether to use the reverse color combination.

The TRUCKS USE RIGHT LANE (R4-5) sign may be used in advance of the TRUCKS OVER 26,000 AND LIVESTOCK-HAZMAT HAULERS OVER 10,000 MUST STOP (R13-101) sign

(see Section 2B.31). Use the TRUCKS USE RIGHT LANE (R4-5) sign in advance of a weigh-in-motion system.

See Section 2D.49 for example applications of the D8 series of guide signs and sign spacing.

Figure 2B-8 Heavy Vehicle Sign



R13-101

Section 2B.61 TRUCK ROUTE Sign (R14-1)

No supplemental information.

Section 2B.62 Hazardous Material Signs (R14-2, R14-3)

No supplemental information.

Section 2B.63 National Network Signs (R14-4, R14-5)

No supplemental information.

Section 2B.64 Headlight Use Signs (R16-5 through R16-11)

No supplemental information.

Section 2B.65 FENDER BENDER Sign (R16-4)

The FENDER BENDER MOVE VEHICLES FROM TRAVEL LANES (R16-4) sign may be used to encourage awareness of *Idaho Statute 49-1301*.

Discontinue the use of the FENDER BENDER? DRIVE DAMAGED VEHICLES TO SHOULDER sign.

Section 2B.66 Seat Belt Symbol

Discontinue the use of seat belt symbols that differ from the one shown in the MUTCD. Signs encouraging seat belt use may be used at egresses from Department facilities, rest areas, and near the state border.

Section 2B.67 Barricades

No supplemental information.

Section 2B.68 Gates

No supplemental information.

Section 2B.100 SLOW DOWN AND MOVE OVER Sign (R16-101, Section is not in the MUTCD)

The SLOW DOWN AND MOVE OVER FOR STOPPED EMERGENCY VEHICLES (R16-101) sign may be used to encourage compliance with *Idaho Statute 46-624* (see Figure 2B-9). The sign may be installed on multi-lane highways in response to a law enforcement agency request. Use of the sign may be limited to state borders and interchanges on multi-lane highways.

Figure 2B-9 Slow Down and Move Over Sign

R16-101

Section 2B.101 CHAINS REQUIRED Sign (R16-201, Section is not in the MUTCD)

In accordance with *Idaho Statute 49-948*, ITD may require chains to be used by commercial vehicles if unsafe conditions exist at the following highway locations:

- Lookout Pass on Interstate 90
- Fourth of July Pass on Interstate 90
- Lolo Pass on US-12

When ITD determines that chains are required, use the CHAINS REQUIRED ALL NON-EXEMPT COMMERCIAL VEHICLES (R16-201) sign (see Figure 2B-10). Install at least two signs in each direction of travel to provide multiple advance notices of the requirement.

Figure 2B-10 Chains Required Sign

R16-201

Commercial vehicles required to use chains include:

- Vehicles with a combined weight in excess of 26,000 pounds including a trailer with a rating of more than 10,000 pounds
- Vehicles with weight in excess of 26,000 pounds

Commercial vehicles that are exempt from the requirement include:

- ITD vehicles used in the maintenance of the highway
- School busses or other vehicles used to transport school children and teachers
- Vehicles used by farmers to transport agricultural products, supplies, or farm equipment
- Mail carrier vehicles
- Motor carriers transporting forest products or chips
- Motor carriers transporting mining products including sand, gravel, and aggregates, but not petroleum products
- Tow trucks

Some vehicles that are not specifically mentioned in the statute, and therefore not required to use chains include:

- Vehicles designed to carry sixteen people or more
- Vehicles transporting hazardous materials

If used, remove or cover the signs when chains are no longer needed or when commercial vehicles can drive on bare pavement.

Use the CHAIN-UP AREA (D5-15 and D5-16) signs (See Section 2I.07) to indicate locations where drivers can pull off the highway to install chains on their tires. Install at least one R16-201 sign prior to the chain-up area.

CHAPTER 2C. WARNING SIGNS AND OBJECT MARKERS

Section 2C.01 Function of Warning Signs

No supplemental information.

Section 2C.02 Application of Warning Signs

No supplemental information.

Section 2C.03 Design of Warning Signs

No supplemental information.

Section 2C.04 Size of Warning Signs

Use 36 x 36 inch or larger diamond-shaped horizontal alignment warning signs on conventional roads and expressways. Use 48 x 48 inch or larger diamond-shaped horizontal alignment warning signs on freeways.

Section 2C.05 Placement of Warning Signs

Where the posted speed limit is 80 mph, use the 75 mph row of MUTCD Table 2C-4 for advance placement of warning signs.

Section 2C.06 Horizontal Alignment Warning Signs

See Section 2C.04 for horizontal alignment warning sign sizes.

Section 2C.07 Horizontal Alignment Signs (W1-1 through W1-5, W1-11, W1-15)

No supplemental information.

Section 2C.08 Advisory Speed Plaque (W13-1P)

No supplemental information.

Section 2C.09 Chevron Alignment Sign (W1-8)

No supplemental information.

Section 2C.10 Combination Horizontal Alignment/Advisory Speed Signs (W1-1a, W1-2a)

No supplemental information.

Section 2C.11 Combination Horizontal Alignment/Intersection Signs (W1-10 Series)

No supplemental information.

Section 2C.12 One-Direction Large Arrow Sign (W1-6)

No supplemental information.

Section 2C.13 Truck Rollover Warning Sign (W1-13)

No supplemental information.

Section 2C.14 Advisory Exit and Ramp Speed Signs (W13-2 and W13-3)

No supplemental information.

Section 2C.15 Combination Horizontal Alignment/Advisory Exit Ramp Speed Signs (W13-6 and W13-7)

No supplemental information.

Section 2C.16 Hill Signs (W7-1, W7-1a)

No supplemental information.

Section 2C.17 Truck Escape Ramp Signs (W7-4 Series)

See Figure 2C-1.

Section 2C.18 HILL BLOCKS VIEW Sign (W7-6)

No supplemental information.

Section 2C.19 ROAD NARROWS Sign (W5-1)

No supplemental information.

Section 2C.20 NARROW BRIDGE Sign (W5-2)

See Figure 2C-2.

Section 2C.21 ONE LANE BRIDGE Sign (W5-3)

See Figure 2C-2. Discontinue the use of the ONE LANE BRIDGE FOR TRUCKS BUSSES sign.

Figure 2C-1 Example Truck Escape Ramps (Sheet 1 of 2)

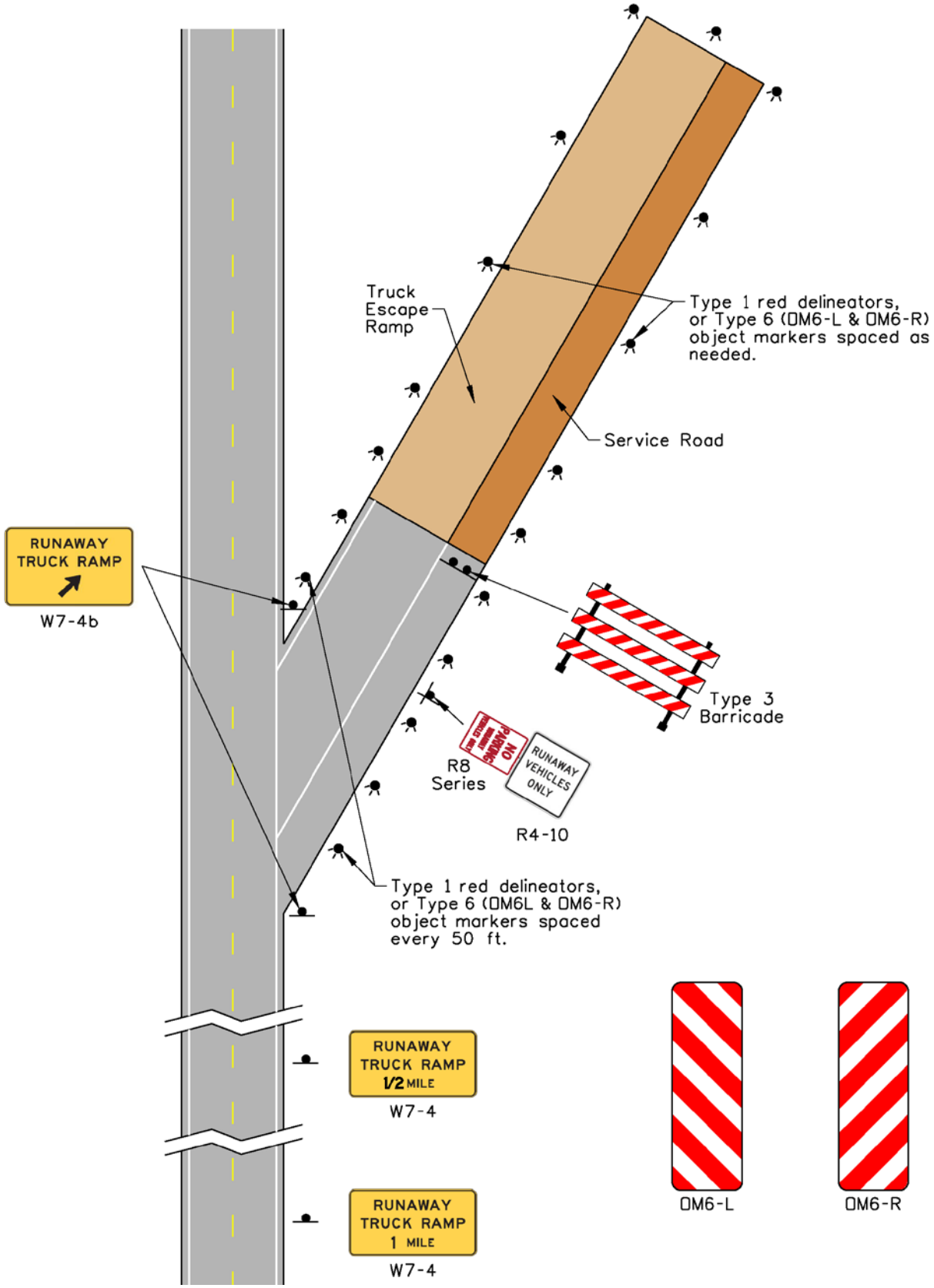


Figure 2C-1 Example Truck Escape Ramps (Sheet 2 of 2)

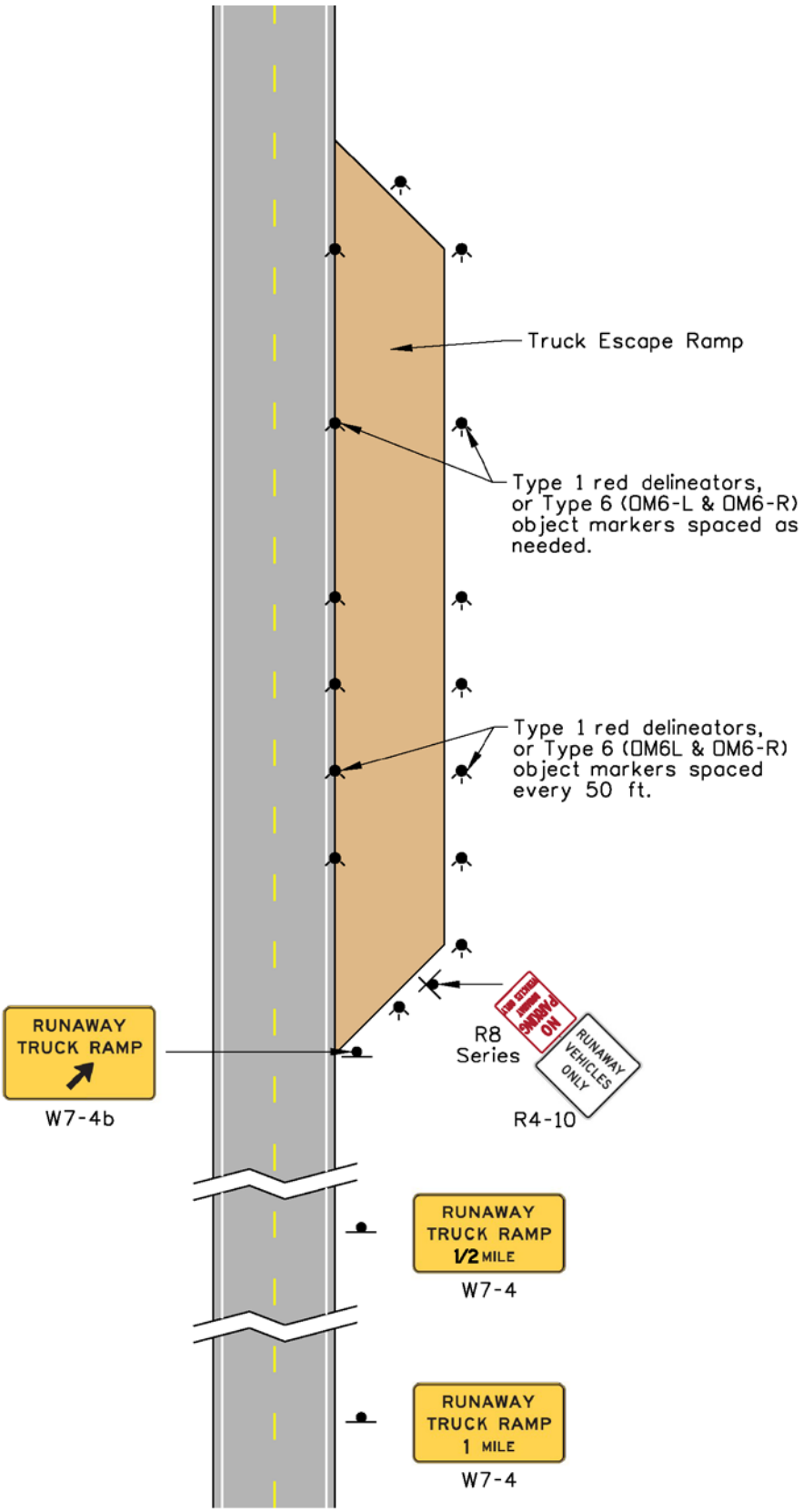
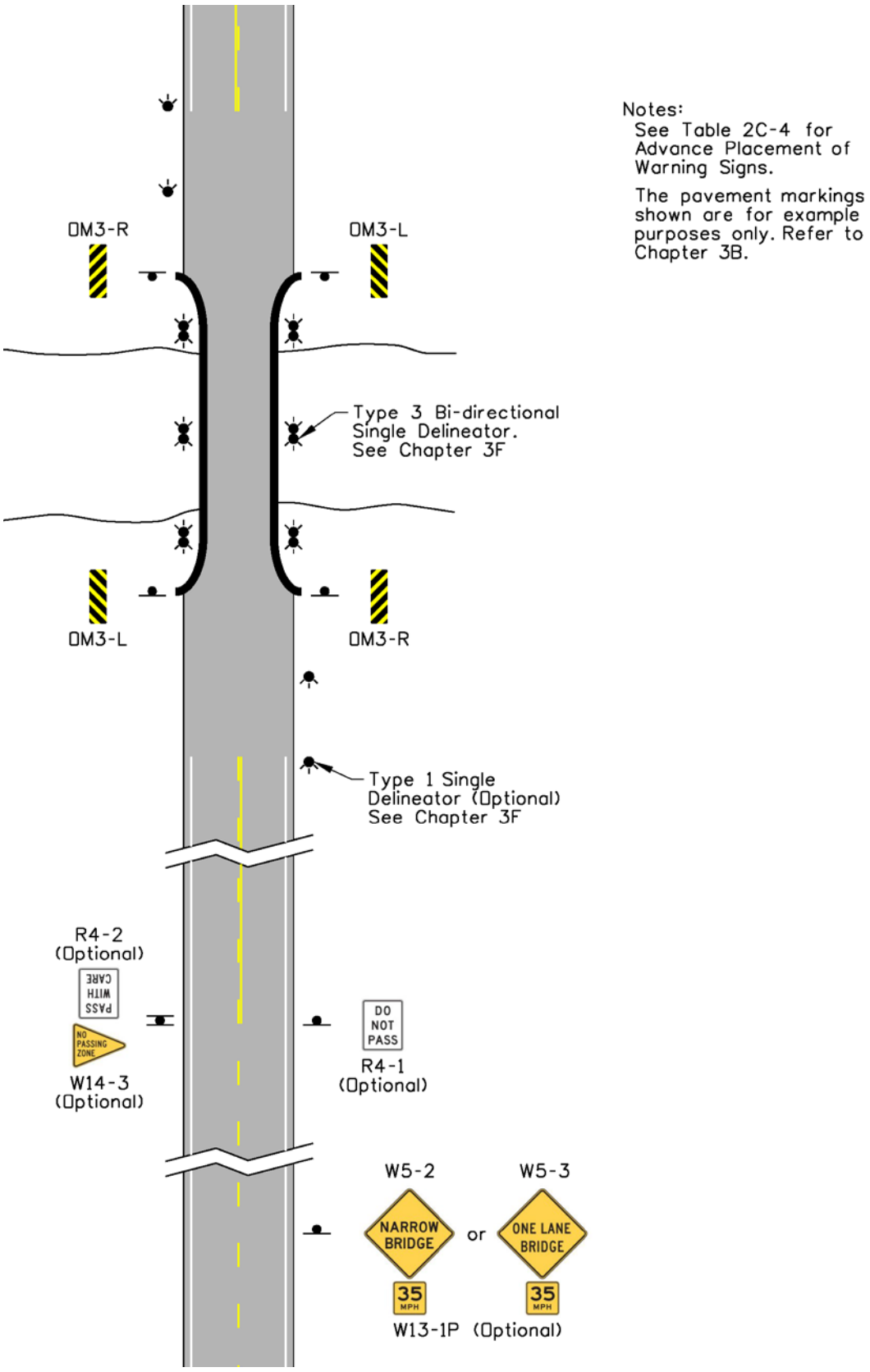


Figure 2C-2 Example Narrow or One Lane Bridge



Section 2C.22 Divided Highway Sign (W6-1)

No supplemental information.

Section 2C.23 Divided Highway Ends Sign (W6-2)

No supplemental information.

Section 2C.24 Freeway or Expressway Ends Signs (W19 Series)

No supplemental information.

Section 2C.25 Double Arrow Sign (W12-1)

No supplemental information.

Section 2C.26 DEAD END/NO OUTLET Signs (W14-1, W14-1a, W14-2, W14-2a)

No supplemental information.

Section 2C.27 Low Clearance Signs (W12-2 and W12-2a)

Use the Low Clearance (W12-2) sign at structures with less than 15 feet of clearance. The statutory maximum vehicle height stated in *Idaho Statute 49-1010(2)* is 14 feet.

Section 2C.28 BUMP and DIP Signs (W8-1, W8-2)

No supplemental information.

Section 2C.29 SPEED HUMP Sign (W17-1)

No supplemental information.

Section 2C.30 PAVEMENT ENDS Sign (W8-3)

No supplemental information.

Section 2C.31 Shoulder Signs (W8-4, W8-9, W8-17, W8-23, and W8-25)

No supplemental information.

Section 2C.32 Surface Condition Signs (W8-5, W8-7, W8-8, W8-11, W8-13, and W8-14)

Custom surface condition signs may be used with legend messages such as SAND ON ROAD, MUD ON ROAD, WATCH FOR ROCK, SLIDE AREA, SLIDE AHEAD, AVALANCHE AREA, FROST HEAVES, or other similar messages if justified by engineering judgment (see Figure 2C-3). Signs with custom legends should follow the design principles of warning signs.

Figure 2C-3 Example Roadway Condition Signs

W8 Series

The CHAINS RECOMMENDED WHEN ICY (W8-1301) sign may be used to warn of a surface condition where chains may be preferred (see Figure 2C-4). If used, the sign should be removed or covered during the off seasons. See Section 2I.07 for CHAIN-UP AREA (D5-15 and D5-16) signs and Section 2B.101 for the CHAINS REQUIRED ALL NON-EXEMPT COMMERCIAL VEHICLES
(R16-201) sign.

Figure 2C-4 Chains Recommended Sign

W8-1301

Section 2C.33 Warning Signs and Plaques for Motorcyclists (W8-15, W8-15P, and W8-16)

No supplemental information.

Section 2C.34 NO CENTER LINE Sign (W8-12)

No supplemental information.

Section 2C.35 Weather Condition Signs (W8-18, W8-19, W8-21, W8-22)

Custom weather condition signs may be used with legend messages such as LOW VISIBILITY AREA, SEVERE STORM AREA, or other similar messages if justified by engineering judgment (see Figure 2C-5). Signs with custom legends should follow the design principles of warning signs.

Figure 2C-5 Example Weather Condition Signs

W8 Series

Section 2C.36 Advance Traffic Control Signs (W3-1, W3-2, W3-3, W3-4)

STOP AHEAD (W3-1) signs may be installed on local public roads in advance of an intersection with a state highway. Coordinate the installation and maintenance of the STOP AHEAD sign with the local road or highway agency (see Section 1A.07).

Section 2C.37 Advance Ramp Control Signal Signs (W3-7 AND W3-8)

No supplemental information.

Section 2C.38 Reduced Speed Limit Ahead Signs (W3-5, W3-5a)

No supplemental information.

Section 2C.39 DRAW BRIDGE Sign (W3-6)

No supplemental information.

Section 2C.40 Merge Signs (W4-1, W4-5)

No supplemental information.

Section 2C.41 Added Lane Signs (W4-3, W4-6)

No supplemental information.

Section 2C.42 Lane Ends Signs (W4-2, W9-1, W9-2)

The LANE ENDS MERGE LEFT (RIGHT) (W9-2) sign or Lane Ends (W4-2) sign should be installed in accordance with MUTCD Table 2C-4. See Figure 2D-4 for the use of the Lane Ends (W4-2) and RIGHT LANE ENDS (W9-1) signs at passing lanes.

Section 2C.43 RIGHT (LEFT) LANE EXIT ONLY AHEAD Sign (W9-7)

No supplemental information.

Section 2C.44 Two-Way Traffic Sign (W6-3)

No supplemental information.

Section 2C.45 NO PASSING ZONE Sign (W14-3)

No supplemental information.

Section 2C.46 Intersection Warning Signs (W2-1 through W2-8)

No supplemental information.

Section 2C.47 Two-Direction Large Arrow Sign (W1-7)

No supplemental information.

Section 2C.48 Traffic Signal Signs (W25-1, W25-2)

Section deleted. See *IDAPA 39.03.41 "Rules Governing Traffic Control Devices."*

Section 2C.49 Vehicular Traffic Warning Signs (W8-6, W11-1, W11-5, W11-5a, W11-8, W11-10, W11-11, W11-12P, W11-14, W11-15, and W11-15a)

Idaho statutes 49-426(4), Board Policy 4070, and *Administrative Policy 5070* address the use of all-terrain vehicles (ATVs), utility type vehicles (UTVs), specialty off-highway vehicles (SOHVs), and motorbikes on state highways as follows:

1) Within city limits, and within one mile of city limits, ATVs, UTVs, SOHVs, and motorbikes can travel on non-full access-controlled state highways if the speed limit is 45 mph or less, unless restricted by ITD.

2) Outside city limits (except for one mile beyond city limits), ITD may designate sections of non-full access-controlled state highways to allow ATV, UTV, SOHV, and motorbike use.
3) ATVs, UTVs, SOHVs, and motorbikes can cross non-full access-controlled state highways at public road intersections within and outside of city limits and other locations permitted by ITD.

Support recommendations to allow ATV, UTV, SOHV, or motorbike travel on or crossings of non-full access-controlled highways with an engineering study. The engineering study should consider the following:

A. Relative speeds of trail and highway users,

B. Relative volumes of trail and highway traffic,

C. Relative importance of trail and highway, and

D. Sight distance available on each approach.

Limit trail crossings to right angles with the highway if practical. Control trail crossings with STOP (R1-1) signs. Place or shield the STOP signs so they are not readily visible to highway users. The TRAIL CROSSING (W11-15a) sign may be used to warn of a location where ATVs, UTVs, SOHVs, and motorbikes might be crossing the highway. Discontinue the use of the RECREATIONAL XING sign.

Manage and track approved ATV, UTV, SOHV, and motorbike crossing points at non-public road intersection as an encroachment permit in accordance with *IDAPA 39.03.42 "Rules Governing Highway Right-of-Way Encroachments on state Right-of-Way."* When TRAIL CROSSING signs are installed by permit, include documentation outlining trail signing responsibility in the crossing permit.

Section 2C.50 Non-Vehicular Warning Signs (W11-2, W11-3, W11-4, W11-6, W11-7, W11-9, and W11-16 through W11-22)

Non-vehicular warning signs with symbols are preferred over warning signs with word messages. Warning signs with word messages such as WATCH FOR STOCK or GAME CROSSING should be removed when they are no longer in serviceable condition. Word messages can be tried if symbol warning signs are frequently being vandalized.

See Section 1A.10 and Section 2A.06 for the use of symbols that are not shown in the "Standard Highway Signs and Markings" book.

See Section 2C.53 for the use of the OPEN RANGE (W16-901P) plaque.

Section 2C.51 Playground Sign (W15-1)

No supplemental information.

Section 2C.52 NEW TRAFFIC PATTERN AHEAD Sign (W23-2)

No supplemental information.

Section 2C.53 Use of Supplemental Warning Plaques

The OPEN RANGE (W16-901P) plaque (see Figure 2C-6) may be used with the Cow (W11-4) or Sheep (W11-17) Non-Vehicular Warning signs. Open range is defined in *Idaho statute 25-2118* as "all unenclosed lands outside of cities, villages and herd districts, upon which by custom, license, lease, or permit are grazed or permitted to roam." *Idaho statute 25-2402* contains a similar definition. *Idaho Statute 49-202(29)* requires ITD to provide information about the state's open range law and the responsibilities, liabilities, and obligations of drivers. The statute does not require the use of the OPEN RANGE plaque, but the plaque may be used in locations determined by engineering judgment.

Figure 2C-6 Open Range Plaque

W16-901P

Section 2C.54 Design of Supplemental Warning Plaques

No supplemental information.

Section 2C.55 Distance Plaques (W16-2 Series, W16-3 Series, W16-4P, W7-3aP)

No supplemental information.

Section 2C.56 Supplemental Arrow Plaques (W16-5P, W16-6P)

No supplemental information.

Section 2C.57 Hill-Related Plaques (W7-2 Series, W7-3 Series)

No supplemental information.

Section 2C.58 Advance Street Name Plaque (W16-8P, W16-8aP)

If used, only use in advance of official named intersecting streets.

The advance street name plaque height can be increased to twelve inches and the legend height to six inches to improve conspicuity. See the "ITD Supplement to the Standard Highway Signs and Markings" Book.

Section 2C.59 CROSS TRAFFIC DOES NOT STOP Plaque (W4-4P)

No supplemental information.

Section 2C.60 SHARE THE ROAD Plaque (W16-1P)

No supplemental information.

Section 2C.61 Photo Enforced Plaque (W16-10P)

No supplemental information.

Section 2C.62 NEW Plaque (W16-15P)

No supplemental information.

Section 2C.63 Object Marker Design and Placement Height

See *IDAPA 39.03.41 "Rules Governing Traffic Control Devices."* Idaho has added Type 6 (Truck Escape Ramp) object marker for use at truck escape ramps (see Figure 2C-7).

Figure 2C-7 Idaho Truck Escape Ramp Object Marker

OM6-R

The Type 6 (OM6 Truck Escape Ramp) object marker can be used in place of red delineators at truck escape ramps (see Figure 2C-1 and Section 3F.03).

Section 2C.64 Object Markers for Obstructions Within the Roadway

No supplemental information.

Section 2C.65 Object Markers for Obstructions Adjacent to the Roadway

No supplemental information.

Section 2C.66 Object Markers for Ends of Roadways

No supplemental information.

Section 2C.100 Radar Speed Feedback Changeable Message Signs (Section is not in the MUTCD)

This section supplements MUTCD Section 2B.13, paragraphs 19 through 20, and MUTCD Chapter 2L.

If a radar speed feedback changeable message sign is used, the sign must be rectangular and have a black legend and border on a yellow background (see Figure 2C-8). The changeable message

portion of the sign must have a yellow legend on a black background. Display the legend YOUR SPEED XX on the sign. Do not display word messages, animation, strobe lights, rapid flashing, dissolving, exploding, scrolling, or other dynamic elements within the changeable message portion of the sign.

The sign dimensions and legend size must match those of the Speed Limit (R2-1) sign. See the design details for the radar speed feedback changeable message sign in the "ITD Supplement to the Standard Highway Signs and Markings" book.

The sign can be installed on the same post under a Speed Limit (R2-1) sign (provided the height still meets MUTCD Section 2A.16) or on its own post. The sign dimensions must be smaller than or equal to the regulatory Speed Limit (R2-1) sign used in the vicinity of the installation.

Figure 2C-8 Example Radar Speed Feedback Changeable Message Sign

W13-100

CHAPTER 2D. GUIDE SIGNS – CONVENTIONAL ROADS

Section 2D.01 Scope of Conventional Road Guide Sign Standards

No supplemental information.

Section 2D.02 Application

No supplemental information.

Section 2D.03 Color, Retroreflection, and Illumination

No supplemental information.

Section 2D.04 Size of Signs

Round sign heights up to twelve inch increments when the signs are constructed with extruded aluminum panels. ITD prefers to use twelve inch extruded aluminum panels.

Section 2D.05 Lettering Style

No supplemental information.

Section 2D.06 Size of Lettering

No supplemental information.

Section 2D.07 Amount of Legend

No supplemental information.

Section 2D.08 Arrows

See the detailed drawings in the "ITD Supplement to the Standard Highway Signs and Markings" book for additional arrow dimensions (see Section 1A.11).

Section 2D.09 Numbered Highway Systems

No supplemental information.

Section 2D.10 Route Signs and Auxiliary Signs

No supplemental information.

