Interagency Transit Passenger Information Design Standards Manual

Prepared by:
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INTRODUCTION

The Regional Transportation Authority (RTA) provides funding, planning, and fiscal oversight for regional bus and rail operations in the Chicago metropolitan region. The RTA's six-county region encompasses the Illinois counties of Cook, DuPage, Kane, Lake, McHenry, and Will.

The delivery of transit services in the Chicago metropolitan region is the responsibility of three independent service agencies. The Chicago Transit Authority (CTA) provides rail rapid transit and bus services in the City of Chicago and 35 neighboring suburbs. Metra provides commuter rail service throughout the six-county region. Pace provides suburban bus services as well as Dial-a-Ride, vanpool, and ADA Paratransit services for the entire region.

One of the RTA's core missions is to provide information so our customers (both current and potential) can more easily navigate the system. Unfortunately, since transit service is delivered by three separate service providers, customers are often confronted with inconsistent messages and/or informational gaps when attempting to transfer from one service provider to another, creating confusion and reducing the attractiveness of choosing transit for regional travel.

To address this problem the Regional Transportation Authority, along with CTA, Metra, Pace, and municipal partners, have been collaborating to create a new integrated system of wayfinding signage and informational products to make transferring between transit services as easy and as seamless as possible.

To provide continued design guidance in this regard, the Regional Transportation Authority (RTA) has developed an Interagency Signage Standards Manual. The RTA Interagency Signage Standards Manual describes a related system of wayfinding signs, bus stop identification, directional information, schedules, neighborhood maps, and bus and train connection diagrams.

The Interagency Signage Standards Manual provides guidance for the development of location-specific wayfinding solutions using a family of standard sign types and customizable information products. The Manual is intended to serve as a reference for information designers and other contractors related to providing transit information for the RTA.
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SECTION A1
Program Overview

Design Goals

The overall design goal of the RTA's Interagency Signage Design project is to provide transit passengers with the information they need to successfully and confidently make transfers between CTA, Metra, and Pace.

 Transit passengers in the Chicago metropolitan region have access to a vast transit network, but to take full advantage of the network, passengers must be able to transfer from one transit mode to another. Wayfinding is an integral part of the total transit experience. Clear, concise, and direct wayfinding information will help transit passengers feel confident in their understanding of the transit system and their ability to successfully use all the transit modes available to them.

The goal of the RTA Interagency Signage Standards Manual is to provide guidance for the design and implementation of effective and flexible signage solutions that will meet the interagency transit users information and wayfinding needs.

General Principles

The underlying strategy for the programming of interagency signage and graphics is to provide relevant transfer information at key decision points within a station or transfer location. This strategy involves the following principles which should be considered during the placement and design of wayfinding signage and information products:

- Simplicity and clarity of message are of primary importance.
- International symbols should be used in conjunction with written text wherever possible.
- Provide information at key decision points.
- Avoid placing information too early and limit repetitions.
- Concentrate information products along the accessible path.
- Consideration should be given to minimize the divergence of accessible and non-accessible pathways until absolutely necessary. Older stations and transfer locations with accessible retrofits may be more challenging than newer, more updated facilities.
- Avoid placement of products that require transit passengers to make U-turns or double back.
- Avoid placement of pedestrian signage in locations that may be inappropriate or create confusion for vehicles or cyclists.

Standards for Wayfinding Signage and Information Products

The wayfinding signage and information products shown in this manual are provided for use as reference standards only. Whenever possible, new Interagency wayfinding signage and information products shall conform to the standards shown in this manual. Generally, information products include pre-designed headers and footers and location-specific graphics. When directed to do so by the RTA, the signage contractor shall develop content and prepare digital art files for the wayfinding signage and information products. Digital art files for the pre-designed product components and digital template files for the location-specific product components shall be provided by the RTA for the development of information products for new locations. Digital art files for wayfinding signs shall typically be developed by the signage contractor using this manual as a guide. Digital template files owned by RTA are in Adobe Creative Suite (CS) / Creative Cloud (CC) InDesign (.indd) and Illustrator (.ai) format. If the existing standards are not compatible with the requirements at a new location, the standards may be modified. Any new designs will conform to the existing standards as closely as possible and are subject to review and approval by the RTA.
Colors, Fonts, Symbols
Colors, fonts, and symbols that were developed during the design phase should be used in a manner consistent with this manual and the digital template files provided by the RTA. The font used in all products is Helvetica LT Standard: Roman, Bold, and Oblique. More information on colors, fonts, and symbols is provided in Part A of this manual. Pre-designed product components, including headers and footers, should be included in the graphics as shown in this manual to ensure consistency.

Review of Proposed Information Products
Proofs for all signs and graphics shall be reviewed and accepted by the RTA prior to production. The RTA may request review proofs in paper copy, electronic (PDF) format, or in the native file format (.ai, .indd). Review requirements should be confirmed with the RTA prior to the production of any new signs or graphics.

Specifications
In addition to this Manual, Technical Specifications for the interagency signs have been developed. The Technical Specifications include performance and fabrication requirements, submittal requirements, materials, products, hardware, installation requirements, periods of performance, and warranty requirements. As new graphics are developed for new locations, additional specifications may be needed to meet site or project-specific requirements.
SECTION A1
Program Overview

Suggested Signage

Passenger Progress

Start of an interagency trip

Rail Station (CTA, Metra / South Shore)  Bus Stop / Bus Terminal (CTA or Pace)

Passenger reviews modes needed to complete trip

Passenger navigates to appropriate boarding area

Rail Platform (CTA, Metra / South Shore)  Bus Stop (CTA or Pace)

Passenger confirms route

Passenger makes first leg of trip – passenger must make interagency transfer to continue / complete trip

Passenger identifies mode for next leg of trip

Passenger navigates to appropriate boarding area

Passenger transfers to new mode, continues / completes trip

Suggested Signage

Sign Type ID  Station Identification
Sign Type MD  Downtown Map
Sign Type MN  Neighborhood Map

Sign Type DSW  Directional Sign – Wall Mounted
Sign Type DSO  Directional Sign – Overhead
Sign Type DSS  Directional Street Signs
Sign Type BA  Bus Boarding Area Graphic

Sign Type TR  Train Route

Sign Type TC  Train Connections Map
Sign Type BC  Bus Connections
Sign Type BT  Bus Times

Sign Type TR  Train Route

Sign Type TR  Train Route

Suggested Signage

Sign Type ID  Station Identification
Sign Type BB  Bus Boarding Sign
Sign Type BS  Bus Stop Sign

Sign Type TC  Train Connections Map
Sign Type BC  Bus Connections
Sign Type BT  Bus Times

Sign Type TR  Train Route

Sign Type TR  Train Route

Sign Type TR  Train Route

Sign Type DSW  Directional Sign – Wall Mounted
Sign Type DSO  Directional Sign – Overhead
Sign Type DSS  Directional Street Signs
Sign Type BA  Bus Boarding Area Graphic

Sign Type TR  Train Route

Sign Type TR  Train Route

Sign Type TR  Train Route

Passenger confirms route

Passenger makes first leg of trip – passenger must make interagency transfer to continue / complete trip

Passenger identifies mode for next leg of trip

Passenger navigates to appropriate boarding area

Passenger transfers to new mode, continues / completes trip
SECTION A1
Program Overview

Quality Control Approach

Introduction

A comprehensive quality control approach, individually developed to meet a particular project’s needs, will help ensure that new interagency wayfinding and information products are developed, produced, and implemented efficiently and appropriately.