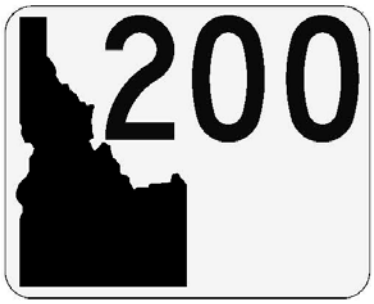
Section 2D.11 Design of Route Signs

The Idaho State Route sign is a square or rectangle with black numerals in the top right corner and a black depiction of the shape of Idaho in the bottom left corner on a white retroreflective background (see Figure 2D-1). The same sign design is used for route sign auxiliaries and as guide sign components.

Discontinue the use of prior Idaho State Route sign designs. Signs with prior designs may remain as long as they are in serviceable condition.

Figure 2D-1 Idaho Route Signs

M1-5 (1 or 2-digit)



M1-5 (3-digit)

See Section 2D.29 for the use of the County Route Sign (M1-6) and the Forest Route Sign (M1-7).

Section 2D.12 Design of Route Sign Auxiliaries

No supplemental information.

Section 2D.13 Junction Auxiliary Sign (M2-1)

No supplemental information.

Section 2D.14 Combination Junction Sign (M2-2)

No supplemental information.

Section 2D.15 Cardinal Direction Auxiliary Signs (M3-1 through M3-4)

No supplemental information.

Section 2D.16 Auxiliary Signs for Alternative Routes (M4 Series)

No supplemental information.

Section 2D.17 ALTERNATE Auxiliary Signs (M4-1, M4-1a)

No supplemental information.

Section 2D.18 BY-PASS Auxiliary Sign (M4-2)

No supplemental information.

Section 2D.19 BUSINESS Auxiliary Sign (M4-3)

No supplemental information.

Section 2D.20 TRUCK Auxiliary Sign (M4-4)

No supplemental information.

Section 2D.21 TO Auxiliary Sign (M4-5)

No supplemental information.

Section 2D.22 END Auxiliary Sign (M4-6)

No supplemental information.

Section 2D.23 BEGIN Auxiliary Sign (M4-14)

No supplemental information.

Section 2D.24 TEMPORARY Auxiliary Sign (M4-7, M4-7a)

No supplemental information.

Section 2D.25 Temporary Detour and Auxiliary Signs

No supplemental information.

Section 2D.26 Advance Turn Arrow Auxiliary Signs (M5-1, M5-2, and M5-3)

No supplemental information.

Section 2D.27 Lane Designation Auxiliary Signs (M5-4, M5-5, and M5-6)

No supplemental information.

Section 2D.28 Directional Arrow Auxiliary Signs (M6 Series)

No supplemental information.

Section 2D.29 Route Sign Assemblies

A County Route Sign or Forest Route Sign assembly, consisting of the route sign and auxiliary signs, may be installed on U.S. or State numbered routes.

Section 2D.30 Junction Assembly

No supplemental information.

Section 2D.31 Advance Route Turn Assembly

No supplemental information.

Section 2D.32 Directional Assembly

No supplemental information.

Section 2D.33 Combination Lane-Use/Destination Overhead Guide Sign (D15-1)

No supplemental information.

Section 2D.34 Confirming or Reassurance Assemblies

Route signs for confirming or reassurance purposes should be placed every 10 miles between interstate interchanges and at 5 mile intervals between cities in rural areas on other highways.

Section 2D.35 Trailblazer Assembly

Unless an agreement is made with a local agency, ITD will not provide, place, or maintain trailblazer assemblies directing motorists to an ITD highway on local agency roads.

Section 2D.36 Destination and Distance Signs

No supplemental information.

Section 2D.37 Destination Signs (D1 Series)

If destination signs are used, the control cities shown in Figure 2D-2 may be shown.

Section 2D.38 Destination Signs at Circular Intersections

No supplemental information.

Section 2D.39 Destination Signs at Jughandles

No supplemental information.

Section 2D.40 Location of Destination Signs

An additional destination sign may be placed at the top of a "T" intersection where approaching vehicles must stop.

Section 2D.41 Distance Signs (D2 Series)

Display distances to a well-defined central area or central business district. If a central area is not well defined, measure distances to the main post office of the community in question.

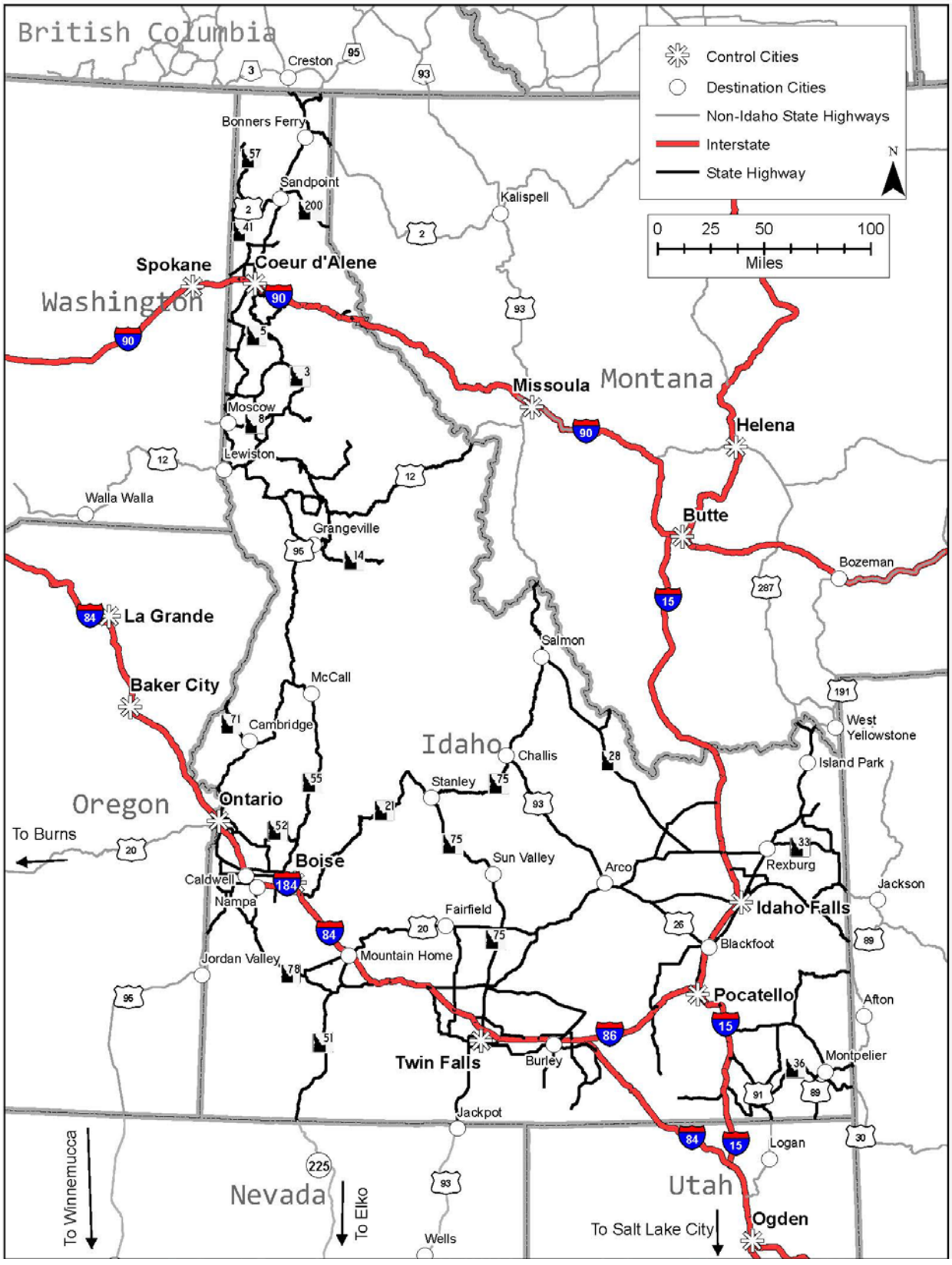
AASHTO maintains a list of control cities for use in guide signs on Interstate highways. The control cities for Interstate highways in Idaho are shown in Table 2D-1 and on Figure 2D-2. Refer to "AASHTO Guidelines for Supplemental Guide Signing" for the website link to the current Interstate control cities list and for procedures to request changes to the list of control cities.

Table 2D-1 Interstate Control Cities

Interstate	Control Cities
15	Ogden, Pocatello, Idaho Falls, Butte
84	Ontario, Boise, Twin Falls, Ogden
86	Pocatello
90	Spokane, Coeur d'Alene, Missoula

Other destination cities, such as those shown in Figure 2D-2, may be used on distance signs.

Figure 2D-2 Control Cities and Example Destination Cities



Section 2D.42 Location of Distance Signs

If used, also install distance signs near state lines and significant traffic generators as determined by engineering judgment.

If used, place distance signs at 20 mile intervals or less.

Section 2D.43 Street Name Signs (D3-1 or D3-1a)

In accordance with *IDAPA 39.03.41 "Rules Governing Traffic Control Devices,"* do not omit sign borders from Street Name signs on the State Highway System or related highways.

When installed on a highway traffic signal mast arm, install the Street Name (D3-1 or D3-1a) sign 2 feet to the right of the furthest right signal head.

Street Name (D3-1 or D3-1a) signs may be installed and maintained by other agencies in ITD right-of-way if an agreement is in place between the agencies.

Section 2D.44 Advance Street Name Signs (D3-2)

No supplemental information.

Section 2D.45 Signing on Conventional Roads on Approaches to Interchanges

No supplemental information.

Section 2D.46 Freeway Entrance Signs (D13-3 and D13-3a)

No supplemental information.

Section 2D.47 Parking Area Guide Sign (D4-1)

No supplemental information.

Section 2D.48 PARK – RIDE Sign (D4-2)

No supplemental information.

Section 2D.49 Weigh Station Signing (D8 Series)

Figure 2D-3 shows example locations of the D8 series signs with the TRUCKS OVER 26,000 AND LIVESTOCK-HAZMAT HAULERS OVER 10,000 MUST STOP (R13-101) sign.

Section 2D.50 Community Wayfinding Signs

No supplemental information.

Section 2D.51 Truck, Passing, or Climbing Lane Signs (D17-1 and D17-2)

See Figure 2D-4 for the use of the NEXT TRUCK LANE XX (D17-1) and PASSING LANE XX MILES (D17-2) signs at passing lanes. The distances shown on the passing lane signs are for example purposes only.

Figure 2D-3 Example of Weigh Station Signing

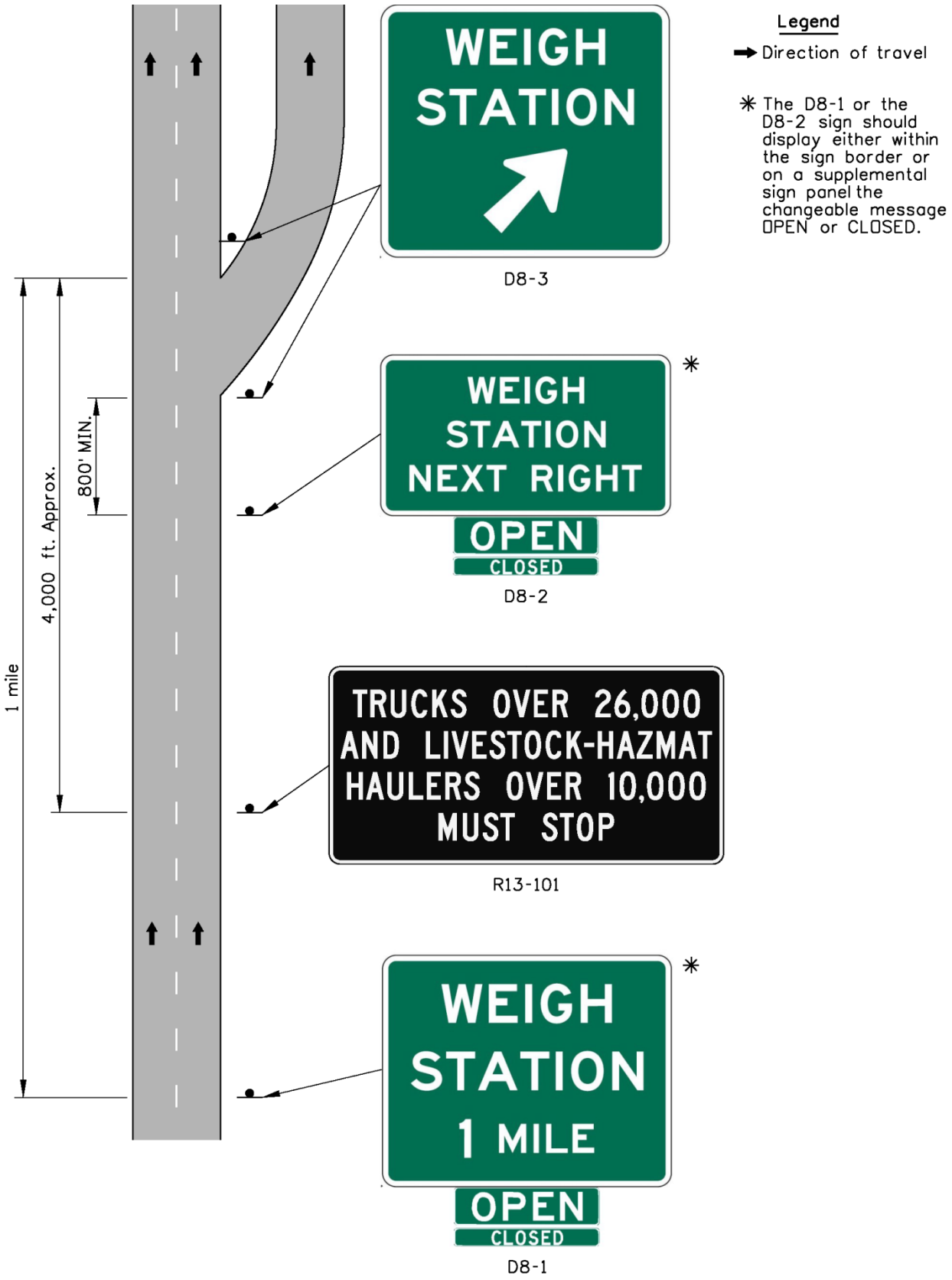
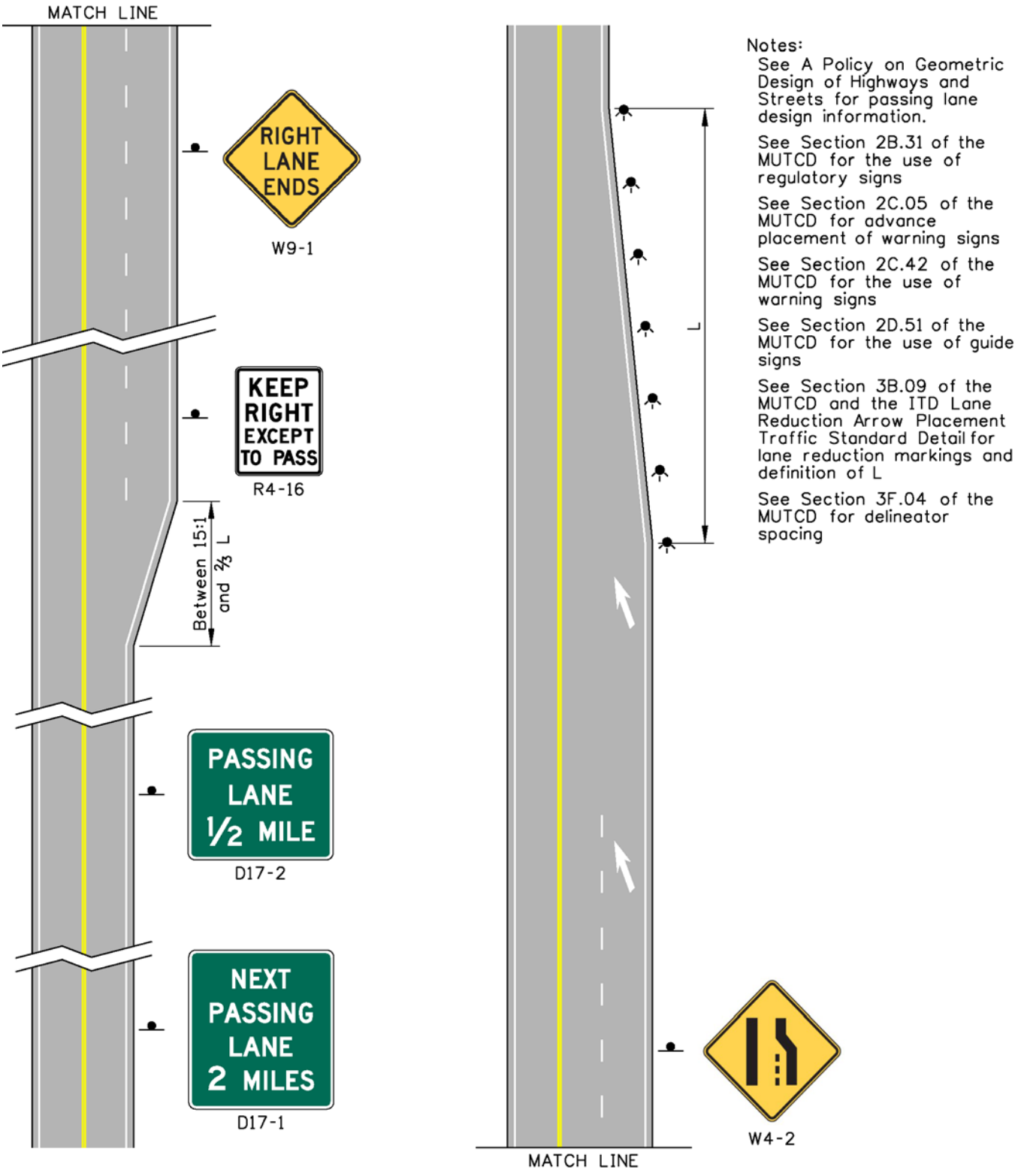


Figure 2D-4 Example Passing Lane Signs and Markings



Section 2D.52 Slow Vehicle Turn-Out Sign (D17-7)

In addition to the SLOW VEHICLE TURN-OUT XX MILES (D17-7) sign, a SLOW VEHICLE TURN-OUT sign (D17-701, see Figure 2D-5) with a directional arrow may be used immediately before the turn-out.

Figure 2D-5 Slow Vehicle Turn-Out Sign

D17-701

Section 2D.53 Signing of Named Highways

See MUTCD Section 2M.10 for memorial highways and bridges.

Section 2D.54 Crossover Signs (D13-1 and D13-2)

No supplemental information.

Section 2D.55 National Scenic Byways Signs (D6-4, D6-4a)

There are six National Scenic Byways in Idaho. They are the International Selkirk Loop, the Northwest Passage Scenic Byway, the Payette River Scenic Byway, the Pend Oreille Scenic Byway, the Pioneer Historic Byway, and the Western Heritage Historic Byway. The National Scenic Byways (D6-4 or D6-4a) signs, signs specific to that scenic byway, or both may be installed in accordance with the MUTCD.

In addition to the six National Scenic Byways in Idaho, the Idaho Transportation Board has designated Idaho Byways (see Board Policy 4082 and Administrative policy 5082). State-designated named scenic byways are a type of auto tour route and are addressed in Section 2H.07 of the MUTCD and this manual.

Section 2D.100 Trip Permits Signs (Section is not in the MUTCD)

Guide signs (D20 series) may be used on non-interstate highways or on streets in the vicinity of Interstate highways to direct heavy vehicles to approved trip permit vendors (see Figure 2D-6).

Figure 2D-6 Example Trip Permit Signs

D20-1

D20-2

D20-3

CHAPTER 2E. GUIDE SIGNS – FREEWAYS AND EXPRESSWAYS

Section 2E.01 Scope of Freeway and Expressway Guide Sign Standards

No supplemental information.

Section 2E.02 Freeway and Expressway Signing Principles

No supplemental information.

Section 2E.03 Guide Sign Classification

No supplemental information.

Section 2E.04 General

No supplemental information.

Section 2E.05 Color of Guide Signs

No supplemental information.

Section 2E.06 Retroreflection or Illumination

No supplemental information.

Section 2E.07 Characteristics of Urban Signing

No supplemental information.

Section 2E.08 Characteristics of Rural Signing

No supplemental information.

Section 2E.09 Signing of Named Highways

No supplemental information.

Section 2E.10 Amount of Legend on Guide Signs

No supplemental information.

Section 2E.11 Number of Signs at an Overhead Installation and Sign Spreading

No supplemental information.

Section 2E.12 Pull-Through Signs (E6-2, E6-2a)

No supplemental information.

Section 2E.13 Designation of Destinations

See Section 2D.41 for control city information.

Section 2E.14 Size and Style of Letters and Signs

Round sign heights up to twelve inch increments when the signs are constructed with extruded aluminum panels. ITD prefers to use twelve inch extruded aluminum panels.

Section 2E.15 Interline and Edge Spacing

No supplemental information.

Section 2E.16 Sign Borders

No supplemental information.

Section 2E.17 Abbreviations

No supplemental information.

Section 2E.18 Symbols

No supplemental information.

Section 2E.19 Arrows for Interchange Guide Signs

See the detailed drawings in the "ITD Supplement to the Standard Highway Signs and Markings" book for additional arrow dimensions (see Section 1A.11).

Section 2E.20 Signing for Option Lanes at Splits and Multi-Lane Exits

No supplemental information.

Section 2E.21 Design of Overhead Arrow-per-Lane Guide Signs for Option Lanes

No supplemental information.

Section 2E.22 Design of Freeway and Expressway Diagrammatic Guide Signs for Option Lanes

No supplemental information.

Section 2E.23 Signing for Intermediate and Minor Interchange Multi-Lane Exits with an Option Lane

Use Figure 2E-1 instead of Figure 2E-11 from the MUTCD.

Section 2E.24 Signing for Interchange Lane Drops

No supplemental information.

Section 2E.25 Overhead Sign Installations

No supplemental information.

Section 2E.26 Lateral Offset

No supplemental information.

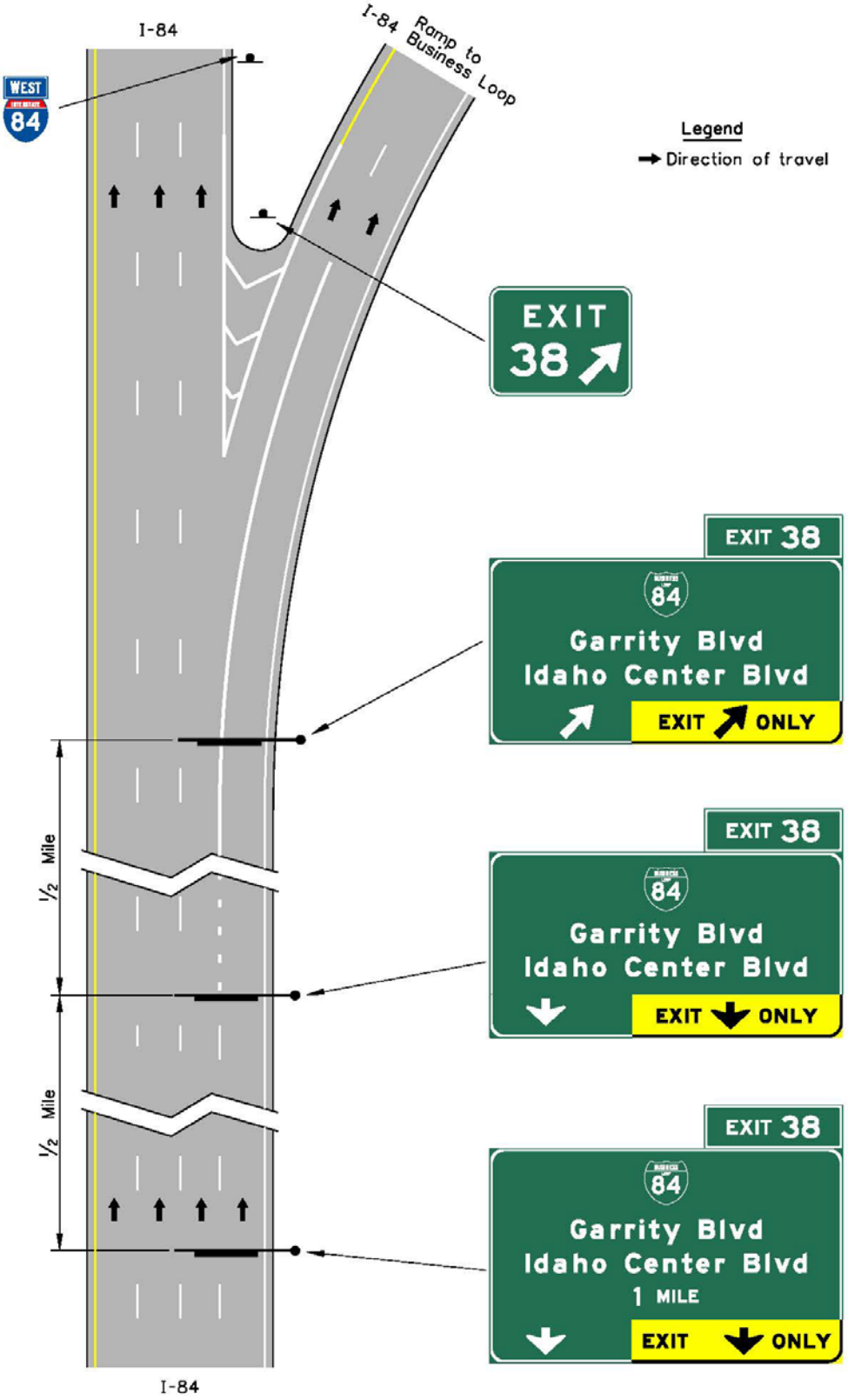
Section 2E.27 Route Signs and Trailblazer Assemblies

No supplemental information.

Section 2E.28 Eisenhower Interstate System Signs (M1-10, M1-10a)

No supplemental information.

Figure 2E-1 Example of Signing for a Two-Lane Exit with an Option Lane



Section 2E.29 Signs for Intersections at Grade

No supplemental information.

Section 2E.30 Interchange Guide Signs

No supplemental information.

Section 2E.31 Interchange Exit Numbering

See *IDAPA 39.03.41 "Rules Governing Traffic Control Devices"* for modifications to paragraph 02.

Exit Number (E1-5P) and Left Exit Number (E1-5bP) plaques must have borders on each side and be at least the width shown in Table 2E-1 of the MUTCD. The E1-5P plaques are to be 36 inches in height and the E1-5bP plaques are to be 60 inches in height. The plaque heights are increased by six inches so that twelve inch extruded aluminum panels can be used to make the plaque. See the design details for the E1-5P and E1-5bP plaques in the "ITD Supplement to the Standard Highway Signs and Markings" book.

Section 2E.32 Interchange Classification

No supplemental information.

Section 2E.33 Advance Guide Signs

No supplemental information.

Section 2E.34 Next Exit Plaques

No supplemental information.

Section 2E.35 Other Supplemental Guide Signs

Refer to the "AASHTO Guidelines for Supplemental Guide Signing" publication as the ITD policy for installing supplemental guide signs.

Section 2E.36 Exit Direction Signs

No supplemental information.

Section 2E.37 Exit Gore Signs (E5-1 Series)

No supplemental information.

Section 2E.38 Post-Interchange Signs

No supplemental information.

Section 2E.39 Post-Interchange Distance Signs

See Section 2D.41 for control city information.

Section 2E.40 Interchange Sequence Signs

No supplemental information.

Section 2E.41 Community Interchanges Identification Signs

No supplemental information.

Section 2E.42 NEXT XX EXITS Sign

No supplemental information.

Section 2E.43 Signing by Type of Interchange

No supplemental information.

Section 2E.44 Freeway-to-Freeway Interchange

See Section 2D.41 for control city information.

Section 2E.45 Cloverleaf Interchange

No supplemental information.

Section 2E.46 Cloverleaf Interchange with Collector-Distributor Roadways

No supplemental information.

Section 2E.47 Partial Cloverleaf Interchange

No supplemental information.

Section 2E.48 Diamond Interchange

No supplemental information.

Section 2E.49 Diamond Interchange in Urban Area

No supplemental information.

Section 2E.50 Closely-Spaced Interchanges

No supplemental information.

Section 2E.51 Minor Interchange

No supplemental information.

Section 2E.52 Signing on Conventional Road Approaches and Connecting Roadways

No supplemental information.

Section 2E.53 Wrong-Way Traffic Control at Interchange Ramps

No supplemental information.

Section 2E.54 Weigh Station Signing

No supplemental information.

CHAPTER 2F. TOLL ROAD SIGNS

Section 2F.01 Scope

No supplemental information.

Section 2F.02 Sizes of Toll Road Signs

No supplemental information.

Section 2F.03 Use of Purple Backgrounds and Underlay Panels with ETC Account Pictographs

No supplemental information.

Section 2F.04 Size of ETC Pictographs

No supplemental information.

Section 2F.05 Regulatory Signs for Toll Plazas

No supplemental information.

Section 2F.06 Pay Toll Advance Warning Sign (W9-6)

No supplemental information.

Section 2F.07 Pay Toll Advance Warning Plaque (W9-6P)

No supplemental information.

Section 2F.08 Stop Ahead Pay Toll Warning Sign (W9-6a)

No supplemental information.

Section 2F.09 Stop Ahead Pay Toll Warning Plaque (W9-6aP)

No supplemental information.

Section 2F.10 LAST EXIT BEFORE TOLL Warning Plaque (W16-P)

No supplemental information.

Section 2F.11 TOLL Auxiliary Sign (M4-15)

No supplemental information.

Section 2F.12 Electronic Toll Collection (ETC) Account-Only Auxiliary Signs (M4-16 and M4-20

No supplemental information.

Section 2F.13 Toll Facility and Toll Plaza Guide Signs - General

No supplemental information.

Section 2F.14 Advance Signs for Conventional Toll Plazas

No supplemental information.

Section 2F.15 Advance Signs for Toll Plazas on Diverging Alignments from Open-Road ETC Account-Only Lanes

No supplemental information.

Section 2F.16 Toll Plaza Canopy Signs

No supplemental information.

Section 2F.17 Guide Signs for Entrances to ETC Account-Only Facilities

No supplemental information.

Section 2F.18 ETC Program Information Signs

No supplemental information.

CHAPTER 2G. PREFERENTIAL AND MANAGED LANE SIGNS

Section 2G.01 Scope

No supplemental information.

Section 2G.02 Sizes of Preferential and Managed Lane Signs

No supplemental information.

Section 2G.03 Regulatory Signs for Preferential Lanes - General

No supplemental information.

Section 2G.04 Preferential Lane Vehicle Occupancy Definition Regulatory Signs (R3-10 Series and R3-13 Series)

No supplemental information.

Section 2G.05 Preferential Lane Periods of Operation Regulatory Signs (R3-11 and R3-14 Series)

No supplemental information.

Section 2G.06 Preferential Lane Advance Regulatory Signs (R3-12, R3-12e, R3-12f, R3-15a, and R3-15d)

No supplemental information.

Section 2G.07 Preferential Lane Ends Regulatory Signs (R3-12a, R3-12b, R3-12c, R3-12d, R3-12g, R3-12h, R3-15b, R3-15c, and R3-15e)

No supplemental information.

Section 2G.08 Warning Signs on Median Barriers for Preferential Lanes

No supplemental information.

Section 2G.09 High-Occupancy Vehicle (HOV) Plaque (W16-11P)

No supplemental information.

Section 2G.10 Preferential Lane Guide Signs - General

No supplemental information.

Section 2G.11 Guide Signs for Initial Entry Points to Preferential Lanes

No supplemental information.

Section 2G.12 Guide Signs for Intermediate Entry Points to Preferential Lanes

No supplemental information.

Section 2G.13 Guide Signs for Egress from Preferential Lanes to General-Purpose Lanes

No supplemental information.

Section 2G.14 Guide Signs for Direct Entrances to Preferential Lanes from Another Highway

No supplemental information.

Section 2G.15 Guide Signs for Direct Exits from Preferential Lanes to Another Highway

No supplemental information.

Section 2G.16 Signs for Priced Managed Lanes - General

No supplemental information.

Section 2G.17 Regulatory Signs for Priced Managed Lanes

No supplemental information.

Section 2G.18 Guide Signs for Priced Managed Lanes

No supplemental information.

CHAPTER 2H. GENERAL INFORMATION SIGNS

Section 2H.01 Size of General Information Signs

No supplemental information.

Section 2H.02 General Information Signs (I Series)

Political entities may install custom political boundary General Information signs in lieu of ITD provided boundary signs by permit (also see Section 2H.04). Permitted custom political boundary signs must be provided, installed, and maintained by the political entity requesting the sign. Comply with the general provisions for signs described in CHAPTER 2A for political boundary sign design and installation. Do not include the names of elected officials or variable message panels on the sign.

Section 2H.03 Traffic Signal Speed Sign (I1-1)

No supplemental information.

Section 2H.04 Miscellaneous Information Signs

Use a combination of lower-case letters with initial upper-case letters for names of places, streets, and highways. See Section 2A.13 of the MUTCD.

Following the guidance in Section 2H.04, political boundary signs may include text denoting the political boundary (city limit, county line, etc.), that the highway user is entering or leaving a political jurisdiction, and the population. Use the WELCOME TO IDAHO (I-201) or IDAHO STATE LINE (I-2) sign near state boundaries (see Figure 2H-1). Use political boundary signs at the boundaries of reservations and National Forests. Because they have no political boundaries, unincorporated communities are usually not signed.

Figure 2H-1 Idaho Boundary Signs

I-201 I-2

IDAPA 39.03.61 "Rules Governing Directional & Other Official Signs & Notices" provides guidance for "Community Official Signs." These are signs approved by a city, erected within its territorial or zoning jurisdiction and maintained at city expense. The sign legend is limited to the name of the city and driver directional information. The rule gives limits on the placement and size of the signs.

If a city does not provide a "Community Official Sign," ITD may provide boundary (I-2 series) signs. Examples of boundary signs for counties, cities, and reservations are shown in

Figure 2H-2. If a population is shown, use population values from the Idaho Labor Market Information website (http://lmi.idaho.gov). Population values may be updated by ITD districts after the release of a census or at the request of a political entity. If requested by a political entity, use the population estimates from the Idaho Labor Market Information website. Updated signs resulting from requests should be paid for by the political entity requesting the update.

Figure 2H-2 Example Boundary Signs

I-2 Series

Some political jurisdictions have received recognition for the community and desire to publicize the recognition with a sign near the entrance to the community. Such signs may include messages recognizing the community as a Gem Community, an Idaho Heritage City, a Tree City, or a Storm Ready County (see Figure 2H-3).

Figure 2H-3 Example Recognition Signs

Often the signs are supplied to the political jurisdiction receiving the recognition or created by the political jurisdiction. ITD prefers that such signs be installed and maintained by the political jurisdiction outside of the highway right-of-way. Signs recognizing communities may be installed below boundary signs in the highway right-of-way at the discretion of the District Engineer. If installed below a boundary sign, the recognition sign should be addressed in a Cooperative Maintenance Agreement between ITD and the political jurisdiction. Do not install

community recognition signs on Interstate highways. A community recognition sign should not be installed by itself in the highway right-of-way. Signs installed within the highway right-of-way without the consent of ITD should be removed and returned to the political jurisdiction.

If used, TREE CITY USA signs are only installed for cities listed on the Arbor Day Foundation's website.

If used, STORM READY signs are only installed for sites listed on the National Weather Service's website.

IDAPA 39.03.61 "Rules Governing Directional & Other Official Signs & Notices" provides guidance for "Bypassed Community Signs." When a city has been bypassed, but is within five miles of an interstate highway or other highway, the city may be permitted to install and maintain a sign showing the city name at city expense. The sign should be similar in design to the D1-1 destination sign. Examples of bypassed community signs are shown in Figure 2H-4.

Figure 2H-4 Example Bypassed Community Signs

D1-101

Following the guidance in Section 2H.04, the I-3 sign may be used to point out geographical features such as rivers and summits. If used, the elevation of vertical features like summits can be shown on the sign. Alternate legends such as HILL, CREEK, or CANAL may also be used (see Figure 2H-5).

Figure 2H-5 Example Geographical Features Signs

I-3 Series

Time zone boundaries, lines of latitude, or other features may be indicated with a miscellaneous information sign (see Figure 2H-6).

Figure 2H-6 Miscellaneous Information Signs

I -3 Series

Section 2H.05 Reference Location Signs (D10-1 through D10-3) and Intermediate Reference Location Signs (D10-1a through D10-3a)

Install Reference Location (D10-1, 2, and 3) signs, also known as milepost signs, on all numbered highways. The ITD Planning Services Section is responsible for the linear referencing system. Use the ITD-2185 form to record new milepost sign locations and ITD-2184 to request milepost renumbering.

ITD designates the 12 inch wide sign as a Type I milepost assembly. The 10 inch wide sign is designated as a Type II milepost assembly. A Type III assembly is two 10 wide milepost signs installed back to back. See the ITD Milepost Assemblies Standard Drawing.

Discontinuities in distance numbering can be indicated with a milepost equation sign. If used, turn the sign face parallel to the traveled way and offset the sign from the highway as far as possible.

Section 2H.06 Enhanced Reference Location Signs (D10-4, D10-5)

No supplemental information.

Section 2H.07 Auto Tour Route Signs

Four National Historic Trails pass through Idaho. They are the California, Lewis and Clark, Nez Perce, and Oregon National Historic Trails. ITD and the National Park Service have Memorandums of Understanding to provide auto tour signs for the Oregon and California trails (see Figure 2H-7).

The Oregon Trail has two branches, the South Alternate and Goodale's Cutoff, in addition to its main line. If trail signs are used, a supplemental plaque can be used to indicate the branch of the Oregon Trail (see Figure 2H-8). Because Goodale's Cutoff is not part of the Oregon National Historic Trail, the sign legend should not designate it as an Auto Tour Route.

The Lewis and Clark and Nez Perce National Historic Trails can also be signed (see Figure 2H-9)

Figure 2H-7 Example Auto Tour Route Signs

Figure 2H-8 Example Supplementary Plaques

Figure 2H-9 Example National Historic Trail Signs

In addition to the six National Scenic Byways in Idaho (see Section 2D.55), the Idaho Transportation Board has designated several Idaho Byways (see Board Policy 4082 and Administrative policy 5082). Idaho Byways are designated as a State Scenic Byway, Historic Byway, or Back Country Byway.

Install Idaho Byway signs (see Figure 2H-10) in the same manner as directed for the D6-4 or D6-4a National Scenic Byway signs. Install Scenic Byway signs beneath the first route sign encountered on the designated scenic route and beneath route signs throughout the length of the byway.

Figure 2H-10 Example Idaho Byway Signs

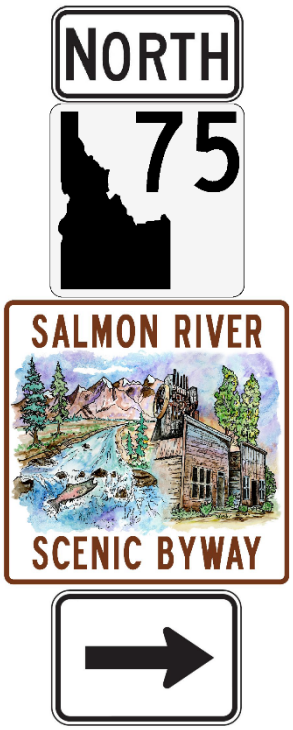
D6-401 Series

Install Idaho Byway signs with route signs from top to bottom in the following order (see Figure 2H-11):

- Route sign (with cardinal direction auxiliary sign plaque if applicable)
- Idaho Byway sign (D6-401 series)
- Direction Arrow auxiliary sign (if applicable)

Discontinue the use of the IDAHO BYWAY (previously numbered D7-10) sign. The IDAHO BYWAY sign was previously used as a substitute for the brown State Route sign (M1-5) that is no longer used.

Figure 2H-11 Example Scenic Byway Assembly



Informational signs describing the scenic byway may be placed at the ends of designated scenic byways in turn-out areas (see Figure 2H-12). These signs are not traffic control devices and should be located outside of the clear zone and where they will not interfere with traffic operations.

A BYWAY INFORMATION AHEAD (D5-2001) sign (see Figure 2H-13) can be installed in advance of the byway information sign and a D5-2101 sign (see Figure 2H-13) can be placed at the entrance to the turnout area.

Figure 2H-12 Example Scenic Byway Informational Sign

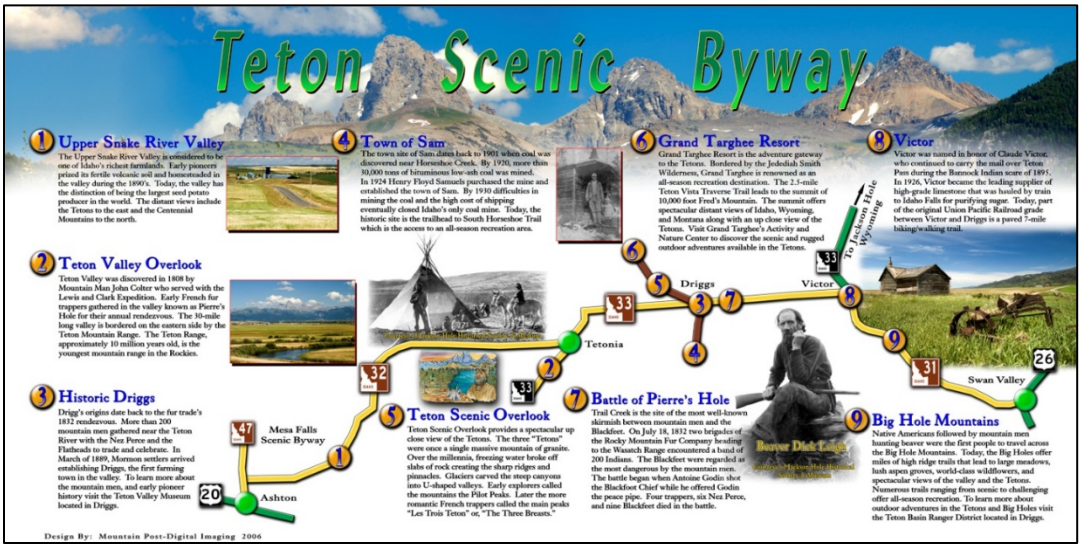
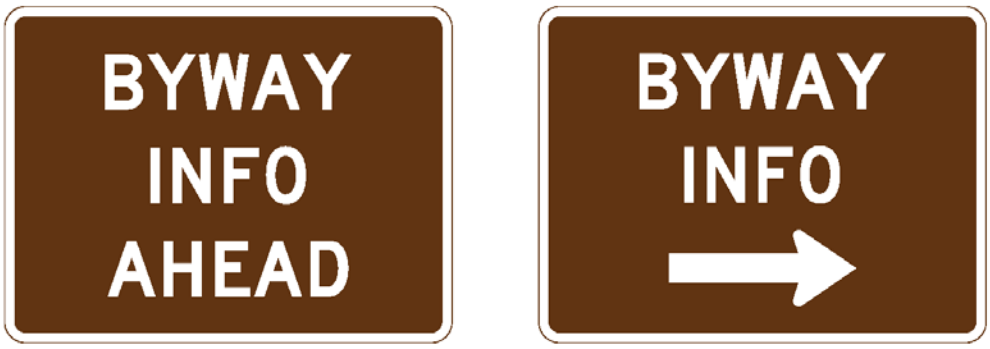


Figure 2H-13 Byway Information Signs



D5-2001 D5-2101

Section 2H.08 Acknowledgement Signs

ITD has chosen to use its own adopt a highway acknowledgement (D14-101) sign design (see Figure 2H-14). If used, the sign may be placed back-to-back with another acknowledgement sign where there are two adjoining adopt a highway segments.

Figure 2H-14 Adopt A Highway Sign

D14-101

CHAPTER 2I. GENERAL SERVICE SIGNS

Section 2I.01 Size of General Information Signs

No supplemental information.

Section 2I.02 General Service Signs for Conventional Roads

Use paragraph 22 as the State guidelines for the use of the Emergency Medical Services symbol sign in Idaho.

Section 2I.03 General Service Signs for Freeways and Expressways

Use paragraph 06 as the statewide policy for the criteria for the use of General Service signs on Freeways and Expressways.

General Service (D9-18 series) signs are generally not used when Specific Service signs are used or in advance of a Business Route (see Section 2D.11).

The services shown on a General Service sign are usually limited to those within three miles of the freeway exit.

Section 2I.04 Interstate Oasis Signing

ITD has instituted *Board Policy 4044 – Safety Rest Areas and Oasis Partnerships* – and *Administrative Policy 5044 – Safety Rest Areas and Oasis Partnerships*. Businesses can enter into a cooperative agreement with ITD to be designated and signed as an Interstate Oasis.

Trailblazer guide signs along the crossroad to guide road users to an Interstate Oasis will be provided by others unless otherwise agreed in the cooperative agreement.

Section 2I.05 Rest Area and Other Roadside Area Signs

Information can be provided on the location of succeeding rest areas using the NEXT REST AREA XX MILES (D5-6) sign, but similar signing should not be used in advance of an Interstate Oasis.

Section 2I.06 Brake Check Area Signs (D5-13 and D5-14)

No supplemental information.

Section 2I.07 Chain-Up Area Signs (D5-15 and D5-16)

When the CHAINS REQUIRED ALL NON-EXEMPT COMMERCIAL VEHICLES (R16-201) sign is used (See Section 2B.101 of the Traffic Manual), the CHAIN-UP AREA (D5-16) sign must be used in accordance with *Idaho Statute 49-948*.

If used, CHAIN-UP AREA signs should be removed or covered during the off seasons.

Discontinue the use of the green CHAIN UP AREA sign.

Section 2I.08 Tourist Information and Welcome Center Signs

VISITOR INFO may be used on the legend of the sign instead of TOURIST INFO or WELCOME CENTER.

Do not use tourist information and welcome center signs if the information or center is located further than five miles from an interchange.

If used, signing along a crossroad to guide the road user from an interchange to the tourist information center and back to the interchange will be installed by a local political jurisdiction.

Section 2I.09 Radio Information Signing

Radio-Weather Information (D12-1) signs are typically spaced 20 miles or more apart. Other spacing distances may be determined by an engineering study.

The REPORT DRUNK DRIVING CALL *ISP (D12-401) sign or REPORT WILDFIRES # FIRE (D12-402) sign may be used for cellular phone communications (see Figure 2I-1).

Figure 2I-1 Telephone Information Signs

D12-401 D12-402

Section 2I.10 TRAVEL INFO CALL 511 Signs (D12 and D12-5a)

No supplemental information.

Section 2I.11 Carpool and Ridesharing Signing

No supplemental information.

CHAPTER 2J. SPECIFIC SERVICE SIGNS

Section 2J.01 Eligibility

No supplemental information.

Section 2J.02 Application

No supplemental information.

Section 2J.03 Logos and Logo Sign Panels

No supplemental information.

Section 2J.04 Number and Size of Signs and Logo Sign Panels

No supplemental information.

Section 2J.05 Size of Lettering

No supplemental information.

Section 2J.06 Signs at Interchanges

No supplemental information.

Section 2J.07 Single-Exit Interchanges

No supplemental information.

Section 2J.08 Double-Exit Interchanges

No supplemental information.

Section 2J.09 Specific Service Trailblazer Signs

No supplemental information.

Section 2J.10 Signs at Intersections

No supplemental information.

Section 2J.11 Signing Policy

ITD has established a signing policy through *IDAPA 39.03.62 "Rules Governing Logo Signs"* which references the ITD document Standards and Procedures for Specific Service Signs.

CHAPTER 2K. TOURIST-ORIENTED DIRECTIONAL SIGNS

Section 2K.01 Purpose and Application

No supplemental information.

Section 2K.02 Design

No supplemental information.

Section 2K.03 Style and Size of Lettering

No supplemental information.

Section 2K.04 Arrangement and Size of Signs

No supplemental information.

Section 2K.05 Advance Signs

No supplemental information.

Section 2K.06 Sign Locations

No supplemental information.

Section 2K.07 State Policy

ITD has established a signing policy through *IDAPA 39.03.64 "Rules Governing Tourist Oriented Direction Signs (TODS)"* which references the ITD document Standards and Procedures for Tourist Oriented Direction Signs (TODS).

CHAPTER 2L. CHANGEABLE MESSAGE SIGNS

Section 2L.01 Description of Changeable Message Signs

See Chapter 16B for additional information on Dynamic Message Signs (DMS).

Section 2L.02 Applications of Changeable Message Signs

No supplemental information.

Section 2L.03 Legibility and Visibility of Changeable Message Signs

No supplemental information.

Section 2L.04 Design Characteristics of Changeable Message Signs

No supplemental information.

Section 2L.05 Message Length and Units of Information

No supplemental information.

Section 2L.06 Installation of Permanent Changeable Message Signs

No supplemental information.

CHAPTER 2M. RECREATIONAL AND CULTURAL INTEREST AREA SIGNS

Section 2M.01 Scope

ITD has memorandums of understanding (MOU) with the U.S. Forest Service regarding signing responsibilities of highways passing through National Forests. ITD has responsibility for the following signing:

- Interstate Highways
    - All signing
- Other Highways
    - Warning and regulatory signs
    - Route markers, designation guide signs, and reference location signs
    - Pedestrian control devices
    - Temporary traffic control devices for ITD construction and maintenance activities

The Forest Service has responsibility for the following signing:

- National Forest boundary signs
- Guard stations and administrative sites
- Fire hazard signing
- Signs related to timber sales
- Point of interest signs
- Other signs related to the administration of National Forests

Other signing within the boundaries of National Forests should be coordinated between the ITD districts and the Forest Service. Arrangements can be made with the Forest Service for ITD to be responsible for the installation and maintenance of other traffic control devices on the highways. Signs installed and maintained by the Forest Service should be by permit.

ITD does not have agreements with other federal public lands agencies.

Section 2M.02 Application of Recreational and Cultural Interest Area Signs

IDAPA 39.03.61 "Rules Governing Directional and Other Official Signs and Notices" sets forth standards that apply to directional signs referred to as recreational and cultural interest area signs in the MUTCD. The rule establishes signing criteria for the eligibility of the various types of services, accommodations, and facilities.

Section 2M.03 Regulatory and Warning Signs

No supplemental information.

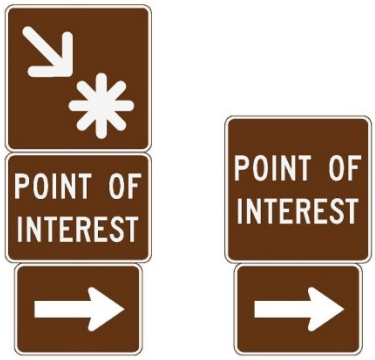
Section 2M.04 General Design Requirements for Recreational and Cultural Interest Area Symbol Guide Signs

General Service signs and plaques from Chapter 2I may be used as recreational and cultural interest area symbol guide signs with a white legend and border on a brown background.

A recreational and cultural interest area guide sign with the legend POINT OF INTEREST may be used in place of the Point of Interest (RS-080) symbol guide sign in the general applications category or as an educational plaque to the Point of Interest (RS-080) symbol guide sign (see Figure 2M-1).

Discontinue the use of POINT OF INTEREST signs with integrated arrows.

Figure 2M-1 Point of Interest Sign and Plaque



Section 2M.05 Symbol Sign Sizes

No supplemental information.

Section 2M.06 Use of Educational Plaques

See Section 2M.04 for use of a POINT OF INTEREST educational plaque. Campground names may be indicated on an educational plaque placed under a Camping (D9-3 on a brown background) or Trailer Camping (D9-3a on a brown background) symbol guide sign.

Section 2M.07 Use of Prohibitive Circle and Diagonal Slash for Non-Road Applications

No supplemental information.

Section 2M.08 Placement of Recreational and Cultural Interest Area Symbol Signs

Recreational and cultural interest area symbol signs are not generally used in urban areas.

Recreational and cultural interest area symbols can be installed for non-road use if justified by engineering judgment. Non-road use symbols have lower priority than all other signs and should be omitted to maintain sign spacing between regulatory, warning, and guide signs.

Discontinue the use of symbol signs that differ from those shown in the MUTCD and the "Standard Highway Signs and Markings" book (see Section 1A.11).

Section 2M.09 Destination Guide Signs

Campgrounds, state parks, recreation areas, wildlife management areas, or other recreational or cultural interest area destinations may be signed if requested by the managing agency. If signs are to be used, ITD districts should coordinate with these requesting agencies concerning the sign message and symbols to be used. ITD will determine the location of recreational or cultural interest area destination guide signs.

IDAPA 39.03.61 "Rules Governing Directional & Other Official Signs & Notices" sets standards for directional signs. For the purposes of this section, destination guide signs are also referred to as destination guide signs to for coordination with the MUTCD.

In the rule, directional signs are defined as "signs containing directional information about public places owned or operated by federal, state, or local governments or their agencies; publicly or privately owned natural phenomena, historic, cultural, scientific, educational and religious sites; and areas of natural scenic beauty or naturally suited for outdoor recreation, deemed to be in the interest of the traveling public."

Directional or destination guide signs may be installed by permit. Approval of the application for permit includes the following criteria:

- Nationally or regionally known activity of outstanding interest to the traveling public
- Location of activity relative to highway and proposed signing plan
- Dominant attraction must be for the edification and enjoyment of motorist, not tourist-oriented business or for generation of activity income (See CHAPTER 2K)
- Presence of drinking water and toilet facilities

The maximum size of signs and prohibited sign messages and locations are defined in *IDAPA 39.03.61*.

Permitted destination guide signs may be used on interstate highways when the attraction is within 75 air miles of the interstate highway. Permitted destination guide signs may be used on other highways when the attraction is within 50 air miles of the highway.

Do not place the signs within 2,000 feet of an interchange, rest area, publicly owned park or recreation area, wildlife or water fowl refuge, historical site, or scenic area. Do not place the signs within 1,000 feet of an intersection between two highways.

Do not place more than one designation guide sign within one mile of other destination guide signs.

No more than three signs pertaining to the same activity and facing in the same direction of travel can be used for the same attraction. Refer to *IDAPA 39.03.61* for additional information about spacing destination guide signs.

Designation guide signs are not usually installed in urban areas, within city limits, or if the recreational or cultural interest area is visible from the highway.

Remove or cover destination guide signs for seasonal closures of the interest area.

Section 2M.10 Memorial or Dedication Signing

Idaho Statutes 40-513 through *40-513E* designate the names of the Veterans Memorial Centennial Bridge, the I.B. Perrine Bridge, the Stu Dopf Memorial Highway, the Purple Heart Trail, the North Idaho Medal of Honor Highway, and the Vietnam Veterans Memorial Highway.

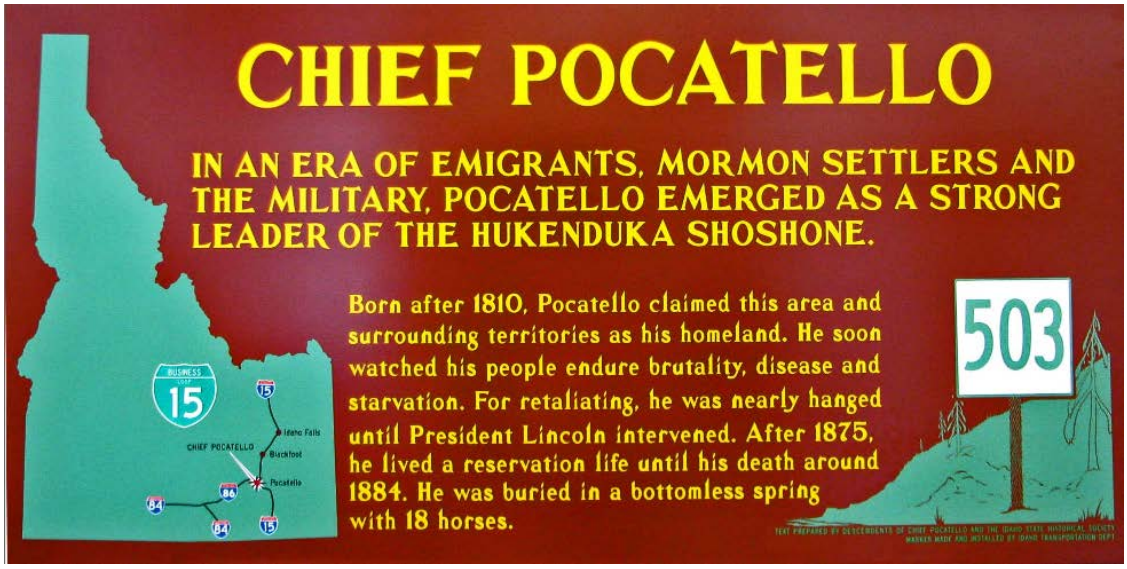
The texts of the statutes vary, but generally the statutes direct ITD to design, construct, and erect signs or markers for these memorial bridges and highways. By statute, signs for the Vietnam Veterans Memorial Highway are to be funded "through private donations, grants, awards, or other moneys."

Refer to the statutes and this Section for sign or marker placement.

Section 2M.100 Historic and Geologic Site Signs (Section is not in the MUTCD)

Idaho Statute 67-4117 allows the use of markers, monuments, and signs memorializing historical events to be placed adjacent to highways on land owned by the state of Idaho or where the state has an easement. This is typically accomplished through the installation of historic or geologic site signs (see Figure 2M-2).

Figure 2M-2 Example Historic or Geologic Site Sign



When ITD districts receive a request for a new or replacement historic or geologic site sign, the district should provide the following information to ITD headquarters:

- The historic or geologic site and the text that the sign requestor is proposing
- A location where the district has determined that a sign could be installed

Propose historic and geologic site sign locations within a turn-out and outside of the roadway clear zone. Obtain consent and approval for the proposed sign location from the state department that owns or administers the land if the land is owned by a state agency other than ITD or within an easement.

Once received, ITD headquarters will forward the sign proposal and text to the Idaho State Historical Society who determines whether a sign should be installed and the legend of the sign.

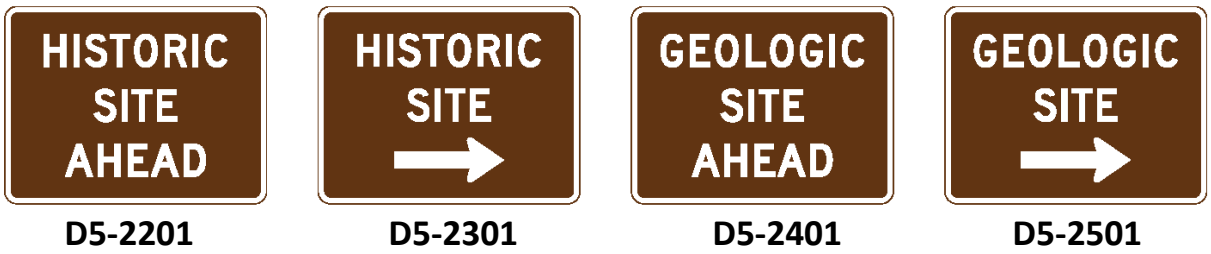
When approved by the Historical Society, the ITD sign shop will design and fabricate a sign and ITD will install the sign.

If a historic or geologic site sign is applicable to a site that is located away from the highway but is accessible by a road maintained by another agency, signs directing travelers to and from the site should be provided by the agency responsible for that road. If applicable, these signs should be in place prior to the sign fabrication and installation.