New interagency wayfinding signage and information graphics must be developed in close cooperation with the RTA, the Service Boards (CTA, Metra, Pace), and other stakeholders. At the start of each project, the RTA will confirm the basic project information and define the project scope. Basic project information may include identification of the project stakeholders and key project personnel, a preliminary list of products that may be required, basic project procedures, and expectations for deliverables.

The RTA Interagency Signage Design Standards Manual shall provide design guidance for the development and design of the interagency wayfinding signage and information graphics. Each interagency signage project will require some amount of programming, development, and design. Each interagency location is different, and each location may require new or unique components and information. Review, assessment, and refinement will be required at key points throughout a project to ensure the wayfinding signage and information graphics are appropriate and correct for the location, while also conforming to the design standards.

Following is a general discussion of Quality Control approaches that should be considered for all interagency signage projects:

Overall Approach

Prior to the start of work, the design project team and the RTA project team should establish clear lines of communication. The project scope, requirements, and schedule should be established by the RTA and clearly understood by all before work begins. If the RTA has not defined a project scope and schedule, the RTA may ask the design project team to develop a project scope and schedule for review and acceptance by the RTA.

Once the project scope and schedule has been established, the project design team should develop project phases and deliverables. A description of proposed project phases and deliverables should be submitted to the RTA for review and acceptance prior to the start of work.

Project phases should divide the scope of work incrementally and be coordinated with the project schedule. Each phase should build upon the previous phase. For each phase, in-progress and final deliverables should be identified. In-progress deliverables should represent key points in the project development. Deliverables should be reviewed internally by the design project team before they are submitted to the RTA. All in-progress and final deliverables need to be reviewed and accepted by the RTA. Any revisions requested by the RTA need to be implemented as work continues and be reflected in subsequent deliverables. Phases should not be considered complete until the RTA Project Team has reviewed and accepted all work for that phase.
SECTION A1
Program Overview

Quality Control Approach

Generally, projects should include the following phases:

Programming
Complete analysis and program development are essential first steps for any project. Working with the RTA, the design project team shall identify, collect, and assimilate as much project information as possible prior to selecting products or developing graphics. Programming information may include site reviews, facility plans, transit schedules, and code information. Product development should not be started until all necessary programming information has been obtained. The design project team should work with the RTA to identify the information required.

Design
Interagency wayfinding signage and information graphics should be developed as per the design standards as outlined in the RTA Interagency Signage Standards Manual. Coordinate with the RTA regarding files and formats. Depending on the product, digital art and digital template files shall be provided to the design project team by the RTA or the project team shall develop new digital art based on the RTA Interagency Signage Standards Manual.

Each interagency location shall present a unique set of challenges and opportunities. The design project team shall work with the site-specific information collected during programming to identify the wayfinding and information graphics products required and develop messages and content. Locations or situations that require new or modified products shall be identified and reviewed with the RTA prior to the start of any design. New products shall be consistent with the overall design intent outlined in the Signage Standards Manual. Preliminary product selections, locations, messages, and content need to be reviewed by the RTA early in the project so that revisions and adjustments can be made. Final products, locations, messages, and content shall not be released for production until they have been reviewed and accepted by the RTA.

Implementation
Quality Control during implementation shall include review, along with the RTA, of samples and submittals. The design project team shall confirm all required samples and submittals are provided and that all items submitted are consistent with the project's design intent. The design project team shall assist the RTA in developing and maintaining an implementation schedule, review site conditions and locations to facilitate product installation, and review installed products to confirm quality and consistency with the design intent.

Conclusion
Every interagency signage and wayfinding project will be different. Each project shall require different project elements and will present unique wayfinding challenges. The goal of the Interagency Signage Standards Manual is to provide design guidance that is flexible enough to meet the requirements of interagency locations throughout the RTA service area while maintaining a consistent overall presentation.

For each interagency signage and wayfinding project, the design project team shall work with the RTA to accurately and efficiently develop effective communication solutions based on the existing design standards. For each project, the design project team shall work with the RTA to identify appropriate quality-control approaches while providing accurate and professional services.
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Program Overview

Information Graphics
Sign Cabinets / Frames
Freestanding Structures
Wall-Mounted Structures

Description

General
Part B general reference.
**SECTION A1**
**Program Overview**

*Bus Stop Signs*
*Bus Boarding Signs*
*Bus Area & Bus Times Signs*
*Posts & Mounting Hardware*

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**Description**

**General**

Part C general reference.
SECTION A1
Program Overview

Directional Wall Signs
Directional Overhead Signs
Directional Street Signs
Freestanding Structures

Description

General
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## SECTION A1

**Program Overview**

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**Description**

**General**
The fonts used for the interagency signs and information graphics are shown above. All letter spacing and word spacing used for the wayfinding signs must meet ADA visual character requirements. No other fonts shall be used unless reviewed and accepted by the RTA.

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**Georgia MT Std Oblique**

<table>
<thead>
<tr>
<th>ABCDEFGHIJKLMNOPQRSTUVWXYZ</th>
<th>abcdefghijklmnopqrstuvwxyz</th>
<th>1234567890</th>
</tr>
</thead>
</table>

**Georgia MT Std Bold Oblique**

<table>
<thead>
<tr>
<th>ABCDEFGHIJKLMNOPQRSTUVWXYZ</th>
<th>abcdefghijklmnopqrstuvwxyz</th>
<th>1234567890</th>
</tr>
</thead>
</table>

**Georgia MT Std Bold**

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<thead>
<tr>
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<th>1234567890</th>
</tr>
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</table>

**Times New Roman MT Std Roman**

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<tr>
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<th>1234567890</th>
</tr>
</thead>
</table>

**Times New Roman MT Std Oblique**

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**Times New Roman MT Std Bold Oblique**

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</table>

**Symbola MT Std Roman**

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**Symbola MT Std Bold**

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<tr>
<th>ABCDEFGHIJKLMNOPQRSTUVWXYZ</th>
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</thead>
</table>

**Century Schoolbook Pro MT Std Roman**

<table>
<thead>
<tr>
<th>ABCDEFGHIJKLMNOPQRSTUVWXYZ</th>
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**Century Schoolbook Pro MT Std Oblique**

<table>
<thead>
<tr>
<th>ABCDEFGHIJKLMNOPQRSTUVWXYZ</th>
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</table>

**Century Schoolbook Pro MT Std Bold**

<table>
<thead>
<tr>
<th>ABCDEFGHIJKLMNOPQRSTUVWXYZ</th>
<th>abcdefghijklmnopqrstuvwxyz</th>
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</thead>
</table>

**Wingdings MT Std Roman**

<table>
<thead>
<tr>
<th>ABCDEFGHIJKLMNOPQRSTUVWXYZ</th>
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<th>1234567890</th>
</tr>
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</table>

**Wingdings MT Std Oblique**

<table>
<thead>
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**Wingdings MT Std Bold Oblique**

<table>
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<tr>
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</tr>
</thead>
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**Wingdings MT Std Bold**

<table>
<thead>
<tr>
<th>ABCDEFGHIJKLMNOPQRSTUVWXYZ</th>
<th>abcdefghijklmnopqrstuvwxyz</th>
<th>1234567890</th>
</tr>
</thead>
</table>
The desired visual character spacing is shown.