Historic and geologic site signs are numbered for reference on maps, pamphlets, and promotional materials.

If historic or geologic site signs are used, a D5-2201 or D5-2401 should be installed in advance of the turnout (see Figure 2M-3). A D5-2301 or D5-2501 sign should be installed at the turnoff point where the driver needs to leave the highway so view the historic or geologic site sign. The legend of the D5-2201 and D5-2401 signs may be changed to indicate a distance (XX MILES) rather than AHEAD.

Figure 2M-3 Historic and Geologic Site Signs



D5-2201 D5-2301 D5-2401 D5-2501

CHAPTER 2N. EMERGENCY MANAGEMENT SIGNING

Section 2N.01 Emergency Management

No supplemental information.

Section 2N.02 Design of Emergency Management Signs

No supplemental information.

Section 2N.03 Evacuation Route Signs (EM-1 and EM-1a)

No supplemental information.

Section 2N.04 AREA CLOSED Sign (EM-2)

No supplemental information.

Section 2N.05 TRAFFIC CONTROL POINT Sign (EM-3)

No supplemental information.

Section 2N.06 MAINTAIN TOP SAFE SPEED Sign (EM-4)

No supplemental information.

Section 2N.07 ROAD (AREA) USE PERMIT REQUIRED FOR THRU TRAFFIC Sign (EM-5)

No supplemental information.

Section 2N.08 Emergency Aid Center Signs (EM-6 Series)

No supplemental information.

Section 2N.09 Shelter Directional Signs (EM-7 Series)

No supplemental information.

PART 3
MARKINGS

CHAPTER 3A. GENERAL

Section 3A.01 Functions and Limitations

No supplemental information.

Section 3A.02 Standardization of Application

No supplemental information.

Section 3A.03 Maintaining Minimum Pavement Marking Retroreflectivity

No supplemental information.

Section 3A.04 Materials

The ITE "Traffic Control Devices Handbook" discusses pavement marking materials such as paint, thermoplastics, tapes, and other materials in detail. The removal of markings is also discussed in the "Traffic Control Devices Handbook."

Section 3A.05 Colors

No supplemental information.

Section 3A.06 Functions, Widths, and Patterns of Longitudinal Pavement Markings

On new or resurfaced pavement, use broken lines with a pattern of 12-foot line segments and 38-foot gaps. In accordance with the MUTCD, other broken line patterns can be used, based on engineering judgment, if the line segment to gap ratio is approximately 1:3.

CHAPTER 3B. PAVEMENT AND CURB MARKINGS

Section 3B.01 Yellow Center Line Pavement Markings and Warrants

When used, lane line pavement markings should be omitted from the area surrounding a cattle guard marked with pavement markings. See the Cattle Guard Standard Drawings.

Figure 2C-2 shows example pavement markings approaching a narrow or one lane bridge.

See Section 2B.28 for the use of the YIELD CENTER LANE TO OPPOSING TRAFFIC (R4-101) sign when a highway has pavement markings indicating three-lane, two-way marking with passing permitted in single-lane direction.

Section 3B.02 No-Passing Zone Pavement Markings and Warrants

Idaho Statues 49-634 and *49-635* address vehicles traveling on the left side of the highway centerline, such as passing on a two-lane highway. The statute restricts travel left of the

highway centerline within 100 feet of an intersection or railroad grade crossing unless otherwise indicated by traffic control devices. The pattern of the center line markings in the 100 feet prior to the intersection or railroad grade crossing determine whether passing is permitted or prohibited in that intersection or railroad grade crossing.

Section 3B.03 Other Yellow Longitudinal Pavement Markings

Two-way left-turn lanes can be used in areas with businesses along the highway generating numerous left turns. Arrow placement within the two-way left-turn lane is described further in Section 3B.20.

Section 3B.04 White Lane Line Pavement Markings and Warrants

A normal width dotted white line marking may be used to separate a through lane from an adjacent slow vehicle turn-out, chain-up area, or historical marker (See Figure 2B-5).

When used, lane line pavement markings should be omitted from the area surrounding a cattle guard marked with pavement markings. See the Cattle Guard Standard Drawings.

Figure 2C-2 shows example pavement markings approaching a narrow or one lane bridge.

Warrants for left-turn lanes on uncontrolled highways can be found in "NCHRP Report 745 – Left-Turn Accommodations at Unsignalized Intersections."

A right-turn lane warrant is shown in Figure 3B-1 that can be used for uncontrolled highways intersecting with public roads or approaches. Right-turn lanes can be further analyzed using the economic analysis procedure for right-turn deceleration lanes described in the article "Operational and Safety Effects of Right-Turn Deceleration Lanes on Urban and Suburban Arterials" that was published in the "Transportation Research Record, Volume 2023." The methodology can be used for rural highways in addition to urban and suburban arterials.

The left-turn and right-turn lane warrants should not be used where the highway is stop controlled or controlled by a traffic control signal. Determine the use of left-turn or right-turn lanes through highway capacity analysis of the intersection.

Examples of left-turn and right-turn lane markings are shown in Figure 3B-2 to Figure 3B-4. See the Pavement Marking Standard Drawing for additional details.

Figure 3B-1. Right-Turn Lane Warrant

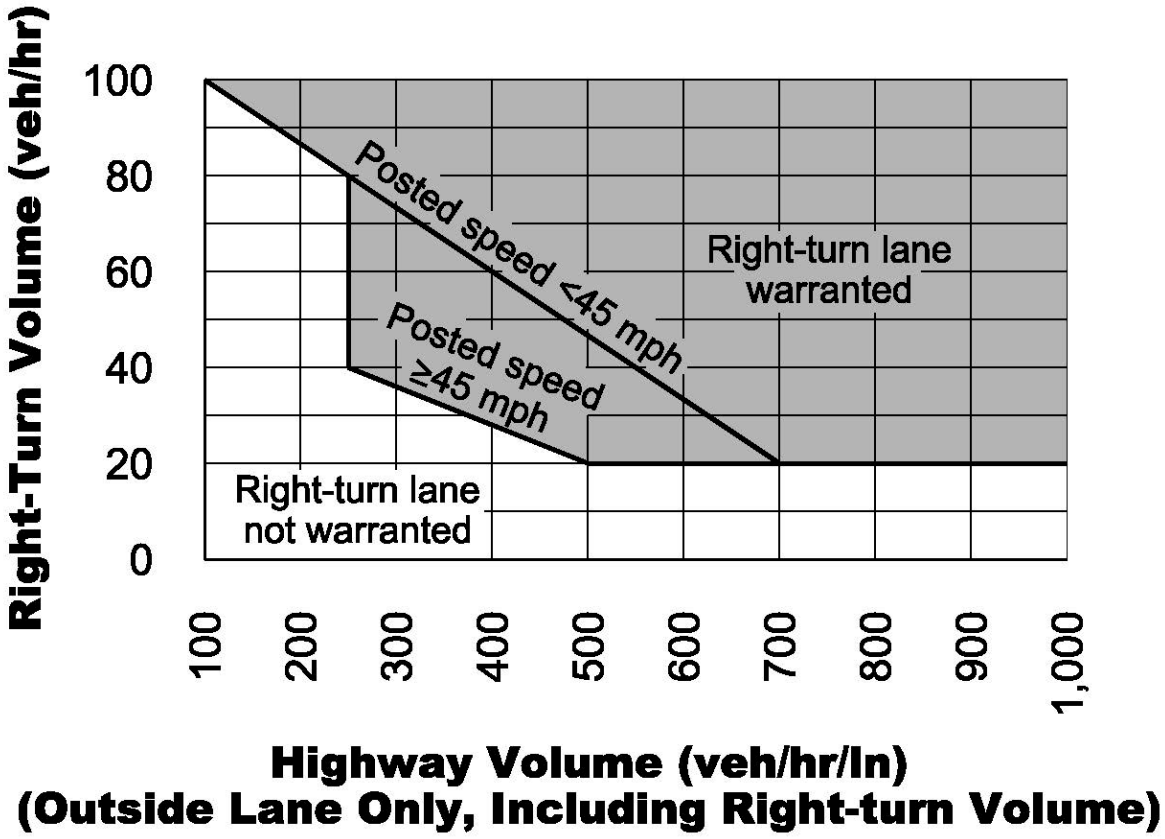
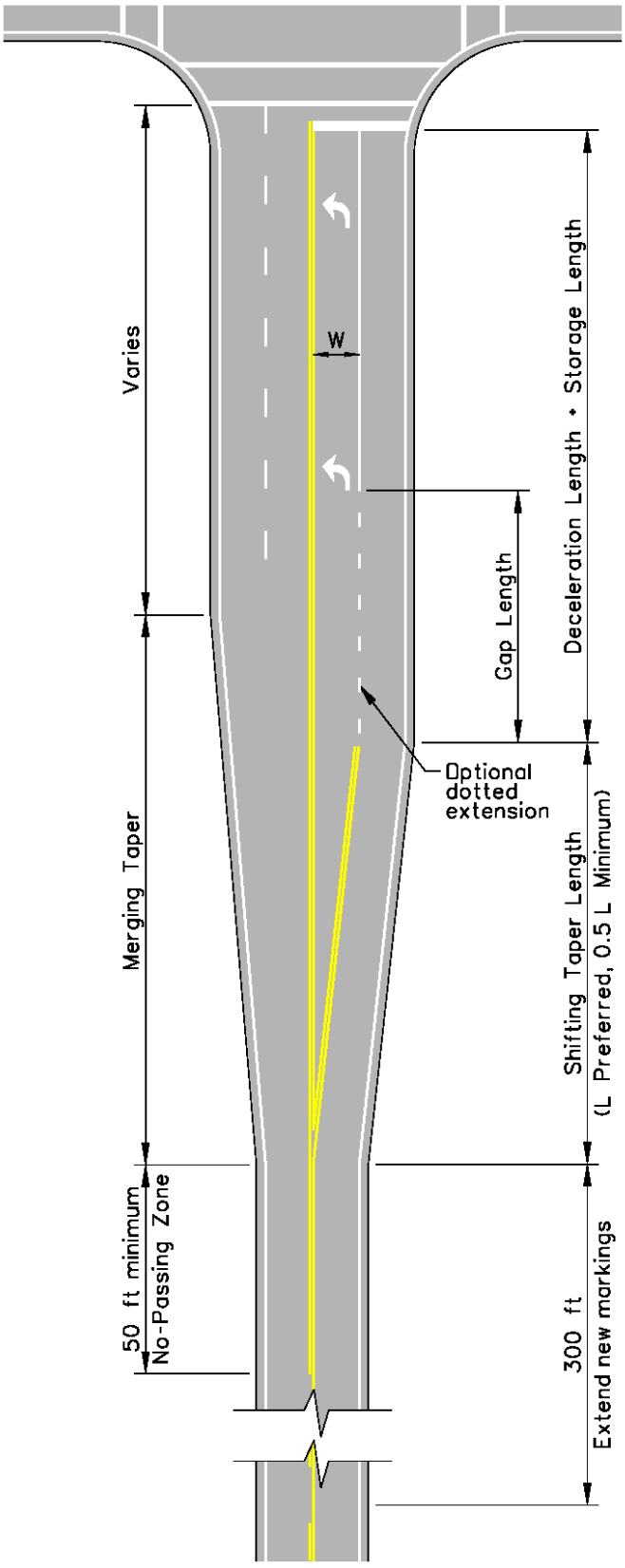


Figure 3B-2. Example Left-Turn Lane Markings



Notes:

1. See Section 3B.02 and Section 6C.08 of the MUTCD for taper equations and definitions.
2. Calculate the storage length as follows:

   Unsignalized approach

   $SL = \frac{5V}{6(PHF)}$, 50 ft minimum

   Signalized approach

   $SL = \frac{50V}{N(PHF)}$, 100 ft minimum

   Where:

   SL = Storage length
   V = Estimated left-turn volume during the design peak hour in vehicles per hour
   PHF = Peak Hour Factor. Use 1 if unknown.
   N = Number of signal cycles per hour. Use 30 if unknown.
3. Calculate the gap length as follows:

   Posted speed of 40 mph or less

   Gap Length = 8W

   Posted speed of 45 mph or higher

   Gap Length = 15W

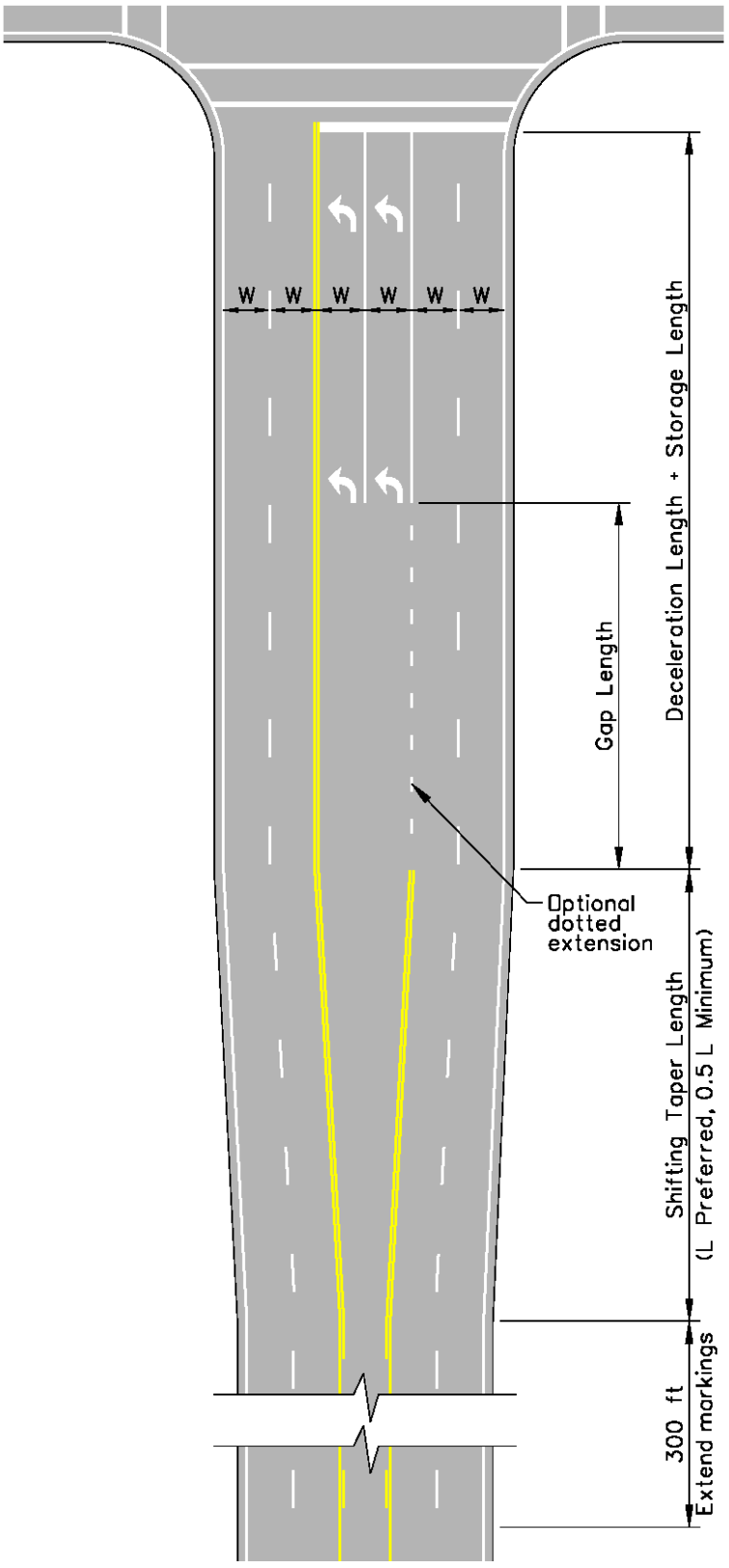
   Where:

   W = Turning lane width
4. Use the following table for the deceleration length:

Posted Speed (mph)	Deceleration Length (ft)
30	100
35	120
40	170
45	230
50	290
55	370
60	460
65	550

The deceleration lengths shown assume a 10 mph speed reduction in the main lanes.

Figure 3B-3. Example Multiple Left-Turn Lane Markings



Notes:

1. See Section 3B.02 and Section 6C.08 of the MUTCD for taper equations and definitions.
2. Calculate the storage length as follows:

   Signalized approach

   $SL = \frac{30V}{N(PHF)}$, 100 ft minimum

   Where:

   SL = Storage length
   V = Estimated left-turn volume during the design peak hour in vehicles per hour
   PHF = Peak Hour Factor. Use 1 if unknown.
   N = Number of signal cycles per hour. Use 30 if unknown.
3. Calculate the gap length as follows:

   Posted speed of 40 mph or less

   Gap Length = 8W

   Posted speed of 45 mph or higher

   Gap Length = 15W

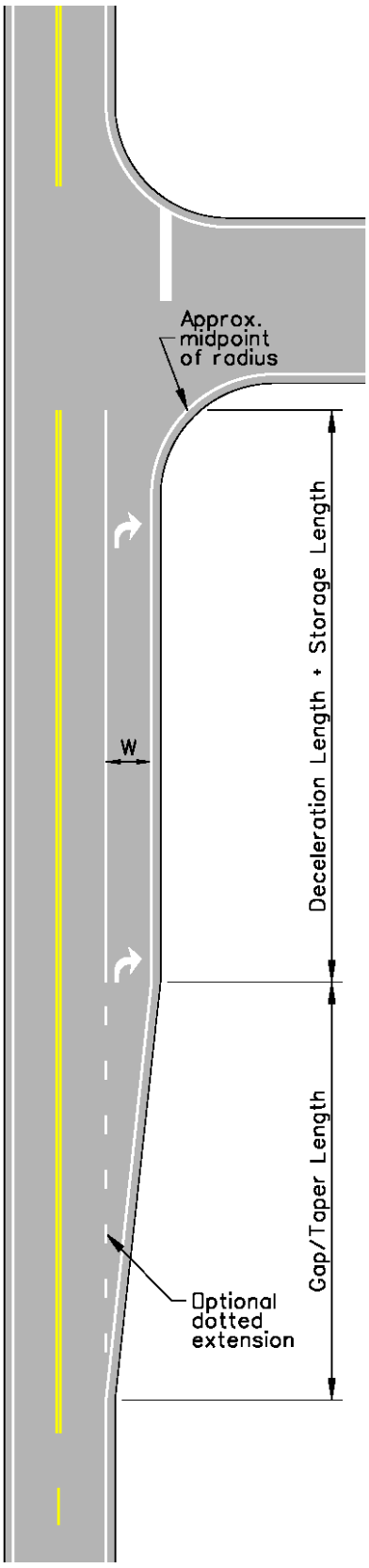
   Where:

   W = Turning lane width
4. Use the following table for the deceleration length:

Posted Speed (mph)	Deceleration Length (ft)
30	100
35	120
40	170
45	230
50	290
55	370
60	460
65	550

The deceleration lengths shown assume a 10 mph speed reduction in the main lanes.

Figure 3B-4. Example Right-Turn Lane Markings



Notes:

1. See Section 3B.02 and Section 6C.08 of the MUTCD for taper equations and definitions.
2. Provide storage for stop controlled or signalized approaches. Use the estimated right-turn volume during the design peak hour to determine the storage length. Calculate the storage length as follows:

   Unsignalized approach

   $SL = \frac{5V}{6(PHF)}$, 50 ft minimum

   Signalized approach

   $SL = \frac{25V}{N(PHF)}$, 50 ft minimum

   Where:

   SL = Storage length
   V = Estimated right-turn volume during the design peak hour in vehicles per hour
   PHF = Peak Hour Factor. Use 1 if unknown.
   N = Number of signal cycles per hour. Use 30 if unknown.
3. Calculate the gap/taper length as follows:

   Posted speed of 40 mph or less

   Gap Length = 8W

   Posted speed of 45 mph or higher

   Gap Length = 15W

   Where:

   W = Turning lane width
4. Use the following table for the deceleration length:

Posted Speed (mph)	Deceleration Length (ft)
30	100
35	120
40	170
45	230
50	290
55	370
60	460
65	550

The deceleration lengths shown assume a 10 mph speed reduction in the main lanes.

Section 3B.05 Other White Longitudinal Pavement Markings

No supplemental information.

Section 3B.06 Edge Line Pavement Markings

Edge lines should not be broken for truck escape ramps.

Section 3B.07 Warrants for Use of Edge Lines

When edge lines are used on highways with pavement widths between 20 and 24 feet, the edge line should be placed six inches from the edge of pavement.

Section 3B.08 Extensions Through Intersections or Interchanges

When pavement marking extensions are used between multiple turn lanes, use turning movement templates or software to determine the pavement marking placement.

Section 3B.09 Lane-Reduction Transition Markings

Edge lines should be continued beyond the ends of tapers or transitions for 300 feet.

Section 3B.10 Approach Markings for Obstructions

Where used, edge lines should be continuous when approaching bridge structures and should not be broken for approaches in the near vicinity of the bridge.

Section 3B.11 Raised Pavement Markers - General

Raised pavement markers are discussed in the ITE “Traffic Control Devices Handbook.”

Section 3B.12 Raised Pavement Markers as Vehicle Positioning Guides with Other Longitudinal Markings

If used, raised pavement markers should be positioned immediately adjacent to the markings they supplement.

Section 3B.13 Raised Pavement Markers Supplementing Other Markings

No supplemental information.

Section 3B.14 Raised Pavement Markers Substituting for Pavement Markings Information

No supplemental information.

Section 3B.15 Transverse Markings

Idaho Statute 49-113 uses the terms stop line and limit line interchangeably.

Section 3B.16 Stop and Yield Lines

No supplemental information.

Section 3B.17 Do Not Block Intersection Markings

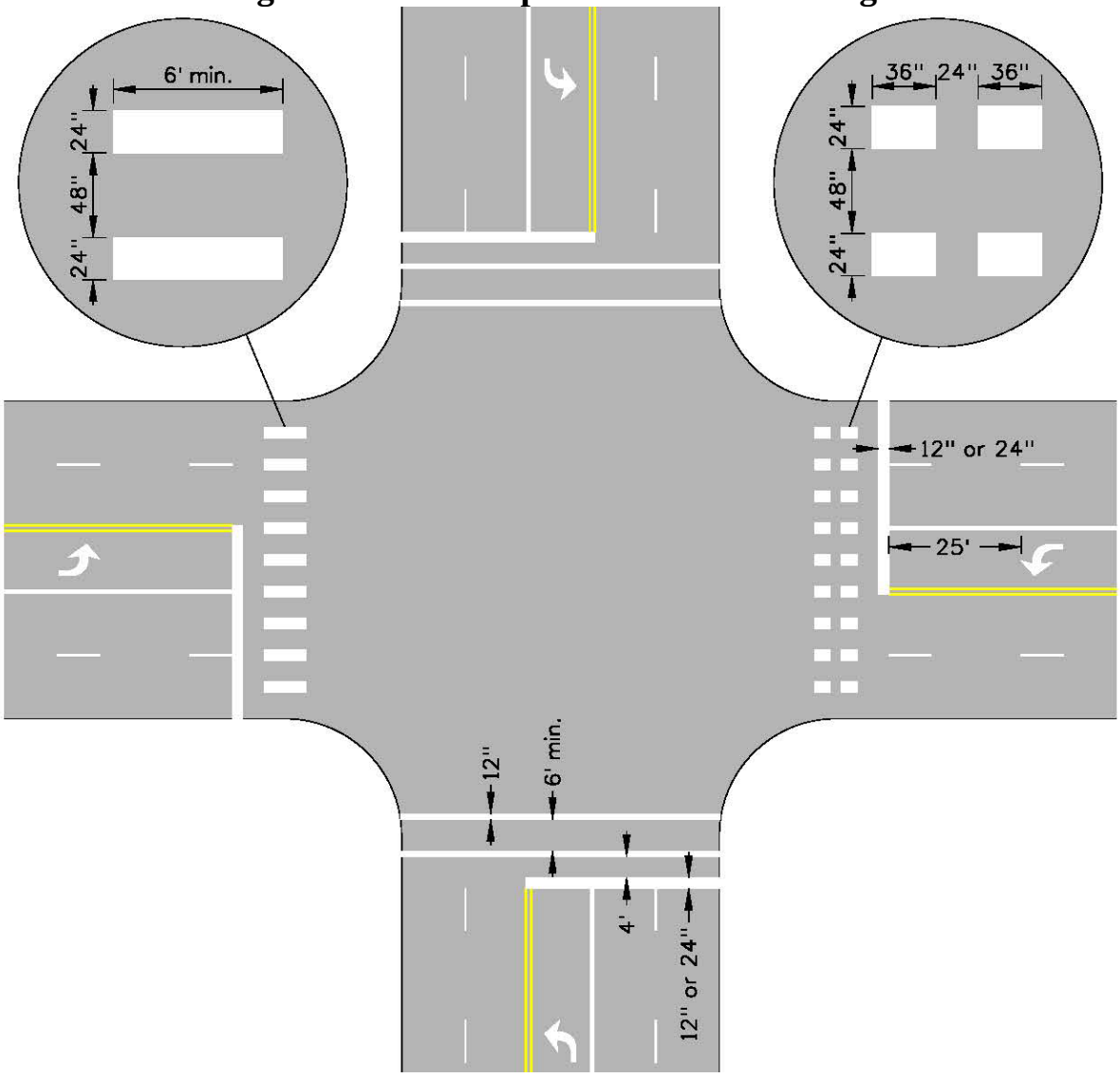
No supplemental information.

Section 3B.18 Crosswalk Markings

Several publications are available on the visibility of crosswalk markings and the safety effects of marked versus unmarked crosswalks. Refer to documents such as the "Crosswalk Marking Field Visibility Study" (FHWA-HRT-10-068), "Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations" (FHWA-HRT-04-100), or other publications when the use of crosswalk markings are considered.

If transverse lines are used to mark crosswalks, the lines should be 12 to 24 inches wide. If longitudinal lines are used, they should be 24 inches wide and spaced at four foot intervals between markings. Space longitudinal markings to avoid wheel paths. See Figure 3B-5 for example crosswalk markings.

Figure 3B-5. Example Crosswalk Markings



Idaho Statute 49-211 authorizes ITD and local authorities to prohibit pedestrian crossing at unmarked crosswalks within their jurisdictions after an engineering study. Traffic control devices must be in place to indicate the prohibited pedestrian movement.

Section 3B.19 Parking Space Markings

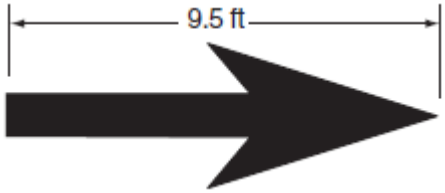
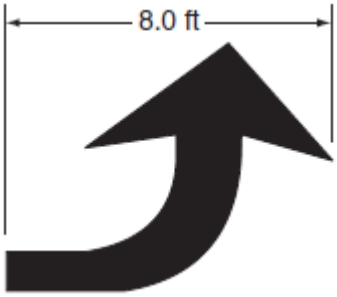
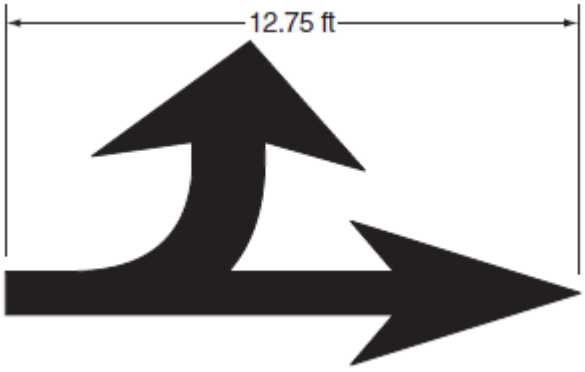
Provide parking space markings for use by persons with disabilities in accordance with *Idaho Statute 49-213*. Blue lines, blue curb markings, or both may be used for parking spaces designated for use by persons with disabilities.

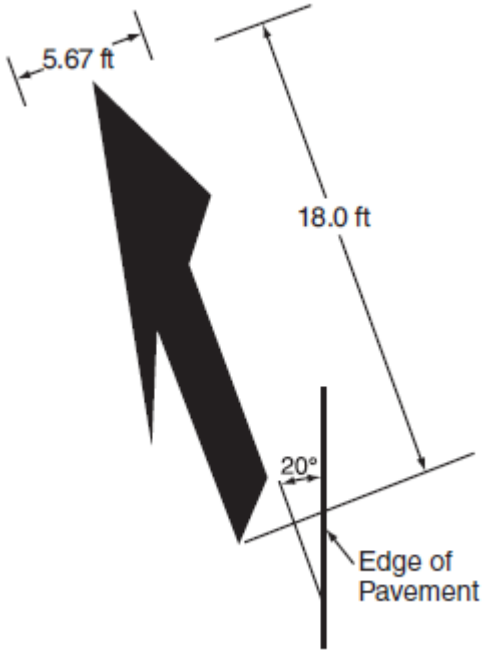
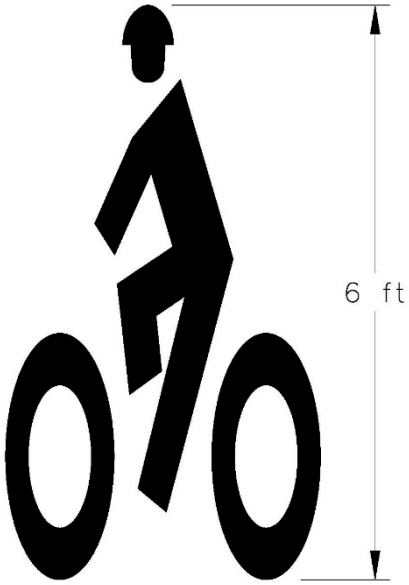
Section 3B.20 Pavement Word, Symbol, and Arrow Markings

The XING word marking may be centered between lanes when used with the SCHOOL (see Section 7C.03) word marking.