If the distance between the two closest points of adjacent characters within a word is less than 10% of the character height, the fabricator must increase the kerning of the space to be 10% of the character height.

If the distance between the two closest points of adjacent characters within a word is more than 35% of the character height, the fabricator must decrease the kerning of the space to be 35% of the character height.

**CTA Trains**

**Trains to Chicago**

**Bus Stops**

**Examples of Typical ADA Compliant Character Spacing**

(with optical kerning and +30 units of tracking in Illustrator CS3)

Scale: NTS

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
</tr>
<tr>
<td>The character spacing for wayfinding messages on the following products shall conform to the standards for visual characters as per Section 703.5 of the 2010 ADA Standards for Accessible Design:</td>
</tr>
<tr>
<td>Bus boarding area signs (BA)</td>
</tr>
<tr>
<td>Directional overhead signs (DSO)</td>
</tr>
<tr>
<td>Directional flag-mounted signs (DSF)</td>
</tr>
<tr>
<td>Directional wall-mounted signs (DSW)</td>
</tr>
<tr>
<td>Directional street signs (DSS)</td>
</tr>
<tr>
<td>Freestanding structures with text (SFM, SPY)</td>
</tr>
<tr>
<td>Wall-mounted structures with text (SWM)</td>
</tr>
</tbody>
</table>

The messages for these signs should also have extra spacing added (+30 units of tracking in Adobe Illustrator CS3 with Optical kerning, or equivalent).

The Contractor shall match the character spacing shown above, and to show this character spacing on all graphic layouts submitted for review. The messages shown above are for reference. The Contractor shall verify if there will be any messages with character spacing which does not conform to the ADA Standards.
### Wayfinding Colors

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
<th>PMS Color</th>
<th>CMYK Color</th>
<th>RGB Color</th>
<th>Web Safe RGB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wayfinding Blue</td>
<td>281 C</td>
<td>100-72-0-32</td>
<td>0-62-126</td>
<td>00-3E-7E</td>
</tr>
<tr>
<td>2</td>
<td>White</td>
<td>Translucent White</td>
<td>0-0-0-100</td>
<td>23-1F-20</td>
<td>EE-34-24</td>
</tr>
<tr>
<td>3</td>
<td>Metallic Silver</td>
<td>1795 C</td>
<td>0-94-100-0</td>
<td>0-83-83-83</td>
<td>0-83-83-83</td>
</tr>
<tr>
<td>4</td>
<td>Black</td>
<td>Process Black</td>
<td>35-31-32</td>
<td>23-1F-20</td>
<td>EE-34-24</td>
</tr>
<tr>
<td>5</td>
<td>Wayfinding Red</td>
<td>1795 C</td>
<td>0-94-100-0</td>
<td>23-1F-20</td>
<td>EE-34-24</td>
</tr>
</tbody>
</table>

### Description

**General**

The general colors used for the interagency signs are shown above. Colors fields shown are approximations only.
SECTION A2
Typography, Colors & Symbols

Logo Colors

Pace, Metra, CTA, RTA, Amtrak, and South Shore (NICTD) Logo Colors

Description

General
The color standards used for the CTA, Metra, Pace, and South Shore logos are shown above. Colors fields shown are approximations only.
SECTION A2
Typography, Colors & Symbols

CTA Train Line Colors

CTA Yellow Line color is PMS 012 C.
Converted to CMYK, the color is:
0%C, 4%M, 100%Y, 0%K
The text outline is shown as:
0%C, 4%M, 100%Y, 50%K
(The text outline stroke width is .75 points for 20.5 point letter height.)

When text using the CTA Yellow Line color appears on a white background, the text is outlined in a stroke the CMYK equivalent color of the text, but with 50% black added to the CMYK color.

CTA Train Line Colors

<table>
<thead>
<tr>
<th>Color</th>
<th>Line</th>
<th>PMS Color</th>
<th>CMYK Values</th>
<th>RGB Values</th>
<th>Web Safe RGB</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Red</td>
<td>186 C</td>
<td>0-100-75-0</td>
<td>207-20-43</td>
<td>E3-1B-37</td>
</tr>
<tr>
<td>21</td>
<td>Orange</td>
<td>172 C</td>
<td>0-72-90-0</td>
<td>242-79-0</td>
<td>F4-77-35</td>
</tr>
<tr>
<td>22</td>
<td>Yellow</td>
<td>012 C</td>
<td>0-1-100-0</td>
<td>247-224-23</td>
<td>F5-E9-28</td>
</tr>
<tr>
<td>23</td>
<td>Green</td>
<td>355 C</td>
<td>95-0-98-0</td>
<td>86-8-0-0</td>
<td>0-150-69</td>
</tr>
<tr>
<td>24</td>
<td>Blue</td>
<td>299 C</td>
<td>0-1-100-0</td>
<td>0-163-224</td>
<td>0-9D-DC</td>
</tr>
<tr>
<td>25</td>
<td>Purple</td>
<td>267 C</td>
<td>95-0-98-0</td>
<td>86-8-0-0</td>
<td>0-150-69</td>
</tr>
<tr>
<td>26</td>
<td>Pink</td>
<td>204 C</td>
<td>0-1-100-0</td>
<td>0-163-224</td>
<td>0-9D-DC</td>
</tr>
<tr>
<td>27</td>
<td>Brown</td>
<td>161 C</td>
<td>95-0-98-0</td>
<td>86-8-0-0</td>
<td>0-150-69</td>
</tr>
</tbody>
</table>

Appearance of Light CTA Train Line Colors on a White Background

Description

General
The color standards used for the CTA train lines are shown above. Colors fields shown are approximations only.
SECTION A2
Typography, Colors & Symbols

Map Base Colors

Color 30
Station Building
PMS 281 C
CMYK 100-72-0-32
RGB 0-62-126
Web Safe RGB 00-3E-7E

Color 31
Water/Parking
PMS 290 C
CMYK 100-25-0-72
RGB 185-224-247
Web Safe RGB 89-E0-F7

Color 32
District Name/Parking Shadow
PMS 299 C
CMYK 85-0-19-0
RGB 0-157-220
Web Safe RGB 00-9D-DC

Color 33
Park
PMS 358 C
CMYK 100-0-38-0
RGB 189-223-178
Web Safe RGB 00-A1-60

Color 34
Building/POI Shadow/Text
PMS 445 C
CMYK 40-12-0-26
RGB 128-130-133
Web Safe RGB 00-82-85

Color 35
School
PMS 505 C (30%)
CMYK 15-30-30-8
RGB 200-167-155
Web Safe RGB 6D-6F-71

Color 36
Building/POI
PMS 445 C
CMYK 20-0-20-65
RGB 94-110-102
Web Safe RGB 5E-6E-66

Color 37
Background Map Base
PMS 538 C
CMYK 12-7-2-0
RGB 220-226-237
Web Safe RGB 93-95-98

Color 38
School Shadow/Text
PMS 505 C (60%)
CMYK 30-60-60-15
RGB 161-105-91
Web Safe RGB A1-69-5B

Color 39
Bus Line (Downtown Map)
PMS Black C (50%)
CMYK 0-0-0-50
RGB 147-149-152
Web Safe RGB 80-82-85

Color 40
Bus Route Label (Downtown Map)
PMS Black C (60%)
CMYK 0-0-0-60
RGB 128-130-133
Web Safe RGB B4-C0-BA

Color 41
Central Business District
PMS 444 C
CMYK 15-0-15-42
RGB 247-237-212
Web Safe RGB 00-A1-60

Color 42
Walking Circle*
PMS 356 C
CMYK 95-0-100-27
RGB 0-133-63
Web Safe RGB 00-85-3F

*Line color is 42%, text and symbols are 100%

Map Base Colors

Description

General
The color standards used for the system maps are shown above. Colors fields shown are approximations only.
SECTION A2
Typography, Colors & Symbols

Bus Route Colors

### Description

#### General

The color standards used for CTA and Pace bus routes are shown above. Colors fields shown are approximations only.
SECTION A2
Typography, Colors & Symbols

Metra Train Line Colors

Metra UP-NW color is PMS Yellow C.
Converted to CMYK, the color is:
0%C, 0%M, 100%Y, 0%K
The text outline is shown as:
0%C, 0%M, 100%Y, 50%K
(The text outline stroke width is .75 points for 20.5 point letter height.)

Metra UP-W color is PMS 176C.
Converted to CMYK, the color is:
0%C, 25%M, 18%Y, 0%K
The text outline is shown as:
0%C, 25%M, 18%Y, 50%K
(The text outline stroke width is .75 points for 20.5 point letter height.)

Metra Train Line Colors

Appearence of Light Colors Metra Train on a White Background

Description

General
The color standards used for the Metra system are shown above. Colors fields shown are approximations only.
**SECTION A2**
*Typography, Colors & Symbols*

**Arrows**

The arrows used for the interagency signs are shown above. Arrows shown are for reference only. Final arrow artwork shall be provided by the RTA. See the General Design and Layout Information for each sign type for additional information about arrow arrangement.

Messages are grouped by mode (CTA Trains, Metra Trains, Buses). Within a message group, the messages are typically arranged with the arrows ordered “up,” “left,” “right,” and “down/behind.”

When bus stop symbols are used on a sign, the bus stop messages will be arranged alphabetically based on the bus stop letters.

**Description**

**General**

The arrows used for the interagency signs are shown above. Arrows shown are for reference only. Final arrow artwork shall be provided by the RTA. See the General Design and Layout Information for each sign type for additional information about arrow arrangement.
**Description**

**General**

The symbols used for the interagency signs are shown above. Symbols shown are for reference only. Final symbol artwork shall be provided by the RTA.
**SECTION A2**

**Typography, Colors & Symbols**

**Symbols**

**Description**

The symbols used for the interagency signs are shown above. The letters ‘I’ and ‘O’ are not used for boarding areas. Symbols shown are for reference only. Final symbol artwork shall be provided by the RTA.
Typical Application - CTA Symbols on White Background

Typical Application - CTA Symbols on Wayfinding Blue Background

Description

General
The CTA Train Line and Bus Service symbols used for the interagency signs are shown above. Additional Bus Service symbols may be added in the future. Symbols shown are for reference only. Final CTA Train Line and Bus Service symbol artwork shall be provided by the RTA.
SECTION A2
Typography, Colors & Symbols

CTA Connecting Services Symbols

Description

General
The symbols used to indicate connecting CTA rail service on TR product artwork are shown above. Symbols shown are for reference only. Final symbol artwork shall be provided by the RTA.
Description

General
The symbols used to indicate connecting Metra rail service and Pace Pulse bus service on TR product artwork are shown above. Symbols shown are for reference only. Final symbol artwork shall be provided by the RTA.
Symbol Definitions

### Description

**General**
The typical treatments for symbols on different color backgrounds are shown.
SECTION A3
Establishing Sign Locations

Introduction

To be effective, interagency signs and graphics must be carefully located. Graphics must be positioned where they can be readily seen and safely understood. Locations must coordinate with the information being presented so that the messages are useful and appropriate. Locations and messages must be documented. Locations must also coordinate with architectural conditions so that signs and graphics fit properly, function correctly, and do not create clutter.

To establish sign locations, the following general steps should be followed. However, every facility and situation is different, so the process for locating signs will need to be adapted to the particular needs of each site or facility.

1) Obtain Information About the Site or Facility

The first step in establishing sign locations should be to obtain as much existing information and documentation about the site or facility where signs are to be installed as is available. Documents may include architectural plans and elevations of the site or facility, construction details, and existing sign plans.

Once any available drawings have been obtained, an initial site review should be made and the facility or location should be thoroughly photographed. Whenever possible, photo locations should be keyed to a floor plan or a site plan. While on site, an initial, overall wayfinding assessment of the facility should be made. Potential passenger routes should be identified and photographed, and possible sign locations should be identified. At potential information locations, site dimensions should be recorded.

2) Establish Preliminary Sign Locations

Once the preliminary site information has been obtained, sign types can be programmed for the site or facility, and preliminary locations for each sign can be established. Factors to consider when establishing sign locations should include:

a) Architectural conditions:
   1) Signs should be placed where they can be seen, but they should also not interfere or conflict with architectural or site features. Signs should be placed where there is sufficient physical space for the sign and the sign can be mounted without intruding into pedestrian ways or otherwise interfering with circulation.

b) Traffic patterns and decision points:
   1) Signs should be located so that information is provided where it is needed. Part of programming and locating signs is to understand the pathways typically used within a facility. Signs should be placed along pedestrian paths and at decision points. Signs should be placed so that directions provide guidance in a logical sequence and minimize backtracking.

c) Space to read the maps and signs:
   1) Sign should be located so that the information is visible and readily accessible. Maps and schedule graphics should be located so that people have enough room to stand and study the information without disrupting the overall pedestrian flow.

   2) Signs located on sidewalks need to be placed far enough from traffic that people reading the signs do not place themselves in the path of oncoming traffic. Signs should also be far enough from curbs so that people can walk around the signs without moving too close to the street or stepping into the roadway.
SECTION A3
Establishing Sign Locations

Introduction

d) Pedestrian signs must not create confusion for vehicles or cyclists:
   1) Pedestrian signs must not be placed so that they may be confused with
      vehicular signs or present possibly confusing or inappropriate information to
      drivers or cyclists. Pedestrian signs must not block traffic signs or interfere with
      driver and cyclist visibility or lines of sight.

3) Establish Preliminary Documentation
Sign locations and messages need to be documented.

a) Develop plans showing the locations for each sign. Sign locations plans may be
   developed by adding signs to existing architectural plans or site plans. New plans may
   need to be developed if existing documentation is not available.

b) A message schedule database must be created to record and track information about
   each sign. The message schedule will record each sign location as well as sign types
   and messages.