Table 3B-1 and Table 3B-2 show the estimated area of some commonly used arrow, symbol, and letter and number pavement markings for the dimension or dimensions shown.

Table 3B-1. Approximate Area of Arrow and Symbol Pavement Markings

Legend	Approximate Area (SF)
	12
	16
	26

Legend	Approximate Area (SF)
	43
	6.5

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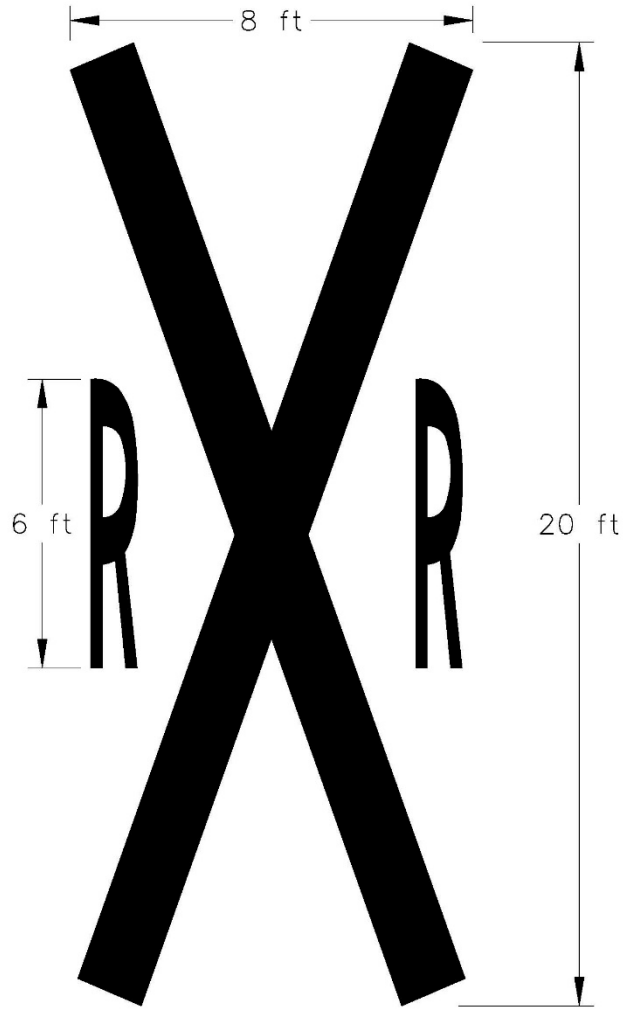
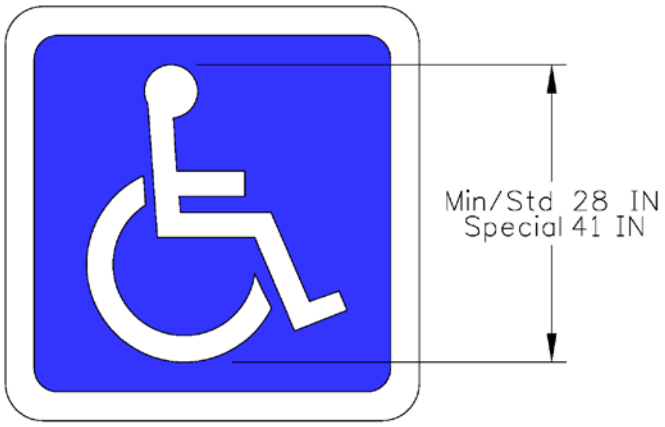
<tr><td> 
</td><td colspan="3">63</td></tr>
<tr><td rowspan="3"> 
</td><td>Size</td><td>Symbol only</td><td>Symbol, background, & border</td></tr>
<tr><td>Min/Std</td><td>1.5</td><td>10.5</td></tr>
<tr><td>Special</td><td>3</td><td>23</td></tr>
</table>

Table 3B-2. Approximate Area of Pavement Marking Letters and Numbers for 6 ft, 8 ft, and 10 ft Heights

LEGEND	6 ft	8 ft	10 ft	LEGEND	6 ft	8 ft	10 ft	LEGEND	6 ft	8 ft	10 ft
	Approx. Area (SF)				Approx. Area (SF)				Approx. Area (SF)		
A	3.0	5.5	8.3	M	4.1	7.3	11.3	Y	2.2	3.9	6.1
B	4.0	7.1	11.1	N	4.0	7.1	11.1	Z	2.9	5.1	7.9
C	2.5	4.3	6.8	O	3.2	5.6	8.7	0	3.2	5.6	8.7
D	3.4	6.0	9.3	P	3.0	5.2	8.1	1	1.5	2.6	4.1
E	3.6	6.3	9.9	Q	3.3	5.8	9.1	2	3.5	6.1	9.6
F	2.6	4.7	7.3	R	3.5	6.1	9.6	3	3.1	5.5	8.6
G	3.1	5.5	8.6	S	3.5	6.1	9.5	4	2.9	5.2	8.1
H	3.5	6.1	9.5	T	2.2	3.9	6.0	5	3.5	6.2	9.7
I	1.5	2.6	4.1	U	3.2	5.7	8.9	6	3.7	6.5	10.1
J	2.0	3.6	5.6	V	2.7	4.8	7.5	7	2.2	3.9	6.0
K	3.4	6.0	9.4	W	4.0	7.2	11.2	8	4.0	7.1	11.0
L	2.2	3.9	6.0	X	2.7	4.8	7.5	9	3.7	6.5	10.1

Section 3B.21 Speed Measurement Markings

No supplemental information.

Section 3B.22 Speed Reduction Markings

No supplemental information.

Section 3B.23 Curb Markings

Curbs or traffic separators are sometimes placed in the median of a highway. Paint the curb retroreflective solid yellow when it is less than 13.5 feet from the right edge of the adjacent lane. Use longitudinal yellow lines if the curb is 13.5 feet or more from the adjacent lane.

Section 3B.24 Chevron and Diagonal Crosshatch Markings

No supplemental information.

Section 3B.25 Speed Hump Markings

No supplemental information.

Section 3B.26 Advance Speed Hump Markings

No supplemental information.

CHAPTER 3C. ROUNDABOUT MARKINGS

Section 3C.01 General

Refer to "NCHRP Report 672 – Roundabouts: An Informational Guide" for additional roundabout marking guidance.

Section 3C.02 White Lane Line Pavement Markings for Roundabouts

No supplemental information.

Section 3C.03 Edge Line Pavement Markings for Roundabout Circulatory Roadways

No supplemental information.

Section 3C.04 Yield Lines for Roundabouts

No supplemental information.

Section 3C.05 Crosswalk Markings at Roundabouts

No supplemental information.

Section 3C.06 Word, Symbol, and Arrow Pavement Markings for Roundabouts

No supplemental information.

Section 3C.07 Markings for Other Circular Intersections

No supplemental information.

CHAPTER 3D. MARKINGS FOR PREFERENTIAL LANES

Section 3D.01 Preferential Lane Word and Symbol Markings

No supplemental information.

Section 3D.02 Preferential Lane Longitudinal Markings for Motor Vehicles

No supplemental information.

CHAPTER 3E. MARKINGS FOR TOLL PLAZAS

Section 3E.01 Markings for Toll Plazas

No supplemental information.

CHAPTER 3F. DELINEATORS

Section 3F.01 Delineators

No supplemental information.

Section 3F.02 Delineator Design

ITD assigns a delineator type to single and double delineators as follows:

Type 1 – Single delineator, one direction.
Type 2 – Double delineator, one direction.
Type 3 – Single delineator, two directions.
Type 4 – Double delineator, two directions.
Type 9 – Delineator for side or top mounting on guardrail or concrete barrier.

Section 3F.03 Delineator Application

Traditionally, yellow double delineators have been used to mark the intersection of highways with other State highways or public roads. However, the use of yellow delineators adjacent to white edge lines is not permitted by the MUTCD. Intersections can be indicated with intersection warning signs (see Chapter 2C), with white delineators at intersections, or both. Delineators used to mark intersections may be enlarged to 3 x 6 inches and retroreflective.

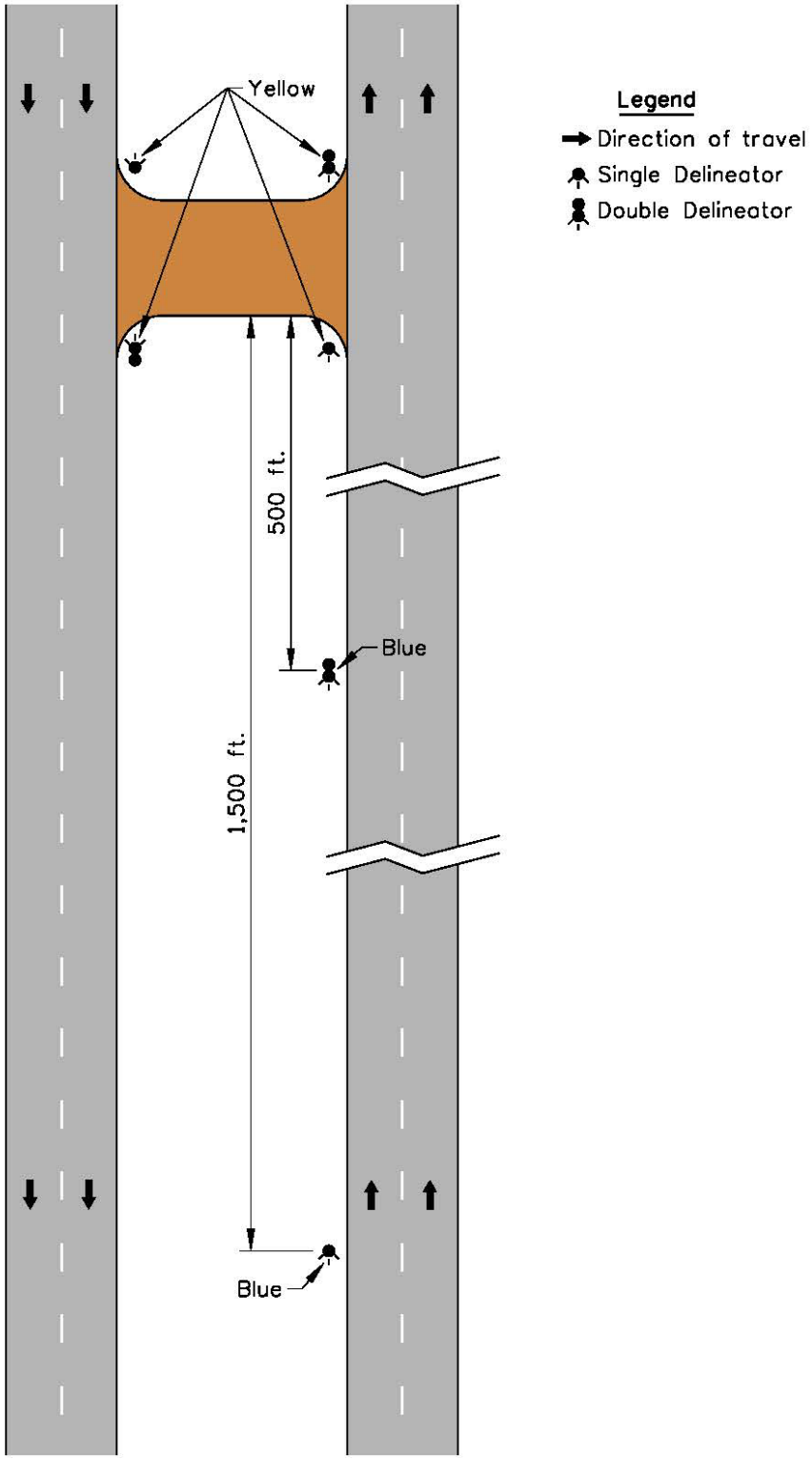
Paragraph 06 of the MUTCD applies to median crossovers that are restricted to authorized vehicles (see *Administrative Policy 5531 – Use of Median Crossovers on Interstates and Divided Highways*). The paragraph does not apply to temporary median crossovers that move traffic traveling in one direction to the opposite side of a divided highway.

As described in Section 1A.08, use blue retroreflective delineators to mark median crossovers that are provided for authorized vehicles. Mark median crossovers 1,500 feet in advance of the crossover with a single (3 x 3 inch) blue delineator and 500 feet in advance of the crossover with a double (3 x 6 inch) blue delineator (see Figure 3F-1). Mark the median opening in accordance with paragraph 06 of the MUTCD with a single yellow delineator on the close side of the crossover and a double yellow delineator on the far side of the crossover. Do not install the blue devices in the same location or on the same posts as yellow delineators.

Section 3F.04 Delineator Placement and Spacing

Delineators are typically space 528 feet, or 0.1 miles apart on mainline tangent sections on Idaho Highways (see the Delineator Standard Drawing). Snow poles may be attached to delineators (see the Snow Poles Standard Drawing). A Standard Detail has been developed to show typical delineator application on interchange ramps.

Figure 3F-1. Example Advance Delineation at a Median Opening



CHAPTER 3G. COLORED PAVEMENTS

Section 3G.01 General

No supplemental information.

CHAPTER 3H. CHANNELIZING DEVICES USED FOR EMPHASIS OF PAVEMENT MARKING PATTERNS

Section 3H.01 Channelizing Devices

Use orange channelizing devices only in temporary traffic control zones.

CHAPTER 3I. ISLANDS

Section 3I.01 General

No supplemental information.

Section 3I.02 Approach-End Treatment

No supplemental information.

Section 3I.03 Island Marking Application

No supplemental information.

Section 3I.04 Island Marking Colors

No supplemental information.

Section 3I.05 Island Delineation

No supplemental information.

Section 3I.06 Pedestrian Islands and Medians

No supplemental information.

CHAPTER 3J. RUMBLE STRIP MARKINGS

Section 3J.01 Longitudinal Rumble Strip Markings

See the Rumble Strip Standard Drawings and the Roadway Design Manual.

Section 3J.02 Transverse Rumble Strip Markings

No supplemental information.

CHAPTER 3K. HIGHWAY MEMORIAL MARKERS AND OTHER MARKERS (Chapter is not in the MUTCD)

Section 3K.01 Traffic Accident Memorials (Section is not in the MUTCD)

Idaho Statute 49-1316 allows relatives or friends of a person killed in a crash to erect a "traffic accident memorial" in memory of the deceased. *IDAPA 39.03.63 "Rules Governing Traffic Accident Memorials,"* addresses the permitting and the dimensions and material, location, and maintenance of the memorial.

Section 3K.02 Blue Star Memorial Markers (Section is not in the MUTCD)

The National Garden Club provides tribute to the Armed Forces of America with Blue Star memorial highway and by-way markers. Treat Garden Club requests to construct Blue Star memorial markers similarly to those for "traffic accident memorials" and with engineering judgment.

Section 3K.03 Private Approach Markers (Section is not in the MUTCD)

Private approaches are not normally marked. Agencies responsible for emergency response may mark the address of rural properties with a 6 x 18 inch blue marker. The marker may be retroreflective. If used, the blue markers are the responsibility of the emergency response agency or of the property owner.

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PART 4
HIGHWAY TRAFFIC SIGNALS

CHAPTER 4A. GENERAL

Section 4A.01 Types

No supplemental information.

Section 4A.02 Definitions Relating to Highway Traffic Signals

No supplemental information.

CHAPTER 4B. TRAFFIC CONTROL SIGNALS - GENERAL

Section 4B.01 General

Administrative Policy 5016 – Traffic Regulation – outlines the Department's distribution of responsibilities such as Traffic Minute Entry approval authority and State and local agreement costs for traffic control devices.

Section 4B.02 Basis of Installation or Removal of Traffic Control Signals

A request for a new traffic signal or improvement to an existing traffic signal is generally initiated from the police, a public official, or within the Department. The request and proposed intersection improvement should be reviewed with the District Traffic Engineer prior to any commitment of ITD to a traffic signal installation.

Section 4B.03 Advantages and Disadvantages of Traffic Control Signal

No supplemental information.

Section 4B.04 Alternatives to Traffic Control Signals

No supplemental information.

Section 4B.05 Adequate Roadway Capacity

No supplemental information.

CHAPTER 4C. TRAFFIC CONTROL SIGNAL NEEDS STUDIES

Section 4C.01 Studies and Factors for Justifying Traffic Control Signals

No supplemental information.

Section 4C.02 Warrant 1, Eight-Hour Vehicular Volume

No supplemental information.

Section 4C.03 Warrant 2, Four-Hour Vehicular Volume

No supplemental information.

Section 4C.04 Warrant 3, Peak Hour

No supplemental information.

Section 4C.05 Warrant 4, Pedestrian Volume

No supplemental information.

Section 4C.06 Warrant 5, School Crossing

No supplemental information.

Section 4C.07 Warrant 6, Coordinated Signal System

No supplemental information.

Section 4C.08 Warrant 7, Crash Experience

No supplemental information.

Section 4C.09 Warrant 8, Roadway Network

No supplemental information.

Section 4C.10 Warrant 9, Intersection Near a Grade Crossing

No supplemental information.

CHAPTER 4D. TRAFFIC CONTROL SIGNAL FEATURES

Section 4D.01 General

Refer to "NCHRP Report 812 – Signal Timing Manual" for guidance on clearance intervals, traffic control signal timing, and corridor coordination. Resources such as FHWA's "Signalized Intersections Informational Guide" and "Traffic Detector Handbook," ITE's "Traffic Control Devices Handbook," and others contain design information that is not included in the MUTCD. "NCHRP Report 500, Volume 12 – A Guide for Reducing Collisions at Signalized Intersections" and the crash modification factors (CMF) clearinghouse may be used to reduce the number of collisions at signalized intersections.

Section 4D.02 Responsibility for Operation and Maintenance

A traffic signal agreement should be in place for all traffic signal installations on the State highway system. Refer to *Administrative Policy 5016 – Traffic Regulation* for guidance on what the agreement should contain.

The timing of each signal controller should be reviewed and updated as needed (construction or special event impacts) or least once a year.

Section 4D.03 Provisions for Pedestrians

Pedestrian signals should be considered for signalized intersection crossings that have curb and sidewalk unless pedestrians are not permitted because of geometric constraints or if No Pedestrian Crossing (R9-3) signs are installed. Pedestrian signals should be considered at rural intersections unless there is little potential for pedestrian traffic. Refer to the *Bicycle/Pedestrian Facilities Administrative Policy* when deciding not to install pedestrian signals.

Section 4D.04 Meaning of Vehicular Signal Indications

Idaho Statute 49-802 – Traffic-Control Signal Legend – describes similar meanings as Section 4D.04, but with some minor differences. *Idaho Statute 49-804 – Flashing Signals* – describes the meanings of flashing signals.

Idaho Statute 49-802(1)(a) and *IDAPA Rule 39.03.41 – Rules Governing Traffic Control Devices* – allow vehicles facing a steady CIRCULAR RED signal indication to turn left from a two-way highway onto a one-way street after stopping and yielding to other users.

Idaho Statute 49-802(3) allows the driver of a motorcycle to proceed through a traffic control signal after exercising due caution and care when facing a CIRCULAR RED or RED ARROW if after one signal cycle the detection equipment does not detect the motorcycle.

See *Idaho Statute 49-804 –Flashing Signals* – for the meaning of flashing signal indications.

Idaho Statute 49-720 allows a bicyclist facing a steady CIRCULAR RED or RED ARROW signal indication to stop, yield to other traffic, and proceed through the traffic control signal as if it were a STOP controlled intersection (see Section 9D.02).

Section 4D.05 Application of Steady Signal Indications

No supplemental information.

Section 4D.06 Signal Indications - Design, Illumination, Color, and Shape

No supplemental information.

Section 4D.07 Size of Vehicular Signal Indications

No supplemental information.

Section 4D.08 Positions of Signal Indications Within a Signal Face - General

Horizontally-arranged signal faces are not typically used in Idaho, but are shown in the Idaho Driver's Manual and may be used based on engineering judgment.

Section 4D.09 Positions of Signal Indications Within a Vertical Signal Face

No supplemental information.

Section 4D.10 Positions of Signal Indications Within a Horizontal Signal Face

No supplemental information.

Section 4D.11 Number of Signal Faces on an Approach

On approaches with two or more lanes for the through movement, provide one signal face per through lane, centered over the through lane, unless otherwise determined through engineering judgment.

Section 4D.12 Visibility, Aiming, and Shielding of Signal Faces

In accordance with *Idaho Statute 49-805 – Display of Unauthorized Signs, Signals, or Markings* – an object that hides from view or interferes with the effectiveness of a traffic control device (including a traffic control signal) is prohibited and can be removed.

A Signal Ahead (W3-3) sign and Warning Beacon installed to warn approaching road users of the traffic control signal is referred to as Dynamic Signal Warning Flashers in the CMF Clearinghouse.

Section 4D.13 Lateral Positioning of Signal Faces

Left-turn primary signal faces can be offset to the right of the center of the left-turning lane to ensure that the signal face is not blocked by the opposing signal face if engineering judgment determines that doing so will improve traffic control signal operations. If offset, position the primary left-turn signal face four feet from the right edge of the turn lane.

Section 4D.14 Longitudinal Positioning of Signal Faces

No supplemental information.

Section 4D.15 Mounting Height of Signal Faces

No supplemental information.

Section 4D.16 Lateral Offset (Clearance) of Signal Faces

No supplemental information.

Section 4D.17 Signal Indications for Left-Turn Movements - General

No supplemental information.

Section 4D.18 Signal Indications for Permissive Only Mode Left-Turn Movements

No supplemental information.

Section 4D.19 Signal Indications for Protected Only Mode Left-Turn Movements

No supplemental information.

Section 4D.20 Signal Indications for Protected/Permissive Mode Left-Turn Movements

No supplemental information.

Section 4D.21 Signal Indications for Right-Turn Movements - General

No supplemental information.

Section 4D.22 Signal Indications for Permissive Only Mode Right-Turn Movements

No supplemental information.

Section 4D.23 Signal Indications for Protected Only Mode Right-Turn Movements

No supplemental information.

Section 4D.24 Signal Indications for Protected/Permissive Mode Right-Turn Movements

No supplemental information.

Section 4D.25 Signal Indications for Approaches With Shared Left-Turn/Right-Turn Lanes and No Through Movement

No supplemental information.

Section 4D.26 Yellow Change and Red Clearance Intervals

Refer to “NCHRP Report 812 Signal Timing Manual” for Yellow Change and Red Clearance calculations.

Section 4D.27 Preemption and Priority Control of Traffic Control Signals

During a preemption call ITD signal controllers are typically programmed to first cancel phases displaying a flashing yellow arrow indication and then to provide green indications to all phases in the preempted direction.

ITD will normally only install emergency vehicle preemption equipment at the request of a local agency after an agreement with that agency has been established. The following are examples of items that should be addressed in the agreement.

ITD generally will:

- Approve preemption signal phasing.
- Approve and modify controller equipment within the traffic signal controller cabinet to accommodate preemption by approach.

The local agency generally will:

- Furnish and maintain the equipment that is to be installed by the local agency within the pre-wired controller cabinet under the supervision of ITD.
- Furnish, install, and maintain the equipment from the emergency vehicle station to the controller cabinet.
- Furnish, install, and maintain the equipment to provide an indication to the driver of an emergency vehicle that the controller has been successfully preempted.

Section 4D.28 Flashing Operation of Traffic Control Signals - General

No supplemental information.

Section 4D.29 Flashing Operation –Transition Into Flashing Mode

No supplemental information.

Section 4D.30 Flashing Operation – Signal Indications During Flashing Mode

No supplemental information.

Section 4D.31 Flashing Operation –Transition Out of Flashing Mode

No supplemental information.

Section 4D.32 Temporary and Portable Traffic Control Signals

No supplemental information.

Section 4D.33 Lateral Offset of Signal Supports and Cabinets

No supplemental information.

Section 4D.34 Use of Signs at Signalized Locations

No supplemental information.

Section 4D.35 Use of Pavement Markings at Signalized Locations

No supplemental information.

CHAPTER 4E. PEDESTRAIN CONTROL FEATURES

Section 4E.01 Pedestrian Signal Heads

No supplemental information.

Section 4E.02 Meaning of Pedestrian Signal Head Indications

See *Idaho Statute 49-803 – Pedestrian-Control Signals* – for the statutory definition of pedestrian signal head indications. The definitions are obsolete and ITD installs pedestrian signal heads as described in the MUTCD.

Section 4E.03 Application of Pedestrian Signal Heads

No supplemental information.

Section 4E.04 Size, Design, and Illumination of Pedestrian Signal Head Indications

No supplemental information.

Section 4E.05 Location and Height of Pedestrian Signal Heads

No supplemental information.

Section 4E.06 Pedestrian Intervals and Signal Phases

No supplemental information.

Section 4E.07 Countdown Pedestrian Signals

No supplemental information.

Section 4E.08 Pedestrian Detectors

ITD Standard Drawings provide additional pedestrian pushbutton location and curb ramp information.

Section 4E.09 Accessible Pedestrian Signals and Detectors - General

Accessible pedestrian signals (APS) are not installed by ITD unless requested, justified by an engineering study, and reviewed by an ITD multi-disciplinary team (see *ITD department memorandum HWY-35 –Accessible Pedestrian Signal Approval Process*).

When an APS request is received, the request will be processed by the Office of Civil Rights. The Office of Civil Rights will convene a review committee consisting of the applicable District Traffic Engineer, a member of the Office of Civil Rights, and a member of the Headquarters Design/Traffic Services section. The District Traffic Engineer will conduct an engineering study in accordance with the MUTCD and *23 USC 217(g)*. Districts will retain study documentation.

APS installation at existing intersections must be programmed and funded through the Idaho Transportation Investment Program (ITIP).

Section 4E.10 Accessible Pedestrian Signals and Detectors - Location

No supplemental information.

Section 4E.11 Accessible Pedestrian Signals and Detectors – Walk Indications

No supplemental information.

Section 4E.12 Accessible Pedestrian Signals and Detectors – Tactile Arrows and Locator Tones

No supplemental information.

Section 4E.13 Accessible Pedestrian Signals and Detectors – Extended Pushbutton Press Features

No supplemental information.

CHAPTER 4F. PEDESTRAIN HYBRID BEACONS

Section 4F.01 Application of Pedestrian Hybrid Beacons

No supplemental information.

Section 4F.02 Design of Pedestrian Hybrid Beacons

No supplemental information.

Section 4F.03 Operation of Pedestrian Hybrid Beacons

No supplemental information.

CHAPTER 4G. TRAFFIC CONTROL SIGNALS AND HYBRID BEACONS FOR EMERGENCY-VEHICLE ACCESS

Section 4G.01 Application of Emergency-Vehicle Traffic Control Signals and Hybrid Beacons

No supplemental information.

Section 4G.02 Design of Emergency-Vehicle Traffic Control Signals

No supplemental information.

Section 4G.03 Operation of Emergency-Vehicle Traffic Control Signals

No supplemental information.

Section 4G.04 Emergency-Vehicle Hybrid Beacons

No supplemental information.

CHAPTER 4H. TRAFFIC CONTROL SIGNALS FOR ONE-LANE, TWO-WAY FACILITIES

Section 4H.01 Application of Traffic Control Signals for One-Lane, Two-Way Facilities

No supplemental information.

Section 4H.02 Design of Traffic Control Signals for One-Lane, Two-way Facilities

No supplemental information.

Section 4H.03 Operation of Traffic Control Signals for One-Lane, Two-Way Facilities

No supplemental information.

CHAPTER 4I. TRAFFIC CONTROL SIGNALS FOR FREEWAY ENTRANCE RAMPS

Section 4I.01 Application of Freeway Entrance Ramp Control Signals

No supplemental information.

Section 4I.02 Design of Freeway Entrance Ramp Control Signals

No supplemental information.

Section 4I.03 Operation of Freeway Entrance Ramp Control Signals

No supplemental information.

CHAPTER 4J. TRAFFIC CONTROL FOR MOVABLE BRIDGES

Section 4J.01 Application of Traffic Control for Movable Bridges

No supplemental information.

Section 4J.02 Design and Location of Movable Bridge Signals and Gates

No supplemental information.

Section 4J.03 Operation of Movable Bridge Signals and Gates

No supplemental information.

CHAPTER 4K. HIGHWAY TRAFFIC SIGNALS AT TOLL PLAZAS

Section 4K.01 Traffic Signals at Toll Plazas

No supplemental information.

Section 4K.02 Lane-Use Control Signals at or Near Toll Plazas

No supplemental information.

Section 4K.03 Warning Beacons at Toll Plazas

No supplemental information.

CHAPTER 4L. FLASHING BEACONS

Section 4L.01 General Design and Operation of Flashing Beacons

See *Idaho Statute 49-804 –Flashing Signals* – for the definition of flashing (signals) Beacons.

Section 4L.02 Intersection Control Beacon

See *Idaho Statute 49-804 –Flashing Signals* – for the meaning of flashing beacon (signal) indications.

Section 4L.03 Warning Beacon

In accordance with *IDAPA Rule 39.03.41 –Rules Governing Traffic Control Devices* – beacons cannot be included within the border of a sign.

Rectangular Rapid-Flashing Beacons (RRFB) may be used as a pedestrian-actuated conspicuity enhancement for pedestrian and school crossing warning signs. ITD has received interim approval from FHWA to use RRFBs. Local agencies must request interim approval from FHWA to use RRFBs on roadways within their jurisdictions.