4) Review the Sign Locations On-Site
After the preliminary sign locations have been established, they should be reviewed on-
site.

Each sign location should be reviewed on-site to confirm the signs can be properly and
safely installed, the information presented is accurate and appropriate, that there are no
conflicts with site features or architecture, and that the site documentation is accurate.
Each location should be photographed. Key site dimensions should also be obtained.

Based on the site review, sign locations and sign types should be revised and updated
as needed. Revised documentation, incorporating the verified sign locations, should be
developed.

The revised locations should be confirmed, and any final adjustments made, prior to
issuing documents for bidding or fabrication.
SECTION A3
Establishing Sign Locations

Sign Location Plan Documentation

Typical Sign Location Plan Information

**Description**

**General**

The sign location plans provide a general indication of where signs are to be placed. Final locations are to be determined on site. The location plans include a general list of sign types and letter designations to indicate sign sides.

The background used for the sign location plan may be an existing architectural building or site plan, map, or aerial photograph. If no existing documentation is available, a new plan of the site may need to be drawn for use on the sign location plan.

---

Location number range

Bus Stop designation listed for reference only

General position indicator and letters to designate sign sides (N, S, E, W)

Sign location number

General sign type list

Bus routes listed for reference only

Supplemental bus stop - shown on map products but no signs are installed, does not receive location number.
SECTION A3
Establishing Sign Locations

GIS Database Story Map Documentation

Example of RTA's GIS Sign Location Documentation
Scale: NTS

Description

General
It is important to develop and maintain documentation of the sign locations and messages.

The RTA has established a GIS database for the interagency sign program. The database includes information about existing and potential sign locations.

The database shall include, but shall not be limited to, location markers, location numbers, sign type designations, location and mounting information, information documenting site conditions, information documenting completed installations, maintenance information, as well as other information about the fabrication and installation of the signs.

The database will be maintained by the RTA. The interagency signage contractor shall coordinate with the RTA regarding the type of information they will need to provide the RTA so that the database can be kept up-to-date.


**SECTION A3**

**Establishing Sign Locations**

**Message Schedule**

**Documentation**

---

### Typical Message Schedule entry

The sign location number typically has a format of AAN-NNN.N-A

<table>
<thead>
<tr>
<th>AA</th>
<th>N</th>
<th>-</th>
<th>NNN</th>
<th>Optional</th>
<th>N</th>
<th>-</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Three digit location identifier within greater interagency location. Identifies location within grid. Use leading &quot;zeros&quot; to fill-in each digit holder, i.e. 001, 021.</td>
<td></td>
<td></td>
<td>One letter abbreviation for cardinal direction of sign face. N = North S = South E = East W = West</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Optional decimal point, used only when multiple sign types are installed on same structure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Optional One digit, if multiple sign types on structure this number identifies the position or sequence of the sign type.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dash</td>
<td></td>
<td></td>
<td>Dash</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Description**

**General**

The Message Schedule is a database of all the sign messages, the sign types, and, where applicable, the sign cabinets, sign structures, and sign mounting hardware codes. When double-sided signs are listed in the message schedule, the sign type, sign cabinet, sign structure, and sign mounting hardware codes will typically appear once for each sign location, not for each side. The sign type code will appear for each side for DSF and DSO sign types. See page A3.6 for additional information on sign type codes. The Message Schedule does not represent sign face layouts.
**SECTION A3**  
Establishing Sign Locations

**Sign Type Key**

**Introduction**

The codes listed in the “Sign Type” field of the Message Schedule contain information related to the overall sign type or information product type, the size of the sign / product, its material, and the number of sides.

The codes will typically have one of the two formats listed below:

Signs except DSO and DSW:

(sign type / product type designation)-[size designation].[material designation].[number of sides]

DSO and DSW signs:

[DSO or DSW]-[panel width (inches)]x[panel height (inches)].[material designation].[number of sides (will typically be single-sided)]

See page A3.7 for information regarding the size, material, and side designations used in the sign type codes.

See page A1.9 for additional information regarding the sign type, information product, and structure designations.

**Example Sign Type codes:**

- **BC-6.1.1**
  - [product type designation] Bus connections map
  - [size designation] 32" x 44"
  - [material designation] Laminated paper printed
  - [number of sides designation] Single sided

- **DSS-3.5.2**
  - [sign type designation] Directional sign, sidewalk mounted
  - [size designation] 18" x 24"
  - [material designation].080" aluminum panel with printed applied vinyl graphics
  - [number of sides designation] Double sided

- **DSO-96x16.7.1**
  - [sign type designation] Directional sign, overhead mounted
  - [size designation] 96" x 16" sign panel
  - [material designation].125" aluminum panel with printed applied vinyl graphics
  - [number of sides designation] Single sided
SECTION A3
Establishing Sign Locations

Sign Type Key

Sign size designations:

The following size designations are used in the sign type codes:

<table>
<thead>
<tr>
<th>BA, BT</th>
<th>DSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = 9” x 28&quot;</td>
<td>1 = 15” x 15&quot;</td>
</tr>
<tr>
<td>2 = 9” x 42.5&quot;</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = 13” diameter with 1” x 5” tab</td>
</tr>
<tr>
<td>2 = 18” x 8.5”</td>
</tr>
<tr>
<td>3 = 18” x 18”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = 18” x 24”</td>
</tr>
<tr>
<td>2 = 18” x 30”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = 12” x 18”</td>
</tr>
<tr>
<td>2 = 12” x 22”</td>
</tr>
<tr>
<td>3 = 18” x 24”</td>
</tr>
<tr>
<td>4 = 18” x 30”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BC, ID, MD, MN, TC, TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = 12” x 18”</td>
</tr>
<tr>
<td>2 = 18” x 24”</td>
</tr>
<tr>
<td>3 = 18” x 30”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BC, ID, MD, MN, TC, TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 = 24” x 30”</td>
</tr>
<tr>
<td>5 = 32” x 18”</td>
</tr>
<tr>
<td>6 = 32” x 44”</td>
</tr>
<tr>
<td>7 = 41” x 18”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DSW, DSO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual sign panel size is provided as width x height in inches – see page A3.6 for examples.</td>
</tr>
</tbody>
</table>

Material designations:

The following general material designations are used in the sign codes. These designations apply to all sign types:

1 = Laminated paper printed
2 = Self-adhesive vinyl with digitally printed graphics
3 = Styrene with printed applied vinyl graphics
4 = .063” aluminum panel with digitally printed applied vinyl graphics
5 = .080” aluminum panel with digitally printed applied vinyl graphics
6 = .080” aluminum panel with digitally printed applied reflective vinyl graphics
7 = .125” aluminum panel with digitally printed applied vinyl graphics
8 = .125” Rhino Panel
9 = .5” Rhino Panel
10 = Aluminum composite with digitally printed applied vinyl graphics
11 = .125” clear and .125” translucent white polycarbonate with digitally printed applied vinyl graphics
12 = .125” acrylic with digitally printed applied vinyl graphics
13 = .5” acrylic with digitally printed applied vinyl graphics

Number of side designations:

The following number of side designations are used in the sign codes. These designations apply to all sign types:

1 = Single Sided
2 = Double Sided
3 = Three Sided

See pages A3.8 to A3.12 for examples of sign type and sign structure codes that are used in the Message Schedule.
### SECTION A3

#### Establishing Sign Locations

### Sign Type Key

<table>
<thead>
<tr>
<th>Sign Type Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA-1.1.1</td>
<td>9&quot; x 28&quot; laminated paper printed, single sided</td>
</tr>
<tr>
<td>BA-1.3.1</td>
<td>9&quot; x 28&quot; Styrene with printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>BA-2.1.1</td>
<td>9&quot; x 42.5&quot; laminated paper printed, single sided</td>
</tr>
<tr>
<td>BA-2.3.1</td>
<td>9&quot; x 42.5&quot; Styrene with printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>BB-1.5.2</td>
<td>13&quot; diameter (plus tab) .080&quot; aluminum panel with digitally printed applied vinyl graphics, double sided</td>
</tr>
<tr>
<td>BB-2.5.2</td>
<td>18&quot; x 8.5&quot; .080&quot; aluminum panel with digitally printed applied vinyl graphics, double sided</td>
</tr>
<tr>
<td>BB-3.6.2</td>
<td>18&quot; x 18&quot; .080&quot; aluminum panel with digitally printed applied reflective vinyl graphics, double sided</td>
</tr>
<tr>
<td>BC-6.1.1</td>
<td>32&quot; x 44&quot; laminated paper printed, single sided</td>
</tr>
<tr>
<td>BC-6.2.1</td>
<td>32&quot; x 44&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>BS-1.6.2</td>
<td>18&quot; x 24&quot; .080&quot; aluminum panel with digitally printed applied reflective vinyl graphics, double sided</td>
</tr>
<tr>
<td>BS-2.6.2</td>
<td>18&quot; x 30&quot; .080&quot; aluminum panel with digitally printed applied reflective vinyl graphics, double sided</td>
</tr>
<tr>
<td>BT-1.1.1</td>
<td>9&quot; x 28&quot; laminated paper printed, single sided</td>
</tr>
<tr>
<td>BT-1.3.1</td>
<td>9&quot; x 28&quot; Styrene with printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>BT-2.1.1</td>
<td>9&quot; x 42.5&quot; laminated paper printed, single sided</td>
</tr>
<tr>
<td>BT-2.3.1</td>
<td>9&quot; x 42.5&quot; Styrene with printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSF-1.7.1</td>
<td>15&quot; x 15&quot; .125&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSO-48x12.7.1</td>
<td>48&quot; x 12&quot; .125&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSO-48x16.7.1</td>
<td>48&quot; x 16&quot; .125&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSO-72x16.7.1</td>
<td>72&quot; x 16&quot; .125&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSO-96x16.7.1</td>
<td>96&quot; x 16&quot; .125&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSO-96x14.11.1</td>
<td>96&quot; x 14&quot; .125&quot; clear and .125&quot; translucent white polycarbonate with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSO-110x22.11.1</td>
<td>110&quot; x 22&quot; .125&quot; clear and .125&quot; translucent white polycarbonate with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSO-[w][h].7.1</td>
<td>Size varies with location .125&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSO-[w][h].10.1</td>
<td>Size varies with location aluminum composite with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSS-1.2.1</td>
<td>12&quot; x 18&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>DSS-1.5.1</td>
<td>12&quot; x 18&quot; .080&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSS-1.5.2</td>
<td>12&quot; x 18&quot; .080&quot; aluminum panel with digitally printed applied vinyl graphics, double sided</td>
</tr>
<tr>
<td>DSS-2.2.1</td>
<td>12&quot; x 22&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>DSS-2.5.1</td>
<td>12&quot; x 22&quot; .080&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSS-3.2.1</td>
<td>18&quot; x 24&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>DSS-3.5.1</td>
<td>18&quot; x 24&quot; .080&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSS-3.5.2</td>
<td>18&quot; x 24&quot; .080&quot; aluminum panel with digitally printed applied vinyl graphics, double sided</td>
</tr>
<tr>
<td>DSS-4.2.1</td>
<td>18&quot; x 30&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>DSS-4.5.1</td>
<td>18&quot; x 30&quot; .080&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSS-4.5.2</td>
<td>18&quot; x 30&quot; .080&quot; aluminum panel with digitally printed applied vinyl graphics, double sided</td>
</tr>
<tr>
<td>DSW-24x15.2.1</td>
<td>24&quot; x 15&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>DSW-24x15.5.1</td>
<td>24&quot; x 15&quot; .080&quot; aluminum with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>DSW-24x15.8.1</td>
<td>24&quot; x 15&quot; .125&quot; Rhino Panel, single sided</td>
</tr>
</tbody>
</table>
### SECTION A3
Establishing Sign Locations

#### Sign Type Key

<table>
<thead>
<tr>
<th>Sign Type Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSW-24x15.9.1</td>
<td>24” x 15”.5” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-24x15.12.1</td>
<td>24” x 15”.125” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-24x15.13.1</td>
<td>24” x 15”.5” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-24x23.2.1</td>
<td>24” x 23” self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>DSW-24x23.5.1</td>
<td>24” x 23” .080” aluminum with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-24x23.8.1</td>
<td>24” x 23”.125” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-24x23.9.1</td>
<td>24” x 23”.5” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-24x23.12.1</td>
<td>24” x 23”.125” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-24x23.13.1</td>
<td>24” x 23”.5” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-24x30.2.1</td>
<td>24” x 30” self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>DSW-24x30.5.1</td>
<td>24” x 30” .080” aluminum with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-24x30.8.1</td>
<td>24” x 30”.125” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-24x30.9.1</td>
<td>24” x 30”.5” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-24x30.12.1</td>
<td>24” x 30”.125” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-24x30.13.1</td>
<td>24” x 30”.5” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-30x15.2.1</td>
<td>30” x 15” self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>DSW-30x15.5.1</td>
<td>30” x 15”.080” aluminum with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-30x15.8.1</td>
<td>30” x 15”.125” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-30x15.9.1</td>
<td>30” x 15”.5” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-30x15.12.1</td>
<td>30” x 15”.125” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-30x15.13.1</td>
<td>30” x 15”.5” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-30x23.2.1</td>
<td>30” x 23” self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>DSW-30x23.5.1</td>
<td>30” x 23”.080” aluminum with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-30x23.8.1</td>
<td>30” x 23”.125” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-30x23.9.1</td>
<td>30” x 23”.5” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-30x23.12.1</td>
<td>30” x 23”.125” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-30x23.13.1</td>
<td>30” x 23”.5” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-30x30.2.1</td>
<td>30” x 30” self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>DSW-30x30.5.1</td>
<td>30” x 30”.080” aluminum with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-30x30.8.1</td>
<td>30” x 30”.125” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-30x30.9.1</td>
<td>30” x 30”.5” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-30x30.12.1</td>
<td>30” x 30”.125” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-30x30.13.1</td>
<td>30” x 30”.5” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-36x15.2.1</td>
<td>36” x 15”.080” aluminum with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-36x15.5.1</td>
<td>36” x 15”.5” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-36x15.8.1</td>
<td>36” x 15”.125” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-36x15.9.1</td>
<td>36” x 15”.5” Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-36x15.12.1</td>
<td>36” x 15”.125” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-36x15.13.1</td>
<td>36” x 15”.5” acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
</tbody>
</table>
### Sign Type Key