Figure 4L-1 Rectangular Rapid Flashing Beacon

The following conditions apply to the use of the RRFB:

1. General Conditions:
    a. Each RRFB unit shall consist of two rapidly flashed rectangular-shaped yellow indications with an LED-array-based light source, and shall be designed, located, and operated in accordance with the detailed requirements specified below.
    b. The use of RRFBs is optional. However, if RRFBs are used, the following design and operational requirements shall apply, and shall take precedence over any conflicting provisions of the MUTCD for the approach on which RRFBs are used:
2. Allowable Uses:
    a. An RRFB shall only be installed to function as a pedestrian-actuated conspicuity enhancement.
    b. An RRFB shall only be used to supplement a post-mounted W11-2 (Pedestrian), S1-1 (School), or W11-15 (Trail) crossing warning sign with a diagonal downward arrow (W16-7P) plaque, or an overhead-mounted W11-2, S1-1, or W11-15 crossing warning sign, located at or immediately adjacent to an uncontrolled marked crosswalk.
    c. Except for crosswalks across the approach to or egress from a roundabout, an RRFB shall not be used for crosswalks across approaches controlled by YIELD signs, STOP signs, traffic control signals, or pedestrian hybrid beacons.
    d. In the event sight distance approaching the crosswalk at which RRFBs are used is less than deemed necessary by the engineer, an additional RRFB may be installed on that approach in advance of the crosswalk, as a pedestrian-actuated conspicuity enhancement to supplement a W11-2 (Pedestrian), S1-1 (School), or W11-15 (Trail) crossing warning sign with an AHEAD (W16-9P) or distance (W16-2P or W16-2aP) plaque. If an additional RRFB is installed on the approach in advance of the crosswalk, it shall be supplemental to and not a replacement for the RRFBs at the crosswalk itself.
3. Sign/Beacon Assembly Locations:
    a. For any approach on which RRFBs are used to supplement post-mounted signs, at least two W11-2, S1-1, or W11-15 crossing warning signs (each with an RRFB unit and a W16-7P plaque) shall be installed at the crosswalk, one on the right-hand side of the roadway and one on the left-hand side of the roadway. On a divided highway, the left-hand side assembly should be installed on the median, if practical, rather than on the far left-hand side of the highway.
    b. An RRFB unit shall not be installed independent of the crossing warning signs for the approach that the RRFB faces. If the RRFB unit is supplementing a post-mounted sign, the RRFB unit shall be installed on the same support as the associated W11-2, S1-1, or W11-15 crossing warning sign and plaque. If the RRFB unit is supplementing an overhead-mounted sign, the RRFB unit shall be mounted directly below the bottom of the sign.

4. Beacon Dimensions and Placement in the Sign Assembly:
    a. Each RRFB shall consist of two rectangular-shaped yellow indications, each with an LED-array-based light source. The size of each RRFB indication shall be at least 5 inches wide by at least 2 inches high.
    b. The two RRFB indications for each RRFB unit shall be aligned horizontally, with the longer dimension horizontal and with a minimum space between the two indications of at least 7 inches, measured from the nearest edge of one indication to the nearest edge of the other indication.
    c. The outside edges of the RRFB indications, including any housings, shall not project beyond the outside edges of the W11-2, S1-1, or W11-15 sign that it supplements.
    d. As a specific exception to Paragraph 5 of Section 4L.01 of the 2009 MUTCD, the RRFB unit associated with a post-mounted sign and plaque may be located between and immediately adjacent to the bottom of the crossing warning sign and the top of the supplemental downward diagonal arrow plaque (or, in the case of a supplemental advance sign, the AHEAD or distance plaque) or within 12 inches above the crossing warning sign, rather than the recommended minimum of 12 inches above or below the sign assembly. (See the example photo that is shown below.)
5. Beacon Flashing Requirements:
    a. When actuated, the two yellow indications in each RRFB unit shall flash in a rapidly flashing sequence.
    b. As a specific exception to the requirements for the flash rate of beacons provided in Paragraph 3 of Section 4L.01, RRFBs shall use a much faster flash rate and shall provide 75 flashing sequences per minute. Except as provided in Condition 5f below, during each 800-millisecond flashing sequence, the left and right RRFB indications shall operate using the following sequence:

        The RRFB indication on the left-hand side shall be illuminated for approximately 50 milliseconds.
        Both RRFB indications shall be dark for approximately 50 milliseconds.

        The RRFB indication on the right-hand side shall be illuminated for approximately 50 milliseconds.
        Both RRFB indications shall be dark for approximately 50 milliseconds.

        The RRFB indication on the left-hand side shall be illuminated for approximately 50 milliseconds.
        Both RRFB indications shall be dark for approximately 50 milliseconds.

        The RRFB indication on the right-hand side shall be illuminated for approximately 50 milliseconds.
        Both RRFB indications shall be dark for approximately 50 milliseconds.

Both RRFB indications shall be illuminated for approximately 50 milliseconds.
Both RRFB indications shall be dark for approximately 50 milliseconds.

Both RRFB indications shall be illuminated for approximately 50 milliseconds.
Both RRFB indications shall be dark for approximately 250 milliseconds.

c. The flash rate of each individual RRFB indication, as applied over the full flashing sequence, shall not be between 5 and 30 flashes per second to avoid frequencies that might cause seizures.
d. The light intensity of the yellow indications during daytime conditions shall meet the minimum specifications for Class 1 yellow peak luminous intensity in the Society of Automotive Engineers (SAE) Standard J595 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2005.
e. To minimize excessive glare during nighttime conditions, an automatic signal dimming device should be used to reduce the brilliance of the RRFB indications during nighttime conditions.
f. Existing RRFB units that use the flashing sequence that was specified in the Interim Approval 11 memorandum and a subsequent interpretation (the RRFB indication on the left-hand side emits two slow pulses of light after which the RRFB indication on the right-hand side emits four rapid pulses of light followed by one long pulse of light) should be reprogrammed to the flash pattern specified above in Condition 5b as part of a systematic upgrading process, such as when the units are serviced or when the existing signs are replaced.

6. Beacon Operation:
   a. The RRFB shall be normally dark, shall initiate operation only upon pedestrian actuation, and shall cease operation at a predetermined time after the pedestrian actuation or, with passive detection, after the pedestrian clears the crosswalk.
   b. All RRFB units associated with a given crosswalk (including those with an advance crossing sign, if used) shall, when actuated, simultaneously commence operation of their rapid-flashing indications and shall cease operation simultaneously.
   c. If pedestrian pushbutton detectors (rather than passive detection) are used to actuate the RRFB indications, a Push Button To Turn On Warning Lights (R10-25) sign (see MUTCD Figure 2B-26) shall be installed explaining the purpose and use of the pedestrian pushbutton detector.
   d. The duration of a predetermined period of operation of the RRFBs following each actuation should be based on the procedures provided in Section 4E.06 of the 2009 MUTCD for the timing of pedestrian clearance times for pedestrian signals.
   e. The predetermined flash period shall be immediately initiated each and every time that a pedestrian is detected either through passive detection or as a result of a pedestrian pressing a pushbutton detector, including when pedestrians are

detected while the RRFBs are already flashing and when pedestrians are detected immediately after the RRFBs have ceased flashing.

f. A small pilot light may be installed integral to the RRFB or pedestrian pushbutton detector to give confirmation that the RRFB is in operation.

7. Accessible Pedestrian Features:
   a. If a speech pushbutton information message is used in conjunction with an RRFB, a locator tone shall be provided.
   b. If a speech pushbutton information message is used in conjunction with an RRFB, the audible information device shall not use vibrotactile indications or percussive indications.
   c. If a speech pushbutton information message is used in conjunction with an RRFB, the message should say, "Yellow lights are flashing." The message should be spoken twice.

Section 4L.04 Speed Limit Sign Beacon

No supplemental information.

Section 4L.05 Stop Beacon

No supplemental information.

CHAPTER 4M. LANE-USE CONTROL SIGNALS

Section 4M.01 Application of Lane-Use Control Signals

No supplemental information.

Section 4M.02 Meaning of Lane-Use Control Signal Indications

Refer to *Idaho Statute 49-806 –Lane Use Control Signals* – when considering the use of Lane Use Control Signals.

Section 4M.03 Design of Lane-Use Control Signals

No supplemental information.

Section 4M.04 Operation of Lane-Use Control Signals

No supplemental information.

CHAPTER 4N. IN –ROADWAY LIGHTS

Section 4N.01 Application of In-Roadway Lights

No supplemental information.

Section 4N.02 In-Roadway Warning Lights at Crosswalks

No supplemental information.

PART 5
TRAFFIC CONTROL DEVICES FOR LOW-VOLUME ROADS

CHAPTER 5A. GENERAL

Section 5A.01 Function

State highways, regardless of traffic volumes, use typical traffic control devices. Traffic control devices for low-volume roads may be used only on applicable local rural road systems.

Section 5A.02 Application

No Supplemental Information.

Section 5A.03 Design

No Supplemental Information.

Section 5A.04 Placement

No Supplemental Information.

CHAPTER 5B. REGULATORY SIGNS

Section 5B.01 Introduction

No Supplemental Information.

Section 5B.02 STOP and YIELD Signs (R1-1 and R1-2)

No Supplemental Information.

Section 5B.03 Speed Limit Signs (R2 Series)

No Supplemental Information.

Section 5B.04 Traffic Movement and Prohibition Signs (R3, R4, R5, R6, R9, R10, R11, R12, R13, and R14 Series)

No Supplemental Information.

Section 5B.05 Parking Signs (R8 Series)

No Supplemental Information.

Section 5B.06 Other Regulatory Signs

No Supplemental Information.

CHAPTER 5C. WARNING SIGNS

Section 5C.01 Introduction

No Supplemental Information.

Section 5C.02 Horizontal Alignment Signs (W1-1 through W1-8)

No Supplemental Information.

Section 5C.03 Intersection Warning Signs (W2-1 through W2-6)

No Supplemental Information.

Section 5C.04 Stop Ahead and Yield Ahead Signs (W3-1, W3-2)

No Supplemental Information.

Section 5C.05 NARROW BRIDGE Sign (W5-2)

No Supplemental Information.

Section 5C.06 ONE LANE BRIDGE Sign (W5-3)

No Supplemental Information.

Section 5C.07 Hill Sign (W7-1)

No Supplemental Information.

Section 5C.08 PAVEMENT ENDS Sign (W8-3)

No Supplemental Information.

Section 5C.09 Vehicular Traffic Warning and Non-Vehicular Warning Signs (W11 Series and W86)

No Supplemental Information.

Section 5C.10 Advisory Speed Plaque (W13-1P)

No Supplemental Information.

Section 5C.11 DEAD END or NO OUTLET Signs (W14-1, W14-1a, W14-2, W14-2a)

No Supplemental Information.

Section 5C.12 NO TRAFFIC SIGNS Sign (W18-1)

No Supplemental Information.

Section 5C.13 Other Warning Signs

No Supplemental Information.

Section 5C.14 Object Markers and Barricades

No Supplemental Information.

CHAPTER 5D. GUIDE SIGNS

Section 5D.01 Introduction

No Supplemental Information.

CHAPTER 5E. MARKINGS

Section 5E.01 Introduction

No Supplemental Information.

Section 5E.02 Center Line Markings

No Supplemental Information.

Section 5E.03 Edge Line Markings

No Supplemental Information.

Section 5E.04 Delineators

No Supplemental Information.

Section 5E.05 Other Markings

No Supplemental Information.

CHAPTER 5F. TRAFFIC CONTROL FOR HIGHWAY-RAIL GRADE CROSSINGS

Section 5F.01 Introduction

No Supplemental Information.

Section 5F.02 Grade Crossing (Crossbuck) Sign and Number of Tracks Plaque (R15-1, R15-2P)

No Supplemental Information.

Section 5F.03 Grade Crossing Advance Warning Signs (W10 Series)

No Supplemental Information.

Section 5F.04 STOP AND YIELD Signs (R1-1, R1-2)

Refer to IDAPA 39.03.41 – Rules Governing Traffic Control Devices.

Section 5F.05 Pavement Markings

No Supplemental Information.

Section 5F.06 Other Traffic Control Devices

No Supplemental Information.

CHAPTER 5G. TEMPORARY TRAFFIC CONTROL ZONES

Section 5G.01 Introduction

No Supplemental Information.

Section 5G.02 Applications

No Supplemental Information.

Section 5G.03 Channelization Devices

No Supplemental Information.

Section 5G.04 Markings

No Supplemental Information.

Section 5G.05 Other Traffic Control Devices

No Supplemental Information.

CHAPTER 5H. TRAFFIC CONTROL FOR SCHOOL AREAS

Section 5H.01 Introduction

No Supplemental Information.

PART 6
TEMPORARY TRAFFIC CONTROL

CHAPTER 6A. GENERAL

Section 6A.01 General

Use the "Work Zone Safety and Mobility (WZSM) Program" on highway projects. The WZSM program provides guidance associated with federal regulations 23 CFR 630 Subpart J – Work Zone Safety and Mobility, and Subpart K – Temporary Traffic Control Devices. Also refer to the ITD "Operations Manual."

CHAPTER 6B. FUNDAMENTAL PRINCIPLES

Section 6B.01 Fundamental Principles of Temporary Traffic Control

Maintenance of traffic and maintenance of temporary detours are addressed in Section 105 of ITD's "Standard Specifications for Highway Construction."

CHAPTER 6C. TEMPORARY TRAFFIC CONTROL ELEMENTS

Section 6C.01 Temporary Traffic Control Plans

Training requirements for personnel involved in the development, design, implementation, operation, inspection, and enforcement of TTC plans on Federal-aid highway projects are listed in the "Work Zone Safety and Mobility Program."

Indicate the background color of warning signs on the TTC plan.

Section 6C.02 Temporary Traffic Control Zones

See *Administrative Policy 5546 – Special Events on State Highways* – for information about Special Event requirements, applications, agreements, and fees.

Section 6C.03 Components of Temporary Traffic Control Zones

No supplemental information.

Section 6C.04 Advance Warning Area

For Table 6C-1 of the MUTCD, use the following speeds for low and high speed urban road types, unless otherwise determined by engineering judgment:

Urban (Low Speed): 35 mph or lower
Urban (High Speed): 40 mph or greater

Section 6C.05 Transition Area

No supplemental information.

Section 6C.06 Activity Area

No supplemental information.

Section 6C.07 Termination Area

No supplemental information.

Section 6C.08 Tapers

No supplemental information.

Section 6C.09 Detours and Diversions

Coordinate detours that route traffic off of the highway system with the local highway agency. Consider initiating a cooperative agreement between ITD and the local highway agency if the traffic is being detoured for long periods of time or if the detoured traffic is anticipated to cause damage to the local highway system.

Section 6C.10 One-Lane, Two-Way Traffic Control

No supplemental information.

Section 6C.11 Flagger Method of One-Lane, Two-Way Traffic Control

No supplemental information.

Section 6C.12 Flag Transfer Method of One-Lane, Two-Way Traffic Control

No supplemental information.

Section 6C.13 Pilot Car Method of One-Lane, Two-Way Traffic Control

No supplemental information.

Section 6C.14 Temporary Traffic Control Signal Method of One-Lane, Two-Way Traffic Control

No supplemental information.

Section 6C.15 Stop or Yield Control Method of One-Lane, Two-Way Traffic Control

No supplemental information.

CHAPTER 6D. PEDESTRIAN AND WORKER SAFETY

Section 6D.01 Pedestrian Considerations

Refer to the "Work Zone Safety and Mobility Program" for an ITD policy statement regarding pedestrians and other road users within work zones.

Section 6D.02 Accessibility Considerations

No supplemental information.

Section 6D.03 Worker Safety Considerations

Use the "Work Zone Positive Protection Guidance" workbook (ITD Form 0283) to determine where and when to use positive protection, such as temporary traffic barriers. Refer to the "Work Zone Safety and Mobility Program."

Training requirements for personnel involved in the development, design, implementation, operation, inspection, and enforcement of TTC plans on Federal-aid highway projects are listed in the "Work Zone Safety and Mobility Program."

CHAPTER 6E. FLAGGER CONTROL

Section 6E.01 Qualifications for Flaggers

Flaggers must be trained and possess a current flagger certification from ATSSA or the Evergreen Safety Council or possess a current flagger certification that was obtained in Washington, Oregon, Montana, or Utah. ITD has reciprocity agreements to recognize certifications obtained in those states. Refer to the "Work Zone Safety and Mobility Program."

Section 6E.02 High-Visibility Safety Apparel

No supplemental information.

Section 6E.03 Hand-Signaling Devices

No supplemental information.

Section 6E.04 Automated Flagger Assistance Devices

ITD's policy governing AFAD application is that AFADs can be used if an engineering study estimates that AFAD use will improve temporary traffic control zone safety or reduce project cost without detrimentally affecting temporary traffic control zone safety. Consider the following in the engineering study:

A. Conditions applicable for the use of Method 1 and Method 2 AFAD operation,

B. Highway volume,

C. Maximum distance between AFADs,

D. Conflicting lenses/indications monitoring,

E. Fail safe procedures,

F. Need for additional signing and pavement markings,

G. Application consistency,

H. Use of larger signs or lenses to increase visibility,

I. Use of backplates.

Section 6E.05 STOP/SLOW Automated Flagger Assistance Devices

No supplemental information.

Section 6E.06 Red/Yellow Lens Automated Flagger Assistance Devices

No supplemental information.

Section 6E.07 Flagger Procedures

No supplemental information.

Section 6E.08 Flagger Stations

No supplemental information.

CHAPTER 6F. TEMORARY TRAFFIC CONTROL ZONE DEVICES

Section 6F.01 Types of Devices

Temporary traffic control devices are specified in Section 626 of the ITD "Standard Specifications for Highway Construction." Maintain temporary traffic control devices to the acceptable or marginal levels described in the ATSSA "Quality Guidelines for Temporary Traffic Control Devices and Features."

Section 6F.02 General Characteristics of Signs

Indicate the background color of warning signs on the TTC plan. For example, if the SOFT SHOULDER (W8-4) sign is used, indicate the sign number and color as W8-4(O).

The use of warning signs and plaques larger than those shown in Table 6F-1 of the MUTCD are encouraged.

The ROAD WORK NEXT XX MILES (G20-1) sign size may be increased to 60 x 24 inches.

The END ROAD WORK (G20-2) sign size may be increased to 48 x 24 inches for conventional roads.

Section 6F.03 Sign Placement

Ensure that sign placement does not inhibit intersection sight triangles as defined in AASHTO's "A Policy on Geometric Design of Highways and Streets."

Section 6F.04 Sign Maintenance

No supplemental information.

Section 6F.05 Regulatory Sign Authority

No supplemental information.

Section 6F.06 Regulatory Sign Design

No supplemental information.

Section 6F.07 Regulatory Sign Applications

No supplemental information.

Section 6F.08 ROAD (STREET) CLOSED Sign (R11-2)

No supplemental information.

Section 6F.09 Local Traffic Only Signs (R11-3a, R11-4)

No supplemental information.

Section 6F.10 Weight Limit Signs (R12-1, R12-2, R12-5)

Idaho Statute 49-1005 – Special Regulations and Notice – gives ITD authority to reduce the permissible size, weight, or speeds of vehicles operating on a highway for a period of time for the protection of the highway or for public safety due to climatic or other reasons. *IDAPA 39.03.14 – Rules Governing Policy During Spring Breakup Season* – provides additional information about the application of the statute.

Use Weight Limit signs (R12 Series) when vehicle weight loadings are restricted to a maximum weight or maximum weight per axle (see Section 2B.59). Use the BEGIN (R3-9cP) and END (R3-9dP) plaques to inform road users where the weight limit begins and ends (see Section 2B.25). Use additional Weight Limit (R12 Series) signs within the restricted section of highway at intersections where overweight vehicles may enter the highway.

Because climatic conditions that cause weight restrictions are usually regional, detours for vehicles weighing more than the posted limit should generally not be provided.

IDAPA 39.03.14 – Rules Governing Policy During Spring Breakup Season – provides information about marking highways when speeds for trucks and busses with a gross weight of 10,000 pounds or more are restrictions due to climatic or other conditions. Use red, yellow, or green markers to indicate the status of the speed restriction. A red marker indicates that the speed is restricted to 30 mph. A yellow marker indicates that the posted speed may be resumed. Green markers may be used when the District Engineer temporarily waives the spring breakup restrictions.

When used, attach 6 x 18 inch red, yellow, or green markers vertically to existing sign posts along the highway segment where speeds are restricted. The markers should usually be attached below Speed Limit (R2-1) signs, but can be posted below other highway sign. Do not cover or alter existing Speed Limit (R2-1) signs. End the restricted speed zone with one or more yellow markers.

Refer to the ITD “Operations Manual” for additional information.

Section 6F.11 STAY IN LANE Sign (R4-9)

No supplemental information.

Section 6F.12 Work Zone and Higher Fines Signs and Plaques

In accordance with *Idaho Statute 49-657*, enforcement agencies can penalize violators of work zone speed limits with a higher fine if the work zone limits are indicated, the speed limit is reduced, and notice is given for an enhanced penalty for exceeding the reduced speed limit.

To indicate that the penalty is enhanced for exceeding the reduced speed limit, use the FINES HIGHER (R2-6P) plaque beneath the Speed Limit (R2-1) sign (see Figure 6F-1). The WORK ZONE (G20-5aP) plaque can also be used above the Speed Limit sign to emphasize the reduced speed limit in the work zone. If the FINES HIGHER plaque is used, install the END HIGHER FINES ZONE (R2-11) sign at the downstream end of the zone.

Do not use the BEGIN HIGHER FINES ZONE (R2-10) sign because it does not indicate that the higher fines apply to the reduced speed limit. By 2021 discontinue the use of the INCREASED FINES FOR WORK ZONE SPEED VIOLATIONS (R2-1001) sign.

Figure 6F-1 Work Zone Higher Fines Assembly

G20-5aP (Optional)

R2-1

R2-6P

Section 6F.13 PEDESTRIAN CROSSWALK Sign (R9-8)

No supplemental information.

Section 6F.14 SIDEWALK CLOSED Signs (R9-9, R9-10, R9-11, R9-11a)

No supplemental information.

Section 6F.15 Special Regulatory Signs

No supplemental information.

Section 6F.16 Warning Sign Function, Design, and Application

Typically, 48 x 48 inch warning signs are used except when available space does not allow.

Section 6F.17 Position of Advance Warning Signs

No supplemental information.

Section 6F.18 ROAD (STREET) WORK Sign (W20-1)

No supplemental information.

Section 6F.19 DETOUR Sign (W20-2)

No supplemental information.

Section 6F.20 ROAD (STREET) CLOSED Sign (W20-3)

No supplemental information.

Section 6F.21 ONE LANE ROAD Sign (W20-4)

No supplemental information.

Section 6F.22 Lane(s) Closed Signs (W20-5a)

No supplemental information.

Section 6F.23 CENTER LANE CLOSED AHEAD Sign (W9-3)

No supplemental information.

Section 6F.24 Lane Ends Sign (W4-2)

No supplemental information.

Section 6F.25 ON RAMP Plaque (W13-4P)

No supplemental information.

Section 6F.26 RAMP NARROWS Sign (W5-4)

No supplemental information.

Section 6F.27 SLOW TRAFFIC AHEAD Sign (W23-1)

No supplemental information.

Section 6F.28 EXIT OPEN and EXIT CLOSED Signs (E5-2, E5-2a)

No supplemental information.

Section 6F.29 EXIT ONLY Sign (E5-3)

No supplemental information.

Section 6F.30 NEW TRAFFIC PATTERN AHEAD Sign (W23-2)

No supplemental information.

Section 6F.31 Flagger Signs (W20-7, W20-7a)

No supplemental information.

Section 6F.32 Two-Way Traffic Sign (W6-3)

No supplemental information.

Section 6F.33 Workers Signs (W21-1, W21-1a)

No supplemental information.

Section 6F.34 FRESH OIL (TAR) Sign (W21-2)

No supplemental information.

Section 6F.35 ROAD MACHINERY AHEAD Sign (W21-3)

No supplemental information.

Section 6F.36 Motorized Traffic Signs (W8-6, W11-10)

No supplemental information.

Section 6F.37 Shoulder Work Sigs (W21-5, W21-5a, W21-5b)

No supplemental information.

Section 6F.38 SURVEY CREW Sign (W21-6)

No supplemental information.

Section 6F.39 UTILITY WORK Sign (W21-7)

No supplemental information.

Section 6F.40 Signs for Blasting Areas

No supplemental information.

Section 6F.41 BLASTING ZONE AHEAD Sign (W22-1)

No supplemental information.

Section 6F.42 TURN OFF 2-WAY RADIO AND CELL PNONE Sign (W22-2)

No supplemental information.

Section 6F.43 END BLASTING ZONE Sign (W22-3)

No supplemental information.

Section 6F.44 Shoulder Signs and Plaque (W8-4, W8-9, W8-17 and W8-17P)

No supplemental information.

Section 6F.45 UNEVEN LANES Sign (W8-11)

No supplemental information.

Section 6F.46 STEEL PLATE AHEAD Sign (W8-24)

No supplemental information.

Section 6F.47 NO CENTER LINE Sign (W8-12)

No supplemental information.

Section 6F.48 Reverse Curve Signs (W1-4 Series)

No supplemental information.

Section 6F.49 Double Reverse Curve Signs (W24-1 Series)

No supplemental information.

Section 6F.50 Other Warning Signs

No supplemental information.

Section 6F.51 Special Warning Signs

Warning signs such as AVOID WINDSHIELD DAMAGE (W8-703) sign (see Figure 6F-2) may be used on seal coat projects. If used, provide an Advisory Speed (W13-1P) plaque below the sign.

Figure 6F-2 Avoid Windshield Damage Warning Sign

W8-703

Section 6F.52 Advisory Speed Plaque (W13-1P)

No supplemental information.

Section 6F.53 Supplementary Distance Plaque (W7-3aP)

No supplemental information.

Section 6F.54 Motorcycle Plaque (W8-15P)

No supplemental information.

Section 6F.55 Guide Signs

No supplemental information.

Section 6F.56 ROAD WORK NEXT XX MILES Sign (G20-1)

The ROAD WORK NEXT XX MILES (G20-1) sign can be enlarged to 60 x 30 inches. See the "ITD Supplement to the Standard Highway Signs and Markings" book for alternate size information.

Section 6F.57 END ROAD WORK Sign (G20-2)

No supplemental information.

Section 6F.58 PILOT CAR FOLLOW ME Sign (G20-4)

In addition to the PILOT CAR FOLLOW ME (G20-4) sign, warning signs such as WAIT FOR PILOT CAR (G20-401) sign (see Figure 6F-3) may be used on low volume intersecting roads when a pilot car is in operation on a highway or major road. If used, the WAIT FOR PILOT CAR (G20-401) sign should be 30 x 30 inches or 36 x 36 inches. See Section 6F.02 and the "ITD Sign Chart: Idaho Supplement to the Standard Highway Signs and Markings Book" for alternate size information.

Figure 6F-3 Wait For Pilot Car Warning Sign

G20-401

Section 6F.59 Detour Signs (M4-8, M4-8a, M4-8b, M4-9, M4-9a, M4-9b, M4-9c, and M4-10)

No supplemental information.

Section 6F.60 Portable Changeable Message Signs

No supplemental information.

Section 6F.61 Arrow Boards

No supplemental information.

Section 6F.62 High-Level Warning Devices (Flag Trees)

No supplemental information.

Section 6F.63 Channelizing Devices

No supplemental information.

Section 6F.64 Cones

No supplemental information.

Section 6F.65 Tubular Markers

Tubular markers are typically used in the activity area and buffer space of TTC zones (See MUTCD Figure 6C-1).

Use tubular markers that are at least 36 inches in height and have at least 3 inches in width when facing traffic.

Section 6F.66 Vertical Panels

No supplemental information.

Section 6F.67 Drums

Drums are typically used in the transition area of TTC zones (See MUTCD Figure 6C-1) and may be used in tangent sections.

Section 6F.68 Type 1, 2, or 3 Barricades

ITD specifies a wider Type 3 barricade that is 7 feet (or 84 inches) in length in the "Standard Specifications for Highway Construction."

Section 6F.69 Direction Indicator Barricades

No supplemental information.

Section 6F.70 Temporary Traffic Barriers as Channelizing Devices

No supplemental information.

Section 6F.71 Longitudinal Channelizing Devices

No supplemental information.

Section 6F.72 Temporary Lane Separators

No supplemental information.

Section 6F.73 Other Channelizing Devices

No supplemental information.

Section 6F.74 Detectable Edging for Pedestrians

No supplemental information.

Section 6F.75 Temporary Raised Islands

No supplemental information.

Section 6F.76 Opposing Traffic Lane Divider and Sign (W6-4)

No supplemental information.

Section 6F.77 Pavement Markings

No supplemental information.

Section 6F.78 Temporary Markings

The following is ITD's policy regarding the temporary use of edge lines, channelizing lines, lane-reduction transitions, gore markings, and other longitudinal markings:

A. Provide temporary edge lines on Interstate highways and Expressways. For other highways, temporary edge lines are optional unless otherwise shown on the project plans.

B. Provide temporary channelizing lines on Interstate highways and Expressways. For other highways, temporary channelizing lines are optional unless otherwise shown on the project plans.

C. Provide temporary lane-reduction transition markings when temporary edge lines, temporary channelizing lines, or both are used.

D. Provide temporary gore markings when temporary edge lines, temporary channelizing lines, or both are used.

E. Use engineering judgment to determine whether to place other temporary longitudinal markings.

The following is ITD's policy regarding the temporary use of various non-longitudinal markings such as stop lines, railroad crossings, crosswalks, words, symbols, and arrows:

A. Temporary stop lines are optional unless required elsewhere in the MUTCD.

B. Temporary railroad crossing markings are optional.

C. If crosswalk markings are shown on the permanent pavement marking plan, provide temporary crosswalk markings when temporary stop lines are used.

D. Temporary word markings are optional.

E. Temporary symbols markings are optional.

F. Temporary arrow markings are optional.

ITD's policy is to use engineering judgment when considering the use of DO NOT PASS (R4-1), PASS WITH CARE (R4-2), and NO PASSING ZONE (R14-3) signs on low volume road for situations lasting more than 14 days.

Section 6F.79 Temporary Raised Pavement Markers

No supplemental information.

Section 6F.80 Delineators

No supplemental information.

Section 6F.81 Lighting Devices

No supplemental information.