<table>
<thead>
<tr>
<th>Sign Type Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSW-36x23.2.1</td>
<td>36&quot; x 23&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>DSW-36x23.5.1</td>
<td>36&quot; x 23&quot;.080&quot; aluminum with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-36x23.8.1</td>
<td>36&quot; x 23&quot;.125&quot; Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-36x23.9.1</td>
<td>36&quot; x 23&quot;.5&quot; Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-36x23.12.1</td>
<td>36&quot; x 23&quot;.125&quot; acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-36x23.13.1</td>
<td>36&quot; x 23&quot;.5&quot; acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-36x30.2.1</td>
<td>36&quot; x 30&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>DSW-36x30.5.1</td>
<td>36&quot; x 30&quot;.080&quot; aluminum with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-36x30.8.1</td>
<td>36&quot; x 30&quot;.125&quot; Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-36x30.9.1</td>
<td>36&quot; x 30&quot;.5&quot; Rhino Panel, single sided</td>
</tr>
<tr>
<td>DSW-36x30.12.1</td>
<td>36&quot; x 30&quot;.125&quot; acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>DSW-36x30.13.1</td>
<td>36&quot; x 30&quot;.5&quot; acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>ID-1.2.1</td>
<td>12&quot; x 18&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>ID-1.5.1</td>
<td>12&quot; x 18&quot;.080&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>ID-2.2.1</td>
<td>18&quot; x 24&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>ID-2.5.1</td>
<td>18&quot; x 24&quot;.080&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>ID-6.1.1</td>
<td>32&quot; x 44&quot; laminated paper printed, single sided</td>
</tr>
<tr>
<td>ID-6.2.1</td>
<td>32&quot; x 44&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>MD-6.1.1</td>
<td>32&quot; x 44&quot; laminated paper printed, single sided</td>
</tr>
<tr>
<td>MD-6.2.1</td>
<td>32&quot; x 44&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>MN-6.1.1</td>
<td>32&quot; x 44&quot; laminated paper printed, single sided</td>
</tr>
<tr>
<td>MN-6.2.1</td>
<td>32&quot; x 44&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>TC-6.1.1</td>
<td>32&quot; x 44&quot; laminated paper printed, single sided</td>
</tr>
<tr>
<td>TC-6.2.1</td>
<td>32&quot; x 44&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>TR-6.1.1</td>
<td>32&quot; x 44&quot; laminated paper printed, single sided</td>
</tr>
<tr>
<td>TR-6.2.1</td>
<td>32&quot; x 44&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>TR-3.2.1</td>
<td>18&quot; x 30&quot; self-adhesive vinyl with digitally printed graphics, single sided</td>
</tr>
<tr>
<td>TR-3.5.1</td>
<td>18&quot; x 30&quot;.080&quot; aluminum panel with digitally printed applied vinyl graphics, single sided</td>
</tr>
<tr>
<td>TR-3.12.1</td>
<td>18&quot; x 30&quot;.125&quot; acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
<tr>
<td>TR-3.13.1</td>
<td>18&quot; x 30&quot;.5&quot; acrylic with digitally printed applied vinyl graphics, Single Sided</td>
</tr>
</tbody>
</table>
# SECTION A3

## Establishing Sign Locations

### Sign Type Key

#### Legacy Sign Types

<table>
<thead>
<tr>
<th>Sign Type Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR-1*</td>
<td>N/A</td>
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<tr>
<td>TR-2*</td>
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<td>TR-3*</td>
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<tr>
<td>TR-5*</td>
<td>N/A</td>
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<td>TT-4*</td>
<td>N/A</td>
</tr>
<tr>
<td>TT-5*</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*These are "legacy" sign types that will no longer be specified for new locations.*
**Sign Structure Key**

The codes listed in the “Support Structure” field of the Message Schedule contain information that may include the overall sign structure type, the size of the sign structure, and the number of sides.

Not all sign structure designations are listed below – see page A1.9 for additional information regarding the different sign structure designations.

The following designations are used in the codes for the SFM, SPY, and SWM support structures:

<table>
<thead>
<tr>
<th>Structure Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFM-1.1</td>
<td>Structure, freestanding mount, one frame on one side</td>
</tr>
<tr>
<td>SFM-1.2</td>
<td>Structure, freestanding mount, one frame on each side</td>
</tr>
<tr>
<td>SFM-2.1</td>
<td>Structure, freestanding mount, two frames on one side</td>
</tr>
<tr>
<td>SFM-2.2</td>
<td>Structure, freestanding mount, two frames on each side</td>
</tr>
<tr>
<td>SFM-3.1</td>
<td>Structure, freestanding mount, three frames on one side</td>
</tr>
<tr>
<td>SFM-3.2</td>
<td>Structure, freestanding mount, three frames on each side</td>
</tr>
<tr>
<td>SFM-4.1</td>
<td>Structure, freestanding mount, four frames on one side</td>
</tr>
<tr>
<td>SFM-4.2</td>
<td>Structure, freestanding mount, four frames on each side</td>
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<tr>
<td>SPY-1.3</td>
<td>Structure, pylon (three-sided), one frame on each side</td>
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<td>SWM-1.1</td>
<td>Structure, wall mount, one frame</td>
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<td>SWM-2.1</td>
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</tr>
<tr>
<td>SWM-3.1</td>
<td>Structure, wall mount, three frames</td>
</tr>
<tr>
<td>SWM-4.1</td>
<td>Structure, wall mount, four frames</td>
</tr>
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PART B

Information Graphics
Sign Frames / Cabinets
Freestanding Structures
Wall-Mounted Structures

Introduction

Description

General
Part B general reference.
SECTION B1
Information Graphics

Section Introduction

Description

General
Section B1 general reference.
## Section B1
### Information Graphics
#### Sign Type Overview

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<th>Sign Type</th>
<th>Description</th>
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<td>BC</td>
<td>Bus Connections Map&lt;br&gt;Provides route diagrams, bus schedule and destination information</td>
</tr>
<tr>
<td>ID</td>
<td>Station Identification&lt;br&gt;Provides identification of and information about transportation centers and locations</td>
</tr>
<tr>
<td>MD</td>
<td>Downtown Chicago Transit Map&lt;br&gt;Provides transit information, points of interest, and location finder for the Chicago downtown area</td>
</tr>
<tr>
<td>MN</td>
<td>Neighborhood Map&lt;br&gt;Provides points of interest and location finder for the neighborhood</td>
</tr>
<tr>
<td>TC</td>
<td>Train Connections Map&lt;br&gt;Provides regional Metra and CTA rail routes and connections</td>
</tr>
<tr>
<td>TR</td>
<td>Train Route&lt;br&gt;Provides schematic map of Metra train stops for individual lines</td>
</tr>
</tbody>
</table>

### Description

**General**

Information Graphics Sign Type Overview.
SECTION B1
Information Graphics

Header Layouts

Elevation - Typical Header for Sign Types BC-6, MD-6, MN-6, TC-6, and TR-6
(Example Header for Sign Type MD-6 Shown)

Scale: 1 1/2" = 1'-0"

---

1. Metra Trains

2. Train Connections

3. Downtown

Elevations - Typical Header Symbol Layouts
Scale: 3" = 1'-0"

Description

Shown is the typical layout for the header portion of the following sign types:

- BC-6 – Bus Connections
- MD-6 – Downtown Chicago Transit Map
- MN-6 – Neighborhood Map
- TC-6 – Train Connections
- TR-6 – Train Route (does not include sign type TR-3)

Headers shall include one to three symbols. Symbols that appear shall reflect the information shown on the sign. Depending on overall content, sign types BC-6, MD-6, MN-6, TC-6, and TR-6 will include up to three mode symbols (mode symbols are the symbols for CTA Trains, Metra Trains, Buses, and Amtrak Trains*).