Section 6F.82 Floodlights

No supplemental information.

Section 6F.83 Warning Lights

No supplemental information.

Section 6F.84 Temporary Traffic Control Signals

No supplemental information.

Section 6F.85 Temporary Traffic Barriers

ITD completed an engineering study to develop positive protection guidelines in accordance with 23 CFR 630 Subpart K. A worksheet was developed to quantitatively determine positive protection use. The worksheet is found in ITD Form 0283. Also refer to the "Work Zone Safety and Mobility Program."

Section 6F.86 Crash Cushions

Use ITD's "Crash Cushion and Roadside Terminal Categorization Charts" when selecting temporary crash cushions.

Section 6F.87 Rumble Strips

No supplemental information.

Section 6F.88 Screens

No supplemental information.

CHAPTER 6G. TYPE OF TEMORARY TRAFFIC CONTROL ZONE ACTIVITIES

Section 6G.01 Typical Applications

See *Administrative Policy 5546 – Special Events on State Highways* – for information about Special Event requirements, applications, agreements, and fees.

Section 6G.02 Work Duration

No supplemental information.

Section 6G.03 Location of Work

No supplemental information.

Section 6G.04 Modifications to Fulfill Special Needs

No supplemental information.

Section 6G.05 Work Affecting Pedestrian and Bicycle Facilities

No supplemental information.

Section 6G.06 Work Outside of the Shoulder

No supplemental information.

Section 6G.07 Work on the Shoulder with No Encroachment

No supplemental information.

Section 6G.08 Work on the Shoulder with Minor Encroachment

No supplemental information.

Section 6G.09 Work Within the Median

No supplemental information.

Section 6G.10 Work Within the Traveled Way of a Two-Lane Highway

No supplemental information.

Section 6G.11 Work Within the Traveled Way of an Urban Street

No supplemental information.

Section 6G.12 Work Within the Traveled Way of a Multi-Lane, Non-Access Controlled Highway

No supplemental information.

Section 6G.13 Work Within the Traveled Way at an Intersection

No supplemental information.

Section 6G.14 Work Within the Traveled Way of a Freeway or Expressway

No supplemental information.

Section 6G.15 Two-Lane, Two-Way Traffic on One Roadway of a Normally Divided Highway

Figure 6G-1 shows example pavement markings for two-lane, two-way traffic on one roadway of a normally divided highway. Use Figure 6G-1 with Figure 6H-39 of the MUTCD. See Section 6F.63 of the MUTCD for tubular marker spacing. See Section 6F.79 of the MUTCD for temporary raised pavement marker spacing. Use 50 for the value of N in the spacing equations.

Section 6G.16 Crossovers

ITD has chosen to provide median crossovers on work with multiple steps or where the work zone is more than 1.5 miles in length unless an appeal is made to the Chief Engineer.

Section 6G.17 Interchanges

No supplemental information.

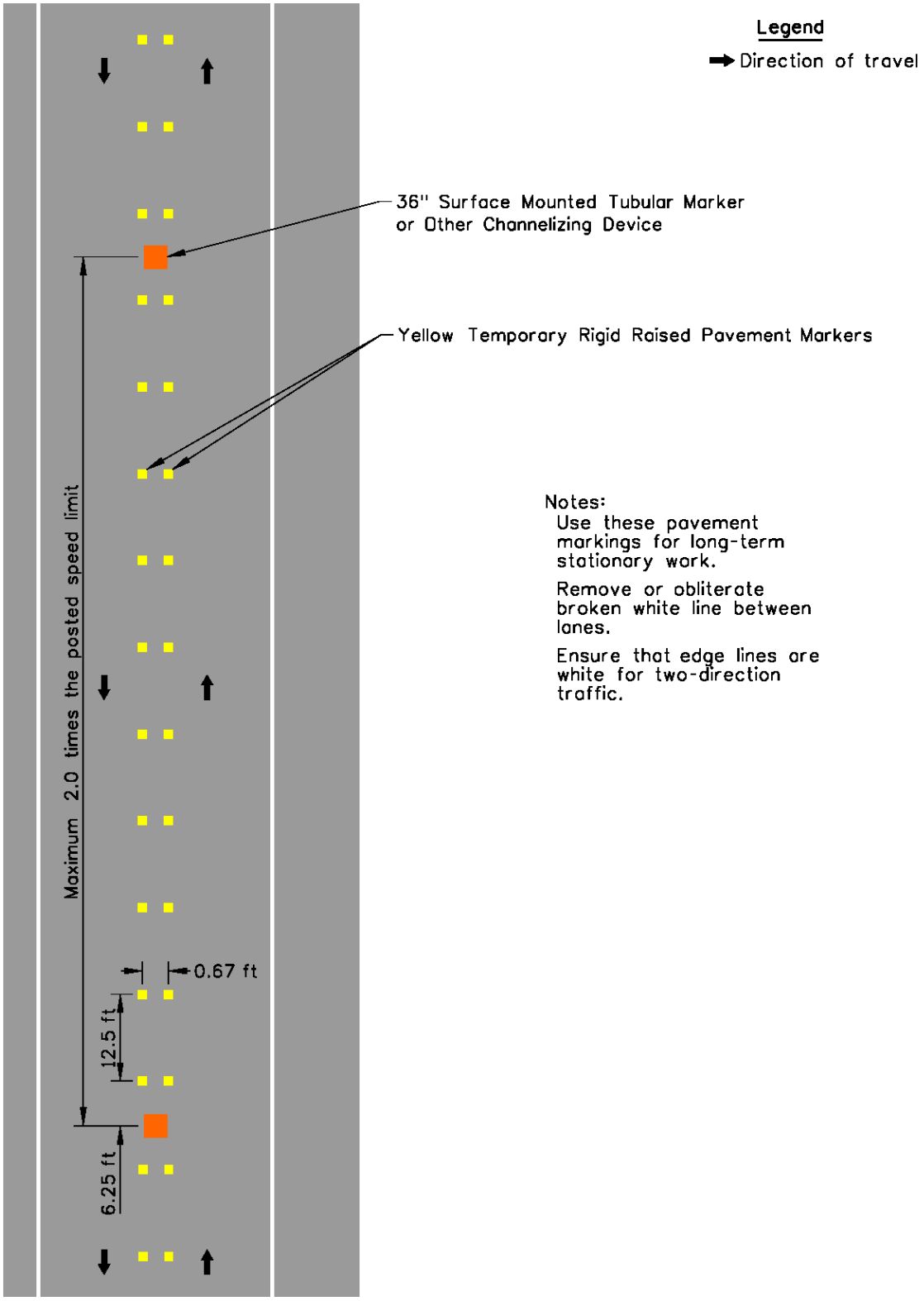
Section 6G.18 Work in the Vicinity of a Grade Crossing

No supplemental information.

Section 6G.19 Temporary Traffic Control During Nighttime Hours

No supplemental information.

Figure 6G-1 Example Pavement Markings for Two-Lane, Two-Way Traffic on One Roadway of a Normally Divided Highway



CHAPTER 6H. TYPICAL APPLICATIONS

Section 6H.01 Typical Applications

For Table 6H-3 of the MUTCD, use the following speeds for low and high speed urban road types, unless otherwise determined by engineering judgment:

Urban (Low Speed): 35 mph or lower
Urban (High Speed): 40 mph or greater

Use Figure 6G-1 with Figure 6H-39 of the MUTCD.

CHAPTER 6I. CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS

Section 6I.01 General

No supplemental information.

Section 6I.02 Major Traffic Incidents

No supplemental information.

Section 6I.03 Intermediate Traffic Incidents

No supplemental information.

Section 6I.04 Minor Traffic Incidents

No supplemental information.

Section 6I.05 Use of Emergency-Vehicle Lighting

No supplemental information.

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PART 7
TRAFFIC CONTROL FOR SCHOOL AREAS

CHAPTER 7A. GENERAL

Section 7A.01 Need for Standards

No supplementary information.

Section 7A.02 School Routes and Established School Crossings

No supplementary information.

Section 7A.03 School Crossing Control Criteria

No supplementary information.

Section 7A.04 Scope

No supplementary information.

CHAPTER 7B. SIGNS

Section 7B.01 Size of School Signs

See *IDAPA 39.03.41 – Rules Governing Traffic Control Devices*. Remove the WHEN CHILDREN ARE PRESENT (S4-2P) sign from MUTCD Table 7B-1.

Section 7B.02 Illumination and Reflectorization

No supplementary information.

Section 7B.03 Position of Signs

No supplementary information.

Section 7B.04 Height of Signs

No supplementary information.

Section 7B.05 Installation of Signs

No supplementary information.

Section 7B.06 Lettering

No supplementary information.

Section 7B.07 Sign Color for School Warning Signs

No supplementary information.

Section 7B.08 School Sign (S1-1) and Plaques

See *IDAPA 39.03.41 – Rules Governing Traffic Control Devices*. Remove the WHEN CHILDREN ARE PRESENT (S4-2P) sign from MUTCD Figure 7B-1.

Section 7B.09 School Zone Sign (S1-1) and Plaques (S4-3P, S4-7P) and END SCHOOL ZONE Sign (S5-2)

No supplementary information.

Section 7B.10 Higher Fines Zone Sign (R2-10,R2-11) and Plaques

No supplementary information.

Section 7B.11 School Advance Crossing Assembly

Do not use STOP HERE FOR PEDESTRIANS (R1-6a, R1-6c) signs. In accordance with *Idaho Statute 49-702*, drivers must yield to a pedestrian crossing the highway within a crosswalk.

Section 7B.12 School Crossing Assembly

Do not use STOP HERE FOR PEDESTRIANS (R1-6a, R1-6c) signs. In accordance with *Idaho Statute 49-702*, drivers must yield to a pedestrian crossing the highway within a crosswalk.

Section 7B.13 School Bus Stop Ahead Sign (S3-1)

No supplementary information.

Section 7B.14 SCHOOL BUS TURN AHEAD Sign (S3-2)

No supplementary information.

Section 7B.15 School Speed Limit Assembly (S4-1P, S4-2P, S4-3P, S4-4P, S4-6P, S5-1) and END SCHOOL SPEED LIMIT Sign (S5-3)

See *IDAPA 39.03.41 – Rules Governing Traffic Control Devices*. Remove S4-2P from section title and from MUTCD paragraph 09. Add to the end of MUTCD paragraph 16: The lenses of the Speed Limit Sign Beacon shall not be positioned within the face of the School Speed Limit (S5-1) sign.

Section 7B.16 Reduced School Speed Limit Ahead Sign (S4-5, S4-5a)

No supplementary information.

Section 7B.17 Parking and Stopping Signs (R7 and R8 Series)

No supplementary information.

CHAPTER 7C. MARKINGS

Section 7C.01 Functions and Limitations

No supplementary information.

Section 7C.02 Crosswalk Markings

Pavement markings for school crossings on urban sections of the State Highway System are typically the responsibility of the local agency jurisdiction as agreed to in a State/Local Maintenance Agreement. Outside the political boundaries of a community, school pavement markings on the State Highway System will be the responsibility of ITD.

Section 7C.03 Pavement Word, Symbol, and Arrow Markings

If used, place the SCHOOL XING pavement markings in advance of ITD approved crosswalks. Figure 7C-1 illustrates the dimensions and placement of the SCHOOL XING marking. In urban locations place the marking 200 feet before the crosswalk, if possible. In rural locations, place the marking before the crosswalk a distance in feet equal to ten times the posted speed limit, in mph, if possible.

CHAPTER 7D. CROSSING SUPERVISION

Section 7D.01 Types of Crossing Supervision

In accordance with *Idaho Statue 33-1801*, school district or school officers may authorize school safety patrols.

Section 7D.02 Adult Crossing Guards

The potential for pedestrian and vehicular conflicts occur only during parts of the day when school is in session. Conflicts at school crossings may be resolved with adult crossing guards when more restrictive traffic control devices are not warranted. The instruction, supervision and cost of either school safety patrols or adult crossing guards are the responsibility of school and community officials.

Section 7D.03 Qualifications of Adult Crossing Guards

No supplementary information.

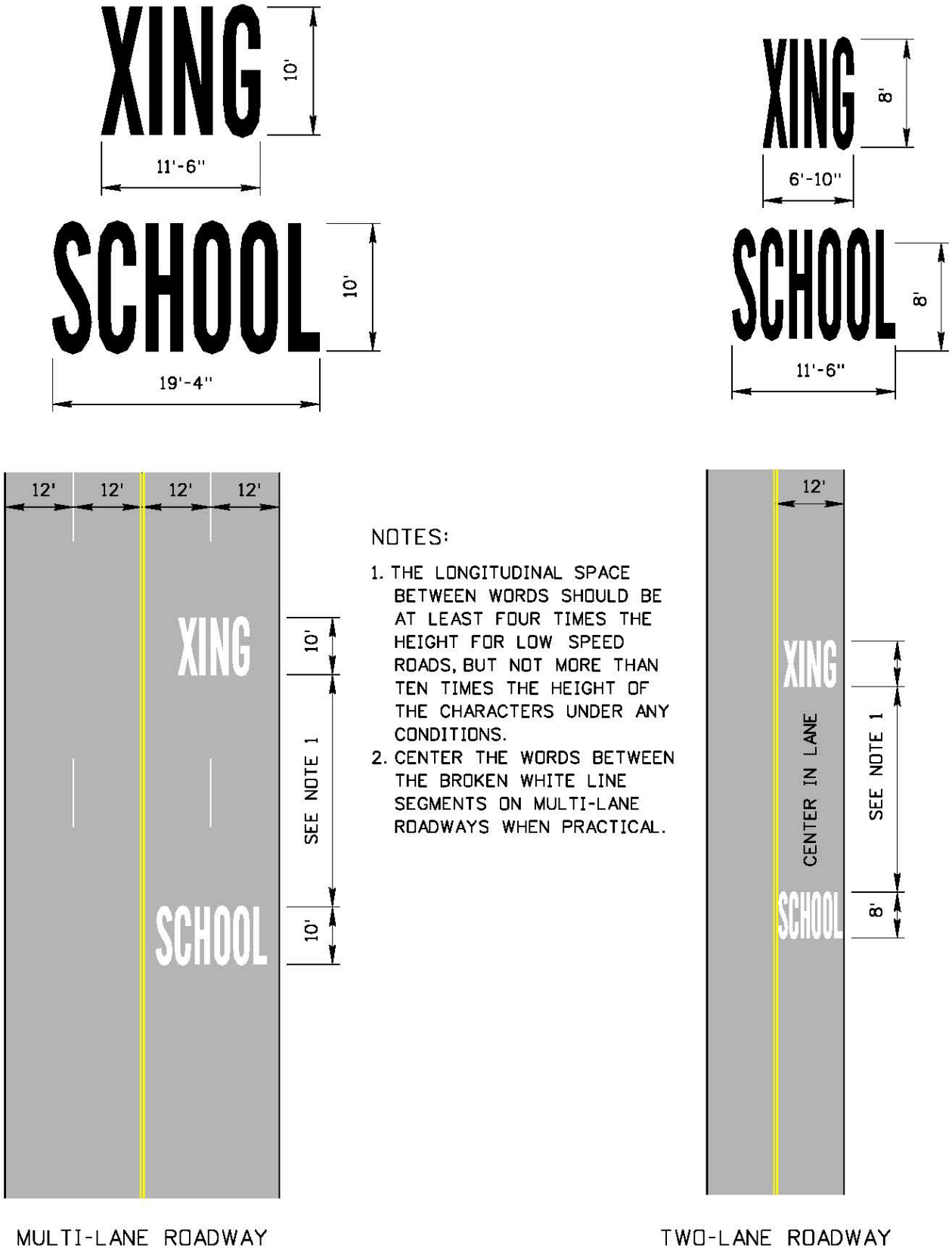
Section 7D.04 Uniform of Adult Crossing Guards

No supplementary information.

Section 7D.05 Operating Procedures for Adult Crossing Guards

No supplementary information.

Figure 7C-1 School Crossing Pavement Markings



PART 8
TRAFFIC CONTROL FOR RAILROAD GRADE CROSSINGS

CHAPTER 8A. GENERAL

Section 8A.01 Introduction

See Idaho Statute Title 62, Chapter 3 for laws pertaining to highway-rail grade crossings on highways. Also refer to the ITD "Railroad Guide" and FHWA "Railroad-Highway Grade Crossing Handbook."

Section 8A.02 Use of Standard Devices, Systems, and Practices at Highway-rail Grade Crossings

No supplemental information.

Section 8A.03 Use of Standard Devices, Systems, and Practices at Highway-LRT Grade Crossings

See IDAPA 39.03.41 – Rules Governing Traffic Control Devices – regarding stop signs at Highway-LRT grade crossings.

Section 8A.04 Uniform Provisions

No supplemental information.

Section 8A.05 Grade Crossing Elimination

No supplemental information.

Section 8A.06 Illumination at Grade Crossings

No supplemental information.

Section 8A.07 Quiet Zone Treatments at Highway-Rail Grade Crossings

No supplemental information.

Section 8A.08 Temporary Traffic Control Zones

No supplemental information.

CHAPTER 8B. SIGNS AND MARKINGS

Section 8B.01 Purpose

ITD or the local agency with jurisdiction over the highway or road is responsible for the signs and markings at highway-rail grade crossings unless otherwise noted.

Section 8B.02 Size of Grade Crossing Signs

No supplemental information.

Section 8B.03 Grade Crossing (Crossbuck) Sign (R15-1) and Number of Tracks Plaque (R15-2P) at Active and Passive Grade Crossings

The railroad company is responsible for the installation and maintenance of the Grade Crossing (R15-1) sign and Number of Tracks (R15-2P) plaque.

Discontinue the use of IdaShield. Do not install or replace IdaShields. Existing IdaShields that are already installed in the field as of December 31, 2017 may remain in place for the remainder of their useful service life.

Section 8B.04 Crossbuck Assemblies with YIELD or STOP Signs at Passive Grade Crossings

The entirety of this section is revised in *IDAPA 39.03.41 – Rules Governing Traffic Control Devices.*

Idaho Statute 49-202(25) requires ITD and local authorities to place STOP (R1-1) signs on the approaches of all railroad grade crossings where electric or mechanical warning signals do not exist (passive highway-rail grade crossings). Install YIELD (R1-2) signs instead of STOP signs if an engineering study determines that the existence of STOP signs constitutes a greater hazard than their absence.

The District Engineer will approve a Traffic Minute Entry for exceptions to placing STOP signs at passive highway-rail grade crossings on ITD highways and forward the Traffic Minute Entry to the Railroad/Utility Manager. Local agencies with passive highway-rail grade crossings under their jurisdiction have the same requirements for STOP signs or an engineering study. See *IDAPA 39.03.65 – Rules Governing Traffic Minute Entries* – and *Administrative Policy 5016 – Traffic Regulation.*

Section 8B.05 Use of STOP (R1-1) or YIELD (R1-2) Signs without Crossbuck Signs at Highway-LRT Grade Crossings

See *IDAPA 39.03.41 – Rules Governing Traffic Control Devices* – regarding the use of stop signs at highway-LRT grade crossings.

Section 8B.06 Grade Crossing Advance Warning Signs (W10 Series)

No supplemental information.

Section 8B.07 EXEMPT Highway-Rail Grade Crossing Plaques (R15-3P, W10-1aP)

See *IDAPA 39.03.41 – Rules Governing Traffic Control Devices* – regarding Idaho law about exempt highway-rail crossings.

Idaho Statute 49-649 and *Article 392.10* of the *Federal Motor Carrier Safety Regulations* require that certain vehicles stop at every railroad grade crossing. Some minimum-use crossings which have positive control such as a flagger and/or stop signs for trains or on industrial or spur lines may qualify as an "Exempt" crossing at which these specific vehicles are not required to stop.

If an exempt crossing is considered, the Railroad/Utility Manager will prepare a report of the crossing, hold a meeting with the railroad company, obtain a letter from the railroad company of its recommendation, and forward that letter to the District Traffic Engineer. The District Traffic Engineer will document the exempt recommendation, obtain District Engineer approval and install the Exempt signs.

Section 8B.08 Turn Restrictions During Preemption

No supplemental information.

Section 8B.09 DO NOT STOP ON TRACKS Sign (R8-8)

See *IDAPA Rule 39.03.41 – Rules Governing Traffic Control Devices* – regarding non-use of yield sign.

Section 8B.10 TRACKS OUT OF SERVICE Sign (R8-9)

No supplemental information.

Section 8B.11 STOP HERE WHEN FLASHING Signs (R8-10, R8-10a)

No supplemental information.

Section 8B.12 STOP HERE ON RED Signs (R10-6, R10-6a)

No supplemental information.

Section 8B.13 Light Rail Transit Only Lane Signs (R15-4 Series)

No supplemental information.

Section 8B.14 Do Not Pass Light Rail Transit Signs (R15-5, R15-5a)

No supplemental information.

Section 8B.15 No Motor Vehicles On Tracks Signs (R15-6, R15-6a)

No supplemental information.

Section 8B.16 Divided Highway with Light Rail Transit Crossing Signs (R15-7 Series)

See *IDAPA 39.03.41 – Rules Governing Traffic Control Devices* – regarding the mounting of R15-7 sign.

Section 8B.17 LOOK Sign (R15-8)

No supplemental information.

Section 8B.18 Emergency Notification Sign (I-13)

See *IDAPA 39.03.41 – Rules Governing Traffic Control Devices* – regarding the application of emergency notification sign.

Section 8B.19 Light Rail Transit Approaching-Activated Blank-Out Warning Sign (W10-7)

No supplemental information.

Section 8B.20 TRAINS MAY EXCEED 80 MPH Sign (W10-8)

No supplemental information.

Section 8B.21 NO TRAIN HORN Sign or Plaque (W10-9, W10-9P)

No supplemental information.

Section 8B.22 NO GATES OR LIGHTS Plaque (W10-13P)

No supplemental information.

Section 8B.23 Low Ground Clearance Grade Crossing Sign (W10-5)

No supplemental information.

Section 8B.24 Storage Space Signs (W10-11, W10-11a, W10-11b)

No supplemental information.

Section 8B.25 Skewed Crossing Sign (W10-12)

No supplemental information.

Section 8B.26 Light Rail Transit Station Sign (I-12)

No supplemental information.

Section 8B.27 Pavement Markings

Generally, truck stopping lanes are not provided at crossings with active protection and are optional at crossings with passive control.

Section 8B.28 Stop and Yield Lines

No supplemental information.

Section 8B.29 Dynamic Envelope Markings

No supplemental information.

CHAPTER 8C. FLASHING-LIGHT SIGNALS, GATES, AND TRAFFIC CONTROL SIGNALS

Section 8C.01 Introduction

See *Idaho Statutes 62-304A, 62-304B,* and *62-304C* for the funding and construction of active traffic control systems.

Section 8C.02 Flashing-Light Signals

No supplemental information.

Section 8C.03 Flashing-Light Signals at Highway-LRT Grade Crossings

No supplemental information.

Section 8C.04 Automatic Gates

No supplemental information.

Section 8C.05 Use of Automatic Gates at LRT Grade Crossings

No supplemental information.

Section 8C.06 Four-Quadrant Gate Systems

No supplemental information.

Section 8C.07 Wayside Horn Systems

No supplemental information.

Section 8C.08 Rail Traffic Detection

No supplemental information.

Section 8C.09 Traffic Control Signals at or Near Highway-Rail Grade Crossings

See *IDAPA 39.03.41 – Rules Governing Traffic Control Devices* – regarding engineering study justification.

Section 8C.10 Traffic Control Signals at or near Highway-LRT Grade Crossings

No supplemental information.

Section 8C.11 Use of Traffic Control Signals for Control of LRT Vehicles at Grade Crossings

No supplemental information.

Section 8C.12 Grade Crossings Within or In Close Proximity to Circular Intersections

No supplemental information.

Section 8C.13 Pedestrian and Bicycle Signals and Crossings at LRT Grade Crossings

No supplemental information.

CHAPTER 8D. PATHWAY GRADE CROSSINGS

Section 8D.01 Purpose

No supplemental information.

Section 8D.02 Use of Standard Devices, Systems, and Practices

No supplemental information.

Section 8D.03 Pathway Grade Crossing Signs and Markings

No supplemental information.

Section 8D.04 Stop Lines, Edge Lines, and Detectable Warnings

No supplemental information.

Section 8D.05 Passive Devices for Pathway Grade Crossings

No supplemental information.

Section 8D.06 Active Traffic Control Systems for Pathway Grade Crossings

No supplemental information.

PART 9
TRAFFIC CONTROL FOR BICYCLE FACILITIES

CHAPTER 9A. GENERAL

Section 9A.01 Requirements for Bicyclist Traffic Control Devices

No supplemental information

Section 9A.02 Scope

No supplemental information

Section 9A.03 Definitions Related to Bicycles

No supplemental information

Section 9A.04 Maintenance

No supplemental information

Section 9A.05 Relation to Other Documents

The most recent edition of the AASHTO "Guide for Development of Bicycle Facilities" may be referenced as an informational document in the development of signing and marking recommendations.

Section 9A.06 Placement Authority

No supplemental information

Section 9A.07 Meaning of Standard, Guidance, Option, and Support

No supplemental information

Section 9A.08 Colors

No supplemental information

CHAPTER 9B. SIGNS

Section 9B.01 Application and Placement of Signs

No supplemental information

Section 9B.02 Design of Bicycle Signs

No supplemental information

Section 9B.03 STOP and YIELD Signs (R1-1, R1-2)

No supplemental information *Idaho Statute 49-720* allows a bicyclist approaching a STOP (R1-1) sign to slow down and proceed through the intersection without stopping after yielding to other traffic (see Section 2B.05).

Section 9B.04 Bike Lane Signs and Plaques (R3-17, R3-17aP, R3-17bP)

No supplemental information

Section 9B.05 BEGIN RIGHT TURN LANE YIELD TO BIKES Sign (R4-4)

No supplemental information

Section 9B.06 Bicycles May Use Full Lane Sign (R4-11)

No supplemental information

Section 9B.07 Bicycle WRONG WAY Sign and RIDE WITH TRAFFIC Plaque (R5-1b, R9-3cP)

No supplemental information

Section 9B.08 NO MOTOR VEHICLES Sign (R5-3)

No supplemental information

Section 9B.09 Selective Exclusion Sign

No supplemental information

Section 9B.10 No Parking Bike Lane Signs (R7-9, R7-9a)

No supplemental information

Section 9B.11 Bicycle Regulatory Signs (R9-5, R9-6, R10-4, R10-24, R10-25, and R10-26)

No supplemental information

Section 9B.12 Shared-Use Path Restriction Sign (R9-7)

No supplemental information

Section 9B.13 Bicycle Signal Actuation Sign (R10-22)

No supplemental information

Section 9B.14 Other Regulatory Signs

No supplemental information

Section 9B.15 Turn or Curve Warning Signs (W1 Series)

No supplemental information

Section 9B.16 Intersection Warning Signs (W2 Series)

No supplemental information

Section 9B.17 Bicycle Surface Condition Warning Sign (W8-10)

No supplemental information

Section 9B.18 Bicycle Warning and Combined Bicycle/Pedestrian Signs (W11-1 and W11-15)

No supplemental information

Section 9B.19 Other Bicycle Warning Signs

No supplemental information

Section 9B.20 Bicycle Guide Signs (D1-1b, D1-1c, D1-2b, D1-2c, D1-3b, D1-3c, D11-1, D11-1c)

No supplemental information

Section 9B.21 Bicycle Route Signs (M1-8, M1-8a, M1-9)

ITD has received approval to use the alternate design of the U.S. Bicycle Route (M1-9) sign (see Figure 9B-1). This alternate sign design should be used in place of the M1-9 sign shown in the 2009 MUTCD.

Figure 9B-1 U.S. Bicycle Route Sign

M1-9

Section 9B.22 Bicycle Route Sign Auxiliary Plaques

No supplemental information

Section 9B.23 Bicycle Parking Area Signs (D4-3)

No supplemental information

Section 9B.24 Reference Location Sign (D10-1 through D10-3) and Intermediat Reference Location Signs (D10-1a through D10-3a)

No supplemental information

Section 9B.25 Mode-Specific Guide Signs for Shared-Use Path (D11-1a, D11-2, D11-3, D11-4)

No supplemental information

Section 9B.26 Object Markers

No supplemental information

CHAPTER 9C. MARKINGS

Section 9C.01 Functions of Markings

No supplemental information

Section 9C.02 General Principles

No supplemental information

Section 9C.03 Marking Patterns and Colors on Shared-Use Paths

No supplemental information

Section 9C.04 Markings For Bicycle Lanes

No supplemental information

Section 9C.05 Bicycle Detector Symbol

No supplemental information

Section 9C.06 Pavement Markings for Obstructions

No supplemental information

Section 9C.07 Shared Lane Marking

No supplemental information

CHAPTER 9D. SIGNALS

Section 9D.01 Application

No supplemental information

Section 9D.02 Signal Operations for Bicycles

Idaho statute 49-720(2) allows bicyclists to enter a signal controlled intersection on a red indication after stopping and yielding to all other traffic (see Section 4D.04).

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PART 15
LIGHTING

CHAPTER 15A. GENERAL

Section 15A.01 General

Highway lighting can improve nighttime visibility of the highway, other highway users, and environmental conditions.

Use the AASHTO "Roadway Lighting Design Guide" when determining lighting use and location (see *Administrative Policy 5016 – Traffic Regulation*). The Illuminating Engineering Society's (IES) RP-8 "Roadway Lighting" and RP-22 "Tunnel Lighting" publications and the "FHWA Lighting Handbook" are additional resources. "NCHRP Report 828 – Guidelines for Nighttime Visibility of Overhead signs" provides design information for lighting overhead signs.

CHAPTER 15B. LIGHTING DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE

Section 15B.01 Lighting Costs

The costs associated with highway lighting include design, installation, operation, and maintenance of the lighting system.

In accordance with *Administrative policy 5016 – Traffic Regulation* – ITD is responsible for the costs of lighting on Interstate highways and at rural interchanges. When lighting is provided on other state highways, ITD is responsible for those costs.

If a local jurisdiction requests additional highway lighting, the associated costs are paid by that local jurisdiction (see *Administrative policy 5016 – Traffic Regulation).*

Section 15B.02 Lighting Agreements

In accordance with *Administrative policy 5016 – Traffic Regulation*, – ITD can enter into a written agreement with other governmental agencies or private entities if that agency or entity requests special lighting devices. The agreement must include arrangements for the installation, operation, and maintenance of the lighting.

ITD and electric utility companies may desire to enter into an energy supply agreement for lighting installations maintained and operated by ITD. The agreement should include information regarding the number and type of luminaires and the date that the system is energized.

Enter into an agreement with the railroad company if the lighting system is located in or crosses railroad right-of-way.

Section 15B.03 Highway Lighting Design

ITD uses AGi32 computer software to assist with the design of lighting systems and to perform calculations to determine the system characteristics. Design lighting systems in accordance with the AASHTO "Roadway Lighting Design Guide." Document the lighting design criteria, and conductor gauge calculations.

Install lighting at new signalized intersections and roundabouts. Lighting is optional on temporary traffic control signals and emergency-vehicle traffic control signals.

Distribute power through a multiple circuit underground electrical distribution system. Limit maximum branch circuit potential to 240 volts with a maximum voltage drop of three percent. The minimum circuit feeder conductor gauge size should be #8 THWN and should not exceed gauge size #2 THWN.

Include the following on lighting plans:

- Lighting pole locations, junction boxes, and highway features
- Conduit routing, size, circuit number, conductors and conductor sizes
- Type of pole, mounting height, mast arm length, lamp, voltage, distribution, and wattage
- Power source
- Electrical service pedestal type

Section 15B.04 Lighting Poles and Foundations

Refer to the AASHTO "Roadside Design Guide" for the design and application of breakaway lighting poles (called luminaire supports in the "Roadside Design Guide").

Contact the local power company for vertical and horizontal clearance requirements or guidance on minimum distances between lighting poles and overhead power lines.

See the ITD Standard Drawings for foundation details.

Contact the ITD Bridge section when designing lighting poles on bridge structures.

Section 15B.05 Overhead Sign Lighting

If overhead signs are to be illuminated, design the lighting in accordance with the AASHTO "Roadway Lighting Design Guide" and Appendix D of "NCHRP Report 828 – Guidelines for Nighttime Visibility of Overhead signs."

PART 16
INTELLIGENT TRANSPORTATION SYSTEMS

CHAPTER 16A. GENERAL

Section 16A.01 General

Intelligent Transportation Systems (ITS) improve safety, mobility, and economic opportunity through collecting real time data and video images, broadcasting traveler information on phone, web, and roadside devices, and sharing data with external customers.

The FHWA provides many ITS resources through the "Regional ITS Architecture Guidance Document," the "Systems Engineering Guidebook for Intelligent Transportation Systems," and through various USDOT and FHWA webpages. Idaho and regional ITS architectures are described in the "Idaho Statewide ITS Strategic Plan Update."

Section 16A.02 ITS Assets

The inventory of ITS assets includes the following:

- Dynamic Message Signs (DMS)
- Road Weather Information Systems (RWIS)
- Highway Advisory Radio (HAR)
- Closed Circuit Television Cameras (CCTV)
- Bluetooth Detectors
- Variable Speed Limits
- Dedicated Short Range Communications radios (DSRC)
- ITS Network Control Software

CHAPTER 16B. DYNAMIC MESSAGE SIGNS (DMS)

Section 16B.01 General

ITD Dynamic Message Signs (DMS) fall into two size classes, freeway walk-in sign cabinets that display 18 inch high characters and arterial highway lift front or brick face signs that display 12 inch high characters. All ITD DMS are full matrix displays using amber LEDs. At some point in the future ITD may transition to full matrix full color LED displays where highway icons can be posted in lieu of highway text, and international symbols can be substituted for verbiage.

Section 16B.02 Design Guidance

Once a location is identified for a proposed DMS that can provide important information for drivers to make informed driving decisions, the power and communications need to be selected.

All ITD DMS use grid power; however as technology advances there may be opportunities to explore site generated power options, such as solar, wind, propane generators etc.

The minimum display pixel matrix for DMS should be 27 x 105, allowing display of three lines of text of 17 characters per line, using a 5 x 7 pixel font.

All DMS purchased must have certified test reports attesting to compliance with National Transportation Communications for Intelligent Transportation System Protocol (NTCIP) communications standards. In addition, all DMS must pass a demonstration test on ITD's ITS Network Control Software.

All fixed DMS are controlled remotely using the ITS Network Control Software, and can be controlled locally using a laptop computer connected to the sign controller. Communications between the ITS Network Control Software and the DMS controller may be either fiber optics, 3G/4G cellular, DSL, or land line. NTCIP Control commands do not require high bandwidth so although fiber optic communications is preferred for its reliability and speed, 3G/4G cellular communications work fine in good cell coverage areas.

CHAPTER 16C. ROAD WEATHER INFORMATION SYSTEMS (RWIS)

Section 16C.01 General

Road Weather Information Systems (RWIS) sites monitor road weather and provide critical data and video images during winter driving conditions. The environmental and road condition data and associated video images are used by ITD Operations staff to guide winter operations treatment material selection, distribution rates and treatment timing. Winter Performance Measures are derived from the RWIS data and each foreman area is rated on their performance.

The sites are polled every fifteen minutes by Vaisala under a data hosting contract. RWIS data and video images are shared with the public on the full featured 511 website and 511 smart phone application. Television stations statewide broadcast RWIS camera snapshot images on their weather segments during the winter season.

Section 16C.02 Design Guidance

ITD has standardized on Vaisala sensors for all RWIS sites, including the non-invasive pavement sensors that measure road surface temperature, layer type, layer thickness, and feed this data to the algorithm that calculates road grip.

RWIS sites may use grid power or locally generated power. Communications may be either 3G/4G cellular, DSL, or dial up. Cellular communications are preferred.

Video cameras being used for RWIS sites are the Mobotix M15 for solar sites and the Axis Q6045E (high definition) for the grid power sites.

A typical site will include the DST111 and DSC111 pavement sensors, a PWD present weather detector, a wind sensor, an HMP temperature/humidity, barometric pressure sensor, a visibility

sensor, video camera(s), and infrared illuminators for nighttime lighting. A remote processing unit receives the signals from the sensors and uploads the data and video images when polled by Vaisala.

CHAPTER 16D. HIGHWAY ADVISORY RADIO (HAR)

Section 16D.01 General

Highway Advisory Radio (HAR) is intended to work in concert with the DMS equipment, broadcasting AM band messages to drivers which cannot be handled by the DMS due to message length limitations. HAR sites consist of the transmitter location and warning beacon sites for the approaches to the HAR transmitter. The beacon sites are spaced at the perimeter of the broadcast coverage area, usually about five miles from the HAR transmitter site.

Section 16D.02 Design Guidance

HAR transmitters utilize both sky wave and ground wave propagation, so a pole antenna and a ground plan are required. Power requirements for both transmitter and beacon sites are minimal, so either grid power or batteries with solar charging may be used. Preferred communications is 3G/4G cellular, but dial up lines can also be used.

All HAR sites required licensing by the Federal Communications Commission (FCC). A condition of maintaining the license is to periodically broadcast a station identification message.

CHAPTER 16E. CLOSED CIRCUIT TELEVISION CAMERAS (CCTV)

Section 16E.01 General

ITD utilizes Closed Circuit Television (CCTV) cameras for traffic surveillance and assisting with incident management. The primary operator of the ITD camera network is Idaho Health and Welfare, EMS Bureau, from the State Communications Center in Meridian, ID. Video is also fed to the Idaho State Police (Meridian and Coeur d'Alene), Kootenai County 911, and ITD HQ and District offices. During local news segments, television stations in the Boise area also broadcast streaming video from ITD cameras.

Section 16E.02 Design Guidance

ITD has standardized on the Axis Q6042-E standard definition dome camera. When sufficient bandwidth becomes available it may be beneficial to upgrade to HD camera technology.

Power for the cameras is grid sourced. Communications options are pretty limited for streaming video, either fiber optics or 4G cellular (lower frame rate and resolution).

Mounting options for the cameras are 50 foot MG2 poles with integral lowering device, or fixed mounting on signal structures or luminaire poles. Camera dome cleaning is most efficient when using the MG2 lowering devices.

CHAPTER 16F. BLUETOOTH DETECTORS

Section 16F.01 General

Travel time is collected on a few highway segments using Bluetooth detectors, by time stamping a detected MAC address at one location and comparing the elapsed time for a similar detection at the second location. Knowing the distance between sites and the elapsed time makes it possible to calculate the travel speed as well as the travel time. ITD has Bluetooth detectors on I-84 and I-184 in the Treasure Valley, and on US 95 in Coeur d'Alene. TrafficCast is the data host for the BlueTOAD detectors.

The detectors use 3G cellular communications and battery power with solar charging.

Section 16F.02 Design Guidance

If these detectors are deployed to monitor work zone delay, they need to be placed well outside of the expected traffic queue in order to collect accurate data.

The units are self-contained and easily deployed on existing structures.

CHAPTER 16G. VARIABLE SPEED LIMIT ZONES

Section 16G.01 General

At some locations around the state there may be a desire to vary the speed limit due to hazardous driving conditions. These conditions may include limited visibility, low grip, work zone activities, and high winds. Posting speed limits on the variable speed limit signs can be changed remotely, locally or driven by environmental sensor data.

Section 16G.02 Design Guidance

Existing RWIS sites may be leveraged in deploying a variable speed limit zone, or additional sensors may be needed if the RWIS location doesn't mirror the highway zone being considered.

CHAPTER 16H. DEDICATED SHORT RANGE COMMUNICATIONS (DSRC) RADIOS

Section 16H.01 General

ITD has begun a partnership with the Idaho National Laboratory (INL) for research into Connected Vehicle Technology, deployed on the INL bus fleet, INL Scout vehicles, ITD snowplows, and at roadside locations. The technology uses Dedicated Short Range Communications (DSRC) 5.9 GHz radio communications to send and receive data with low latency and high bandwidth, to enable safety, mobility, and operational applications. A back office server is needed to archive the data and provide computing power.

Section 16H.02 Design Guidance

The roadside deployment requires an elevated structure to mount the DSRC unit, power and 3G/4G cellular communications for backhaul to the back office server. Existing ITS sites can be leveraged to lower the installation cost of roadside DSRC radios.

CHAPTER 16I. ITS NETWORK CONTROL SOFTWARE

Section 16I.01 General

ITD has an existing ITS Network Control Software system called iNET, developed by Parsons. It has several modules for controlling various devices and applications. ITD has purchased the CCTV, DMS, and HAR control modules, along with the Center to Center application for data sharing. Other modules that may be of interest in the future are the Weather Detection and Notification System and the Travel Time Information System.

Section 16I.02 Design Guidance

Test DMS, HAR and CCTV equipment using iNET prior to purchase and during installation.

CHAPTER 16J. SYSTEMS ENGINEERING

Section 16J.01 General

A Systems Engineering (SE) analysis is required for each project that includes Intelligent Transportation Systems components.

SE guidance can be found in the "Systems Engineering Guidebook for Intelligent Transportation Systems" produced by the FHWA California Division and CalTrans, through the U.S. Department of Transportation's (USDOT) ITS website, and through the FHWA California Division website.

Section 16J.02 Systems Engineering (SE) Analysis (ITS Project Development Process)

The SE analysis, according to the FHWA ITS Final Rule, is a structured process for arriving at a final design of a system. The final design is selected from a number of alternatives that would accomplish the same objectives and considers the total life-cycle of the project including not only the technical merits of potential solutions but also the costs and relative value of alternatives.

The SE analysis for ITS project development and deployment of integrated transportation systems requires the project developer to consider all phases of the ITS system's lifecycle: planning, requirements, design, procurement, implementation, deployment, operations, and maintenance.

Using the SE approach will help ensure the technology based projects are completed on time, on budget, and satisfy the user's requirements. The SE process is required for all federal-aid ITS projects, regardless of size or complexity. However, the amount of SE analysis shall be commensurate with the project scope and technical complexity.

ITS projects exempt from the requirement of the SE process are: 1) those that do not use federal funding and 2) ITS expansions that do not add new functionality (upgrade to an existing traffic signal, installation of an isolated traffic signal, traffic signal timing project with no new hardware or software, studies or plans whose product is only a document, routine operations with no new hardware or software).

In accordance with 23 CFR 940.11 (Project Implementation), address the following through the SE process:

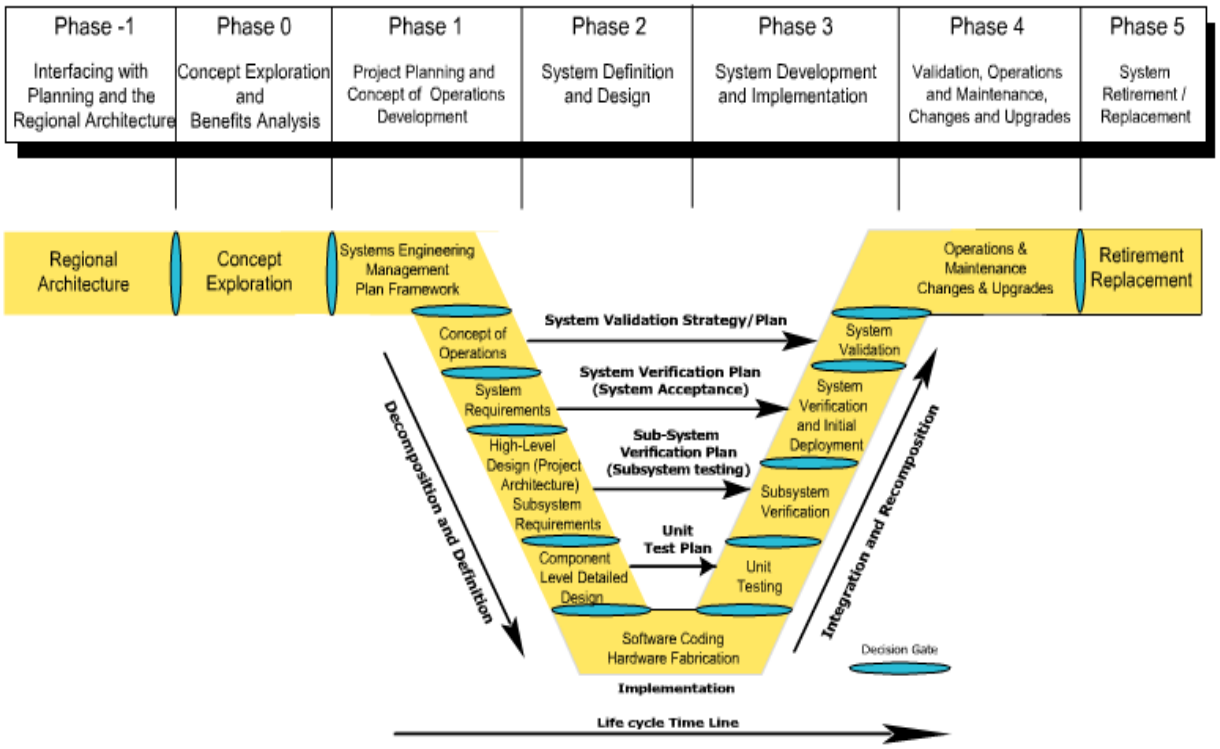
1. Identification of portions of the Regional Architecture (RA) being implemented or if a RA does not exist, the applicable portions of the National ITS Architecture
2. Identification of participating agencies and their roles and responsibilities
3. Requirements definitions
4. Analysis of alternative system configurations and technology options to meet requirements
5. Procurement options
6. Identification of applicable ITS standards and testing procedures
7. Procedures and resources necessary for operation and management of the system

As shown in Figure 16J-1, FHWA recommends the Vee Model as the preferred systems engineering approach for ITS projects. The Vee Model above, shows the SE Process that covers the entire life cycle of an ITS project, from planning to design, operations, and maintenance. The process translates user needs into ITS system requirements and then into an ITS system design.

The objectives of the SE Process are to ensure ITS projects are completed:

1. On-time (i.e. avoid schedule overruns)
2. Within budget (i.e. reduce the risk of cost)
3. With satisfied user's needs (i.e. system functionality that meets user's expectation)
4. With high level of stakeholder participation
5. With good system documentation
6. Using a system that can evolve with a minimal redesign

Figure 16J-1 Systems Engineering Vee Model



Section 16J.03 Systems Engineering (SE) Analysis Documentation

Document SE analysis with the following outline:

Name of Project:

Name of Regional ITS Architecture:

1. Identification of portions of the regional ITS architecture being implemented
   [Identify which user services, physical subsystems, information flows, and market packages are being completed as part of the project and how these pieces are part of the regional architecture.]

2. Identification of participating agencies roles and responsibilities (concepts of operation)
   [For the user services to be implemented, define the high-level operations of the system, including where the system will be used, functions of the system capabilities, performance parameters, the life cycle of the system, and who will operate and maintain the system. Establish requirements or agreements on information sharing and traffic device control responsibilities.]

3. Requirements definitions
   [Based on the concept of operations, define the "what" and not "how" of the system. The applicable high-level functional requirements from the Regional Architecture (RA) are a good starting point for discussion.]

4. Analysis of alternative system configurations and technology options to meet requirements
   [The analysis of system alternatives should outline the strengths and weaknesses, technical feasibility, institutional compatibility, and life cycle costs of each alternative.]
5. Procurement options
   [Some procurement (contracting) options to consider include: consultant design/low bid contractor, systems manager, systems integrator, task order, and design/build. Deciding on the best procurement option should consider the level of agency participation, compatibility with existing procurement methods, role of system integrator, and life cycle costs.]

6. Identification of applicable ITS standards and testing procedures
   [Include documentation on which standards will be incorporated into the system design and justification for any applicable standards not incorporated. The standards report from the RA is a good starting point for discussion.]

7. Procedures and resources necessary for operations and management of the system
   [In addition to the above concept of operations, document any internal policies or procedures necessary to recognize and incorporate the new system into the current operations and decision-making processes. Resources necessary to support continued operations, including staffing and training must also be recognized early and be provided for. Such resources must also be provided to support necessary maintenance and upkeep to ensure continued system viability.]

PART 17
TRANSPORTATION ENGINEERING STUDIES

CHAPTER 17A. GENERAL

Section 17A.01 Introduction

The Institute of Transportation Engineers' (ITE) "Manual of Transportation Engineering Studies" describes how to conduct transportation engineering studies in the field for spot locations, segments and networks, multimodal studies, asset management, safety, and planning and access management. The ITE manual focuses on planning the study, preparing for field data collection, executing the data collection plan, and compiling, reducing, and analyzing the data as well as presenting the study results orally or in written form. Other resources such as the ITE "Traffic Engineering Handbook," ITE "Traffic Control Devices Handbook," and others referenced in this part also provide information about conducting transportation engineering studies.

CHAPTER 17B. SPOT LOCATION STUDIES

Section 17B.01 General

Spot location studies include volume studies, speed and delay studies, intersection and driveway studies, and traffic control device studies. Refer to the ITE "Manual of Transportation Engineering Studies" for descriptions about how to conduct these types of studies.

Section 17B.02 Speed Zone Studies

Idaho Statute 49-201(4) gives the Idaho Transportation Board authority to determine and declare maximum and minimum speed limits for the state highway or interstate highway systems based on engineering studies. The Transportation Board has authority to set speed limits on all highways. Local jurisdictions have authority to set speed limits on non-highway roads.

Statutory speed limits are defined in *Idaho Statute 49-201(4)* as 75 mph on interstate highways and 65 mph on state highways. The statute allows the Transportation Board to exceed the statutory speed limits and post speed limits on interstate highways at 80 mph and at 70 mph on state highways.

The Transportation Board delegates the authority to set speed limits up to the statutory speed limit to the Districts through *Board Policy 4016 – Traffic Regulation* and *Administrative Policy 5016 – Traffic Regulation*. The Transportation Board retains the authority to approve 80 mph interstate speed limits and 70 mph speed limits on other highways. Traffic minute entries are described in *IDAPA 39.03.65 "Rules Governing Traffic Minute Entries,"* and *Administrative Policy 5016 – Traffic Regulation*.

Speed data is typically collected at spot locations and is then used to set speed limits on highway segments. Data collection methods are described in the ITE "Manual of Transportation Engineering Studies."

Use the ITE "Traffic Engineering Handbook," the FHWA publication "Methods and Practices for Setting Speed Limits: An Informational Report" or other engineering resources for practices and methodologies used in establishing speed limits. Also refer to Section 2B.13 of the MUTCD.

The expert approach described in "Methods and Practices for Setting Speed Limits: An Informational Report" uses FHWA's USLIMITS2 online program. The program can be used to identify the appropriate speed limit, or to supplement the engineering approach that is described in the informational report. Due to the way USLIMITS2 was developed, the program will not recommend a speed limit higher than 75 mph on a limited access freeway, higher than 65 mph for road sections in an undeveloped area, or higher than 50 for road sections in a developed area. This does not imply that speed limits cannot be set to a higher maximum speed for these types of facilities; only that the USLIMITS2 program will not recommend a higher speed limit.

Speed limits can be established for different times of day, different types of vehicles, varying weather conditions, can be variable (see *Idaho Statute 49-201(4)*), or to establish minimum speed limits (see *Idaho Statute 49-202(22)*).

In accordance with *Idaho Statute 49-654(3)*, the speed limit for trucks (five or more axles and over 26,000 lbs.) on non-urban interstate highways is set ten mph lower than the posted speed limit for other vehicles. Speed limits for truck speeds on interstate highways in urban areas cannot exceed 65 mph.

Section 17B.03 Traffic Control Device Studies

Idaho Statute 49-202(20) directs ITD to place and maintain traffic control devices on the state highway system. The MUTCD contains warrants or application guidelines for signs, pavement markings, traffic control signals, and other traffic control devices.

The ITE "Manual of Transportation Engineering Studies" contains information on establishing the need for traffic control devices, removing unnecessary traffic control devices, and evaluating the effectiveness and condition of traffic control devices.

CHAPTER 17C. SEGMENT AND NETWORK STUDIES

Section 17C.01 General

Segment and network studies include travel-time, and delay studies along corridors, freeway and managed lane studies, and simulation studies. Refer to the ITE "Manual of Transportation Engineering Studies" for descriptions about how to conduct these types of studies.

CHAPTER 17D. MULTIMODAL STUDIES

Section 17D.01 General

Multimodal studies include pedestrian and bicycle studies, public transportation studies, and goods movement studies. Refer to the ITE "Manual of Transportation Engineering Studies" for descriptions about how to conduct these types of studies.

CHAPTER 17E. ASSET MANAGEMENT STUDIES

Section 17E.01 General

Asset management studies include inventories and parking studies. Refer to the ITE "Manual of Transportation Engineering Studies" for descriptions about how to conduct these types of studies.

Section 17E.02 Parking Studies

ITD parking studies consist of evaluating rural parking prohibitions and urban angle parking.

In accordance with *Idaho Statute 49-202(28)*, ITD and local agencies can restrict stopping, standing, or parking of vehicles with traffic control devices. Restrict parking where stopping, standing, or parking is dangerous to those using the highway or unduly interferes with traffic movement. Document rural parking restrictions in accordance with *Administrative Policy 5016 – Traffic Regulation*.

Idaho Statute 49-661 prohibits angle parking on state highways unless ITD determines that angle parking will not interfere with the movement of traffic. Document urban angle parking in accordance with *Administrative Policy 5016 – Traffic Regulation*.

CHAPTER 17F. SAFETY STUDIES

Section 17F.01 General

Safety studies include the collection of crash information, traffic collision studies, alternative safety studies such as road safety audits, and roadway lighting studies. Refer to the ITE "Manual of Transportation Engineering Studies" for descriptions about how to conduct these types of studies.

Section 17F.02 Traffic Hazard Investigation

Idaho Statute 49-1315 addresses the investigation of crashes resulting in death, injury, or property damage where an investigation or judicial action finds that a physical traffic hazard causes or was responsible for causing the crash. If the investigating traffic enforcement officer or presiding judicial officer provides their written findings to ITD for a crash on the state highway system, then ITD has sixty days to investigate and report on the purported traffic hazard. In the report, explain the hazard and propose mitigating measures, how the hazard has

been mitigated, or why no action is to be taken. Provide the report to the investigating traffic enforcement officer or presiding judicial officer and the board of county commissioners.

Section 17F.03 Road Safety Audits

Refer to the ITD "Road Safety Audit Manual."

CHAPTER 17G. PLANNING STUDIES

Section 17G.01 General

Planning studies include general transportation planning, environmental impacts of transportation, and traffic access and impact studies. Refer to the ITE "Manual of Transportation Engineering Studies" for descriptions about how to conduct these types of studies.

Section 17G.02 Traffic Access and Impact Studies

Traffic impact studies may be required as described in *IDAPA 39.03.42 "Rules Governing Highway Right-of-Way Encroachments on State Rights-of-Way*." The IDAPA rule addresses signal and approach spacing and trip generation thresholds. In addition to the ITE "Manual of Transportation Engineering Studies," refer to the ITE "Transportation Impact Analyses for Site Development" recommended practice document for information regarding how to perform a traffic impact study.

Traffic Manual Revision Summary

April 2019

All Parts

- Corrected references to the ITD Supplement to the Standard Highway Signs and Markings Book to correspond with IDAPA 39.03.41.

Part 1

- Section 1A.07 – Added text regarding STOP and YIELD signs at passive highway-rail grade crossings.
- Section 1A.08 – Added information about non-traffic control device blue delineators at divided highway median crossovers based on guidance provided by the FHWA MUTCD team.
- Section 1A.10 – Added information about official interpretations and interim approvals. Added a sentence indicating that the list of IA's is on the MUTCD website.
- Section 1A.11 – Updated references where applicable. Added reference to RP-22 Tunnel Lighting. Added reference to Standard Drawings.

Part 2

- Section 2B.06 – Added text regarding STOP signs at passive highway-rail grade crossings. Added a reference to Idaho Statute 49-202(5).
- Section 2B.09 - Added text regarding STOP and YIELD signs at passive highway-rail grade crossings.
- Section 2B.11 – Added text regarding the appropriate use of "YIELD TO PEDESTRIANS" or "STOP FOR PEDESTRIANS" based on Idaho law.
- Section 2B.12 – Added text regarding the appropriate use of "YIELD TO PEDESTRIANS" or "STOP FOR PEDESTRIANS" based on Idaho law.
- Section 2B.13 – Added a reference to the "Traffic Control Devices Handbook" for sign spacing. Added a reference to new section 2C.100 for radar speed feedback CMS.
- Section 2B.17 – Moved information to Section 6F.13.
- Section 2B.39 – Changed COMPRESSION BRAKES PROHIBITED sign based on feedback from the Sign Shop, Traffic Supply, and the trucking industry. Showing two options for compression brakes signs.
- Section 2C.04 – Revised to provide specific guidance for conventional roads, expressways, and freeways.
- Section 2C.42 – Added a sentence recommended by the NCUTCD to address an inconsistency in MUTCD Section 2C.42 and MUTCD Figure 3B-14.
- Section 2C.49 – Revised to match changes to Idaho law. Revised further.
- Section 2C.63 – Deleted IdaShield. ITD's permission to experiment with the IdaShield has been terminated.
- Added 2C.100 – New section added for radar speed feedback CMS.
- Section 2D.41 – Revised and combined Control Cities and Example Destination Cities Figure.
- Section 2D.55 – Moved Idaho Byway signs to Section 2H.07 based on MUTCD Interpretation Letter 2(09)-42 (I).

- Section 2E.23 – Added a NCUTCD suggested Example of Signing for a Two-Lane Exit with an Option Lane figure to replace a figure in the MUTCD.
- Section 2H.04 – Removed broken links to the Arbor Day Foundation and National Weather Service websites. The information can be found through an internet search.
- Section 2H.07 – Moved Idaho Byway signs to this section based on MUTCD Interpretation Letter 2(09)-42 (I).

Part 3

- Section 3F.02 – Deleted delineator types 4 through 8. The types have already been deleted from Standard Drawing 617-1. Type 9 delineators serve the same purpose.
- Section 3F.03 –Added information about non-traffic control device blue delineators at divided highway median crossovers based on guidance provided by the FHWA MUTCD team. Updated figure. Changed intersection delineator size to 3 x 6 inches.

Part 4

- Section 4D.04 – Corrected references to Idaho law.
- Section 4E.09 – Added the content from the HWY-35 Chief Operating Officer memo.
- Section 4L.01 – Removed old RRFB information.
- Section 4L.02 – Added a reference to Idaho law.
- Section 4L.03 – Added new RRFB information.

Part 6

- Section 6A.01 – Made the WZSM Program applicable to all projects by deleting the Federal-Aid qualifier.
- Section 6F.12 – Moved higher fines signs to this section. See proposed Traffic Manual changes for additional desired changes. Added propsed change to FINES HIGHER plaque.

Part 7

- Section 7B.11 – Added text regarding the appropriate use of “YIELD TO PEDESTRIANS” or “STOP FOR PEDESTRIANS” based on Idaho law.
- Section 7B.12 – Added text regarding the appropriate use of “YIELD TO PEDESTRIANS” or “STOP FOR PEDESTRIANS” based on Idaho law.

Part 8

- Section 8B.03 – Deleted IdaShield. ITD’s permission to experiment with the IdaShield has been terminated. Added text from FHWA’s letter ending the IdaShield experiment that existing IdaShields can remain in place.
- Section 8B.04 – Deleted IdaShield. ITD’s permission to experiment with the IdaShield has been terminated. Rephrased section and added YIELD sign guidance.

Part 15

- Section 15A.01 – Added a reference to IES RP-22 Tunnel Lighting.