Mode symbols shall always be shown in the following order (left to right):
First: CTA Trains
Second: Metra Trains
Third: Buses and / or Amtrak Trains*

If a particular mode is not included in the sign information, the symbol positions shall shift to the left as required. A digital base art file, for use when developing final art for header graphics, shall be provided by the RTA.

* Locations that include Amtrak trains in the header do not include CTA trains, and will have a maximum of three symbols in the header.
Section B1
Information Graphics

Header Layouts

1. Elevation - Typical Footer for Sign Type ID-1
   Scale: 3" = 1'-0"

2. Elevation - Typical Footer for Sign Type ID-2
   Scale: 3" = 1'-0"

3. Elevation - Typical Footer for Sign Type TR-3
   Scale: 3" = 1'-0"

Description

Shown is the typical layout for the header portion of the following sign types:

ID-1, ID-2 – Station Identification
TR-3 – Train Route

Headers shall include one symbol. Sign types ID-1 and ID-2 shall have the Information symbol, sign type TR-3 shall have the symbol for Metra Trains.

The primary header text for sign types ID-1 and ID-2 shall always be "Transit Information." The secondary header text shall vary with location.

The primary header text for sign type TR-3 shall be "Metra Trains." The secondary header text shall vary depending on the Metra Line shown on the sign.

Digital base art files, for use when developing final art for the sign type ID-1, ID-2, and TR-3 header graphics, shall be provided by the RTA.
SECTION B1
Information Graphics

Header Layouts

Description

Shown is the typical layout for the header portion of sign type ID-6: Station Identification. Depending on overall content, sign type ID-6 will include up to three mode symbols in the header (mode symbols are the symbols for CTA Trains, Metra Trains, and Buses, and Amtrak Trains*). Locations that include Amtrak trains in the header do not include CTA trains, and will have a maximum of three symbols in the header. Mode symbols shall always be shown in the following order (top to bottom):

First: CTA Trains
Second: Metra Trains
Third: Buses (CTA, Pace, or CTA and Pace) and / or Amtrak Trains*

If a particular mode is not included in the sign information, the symbol positions shall shift up as required.

A digital base art file, for use when developing final art for Sign Type ID-6 header graphics, shall be provided by the RTA.

1. Elevation - Typical Header for Sign Type ID-6 with 1 Mode
   Scale: 1 1/2" = 1'-0"

2. Elevation - Typical Header for Sign Type ID-6 with 2 Modes
   Scale: 1 1/2" = 1'-0"

3. Elevation - Typical Header for Sign Type ID-6 with 3 Modes
   Scale: 1 1/2" = 1'-0"

Alternate header with 3 modes, including Amtrak Trains.
SECTION B1
Information Graphics

Footer Layouts

1. **Elevation - Typical Footer for Sign Types ID-1, ID-2, and TR-3**
   Scale: 1 1/2" = 1'-0"

2. **Elevation - Typical Footer for Sign Types BC, ID-6, MD, MN, and TC**
   Scale: 1 1/2" = 1'-0"

3. **Elevation - Typical Footer for Sign Type TR-6**
   Scale: 1 1/2" = 1'-0"

**Description**

Shown is the typical layout for the footer portion of the following sign types:

- BC-6 – Bus Connections
- ID-1, ID-2, ID-6 – Station Identification
- MD-6 – Downtown Chicago Transit Map
- MN-6 – Neighborhood Map
- TC-6 – Train Connections
- TR-3, TR-6 – Train Route

All footers shall include contact information for RTA Travel Information. Except for sign types ID-1, ID-2, and TR-3, the footers shall include the RTA and Service Board logos. The footer for sign types ID-1, ID-2, and TR-3 shall include only the RTA logo. Footers at locations where Metra and Amtrak stations are co-located shall also include the Amtrak logo (see page B1.7). The footer for sign type TC-6 used at locations where Metra and South Shore stations are co-located shall also include the South Shore logo (see page B1.6).

A digital base art file, for use when developing final art for footer graphics, shall be provided by the RTA.
SECTION B1
Information Graphics

Footer Layouts

Shown are the special layouts for the footer portion of the following sign types:

- BC-6 – Bus Connections
- ID-6 – Station Identification
- MD-6 – Downtown Chicago Transit Map
- MN-6 – Neighborhood Map
- TC-6 – Train Connections*
- TR-6 – Train Route

*The South Shore logo is only used on the footer of the Train Connections product.

All footers for sign types shown on this page shall include the RTA and Service Board logos and contact information for RTA Travel Information. Footers at locations where Metra and Amtrak stations are co-located shall also include the Amtrak logo. The footer for sign type TC-6 used at locations where Metra and South Shore stations are co-located shall also include the South Shore logo.

A digital base art file, for use when developing final art for footer graphics, shall be provided by the RTA.
When they appear in the footers of interagency signs and graphics, the RTA and Service Board logos shall be sized as shown in this Manual. Shown are the proportions for sizing and placing the RTA and Service Board logos when they appear in the footers of the following sign types:

- BC – Bus Connections
- ID – Station Identification
- MD – Downtown Chicago Transit Map
- MN – Neighborhood Map
- TC – Train Connections*
- TR – Train Route

*The South Shore logo is only used on the footer of the Train Connections product.

For similar interagency graphics that include the RTA and Service Board logos that are not currently covered by this manual, the RTA and Service Board logos shall typically be sized per the proportions indicated.

Pre-production proofs, or similar pre-production review graphics, of all interagency signs and graphics shall be provided for review by the RTA prior to final production of any signs or graphics.
## Description

### General


*(V.O. = Visual Opening)*

---

### Print size indicated is for artwork used in CWS snap frames.*
SECTION B1
Information Graphics

Bus Connections Map
Sign Type BC-6

General Information

1 Elevation - Sign Type BC-6

Scale: 1" = 1'-0"

Associated Sign Cabinet / Frame Information:
New Location and Installation:
Sign type BC-6 is typically mounted using a CWS-1 snap frame. For information on CWS-1, see Section B2.

Description

General
Sign type BC-6 provides schematic diagrams of the bus routes originating from the site where the sign type is located, along with bus schedule and destination information. Typically, scheduled bus times should be used on information products. When headway is less than 15 minutes, RTA may select to show headway intervals. Sign type BC-6 content will vary with location. See page B1.11 for Design and Layout Notes.

1 Bus Connections Graphic
The BC-6 graphic shall be digitally printed at high resolution using UV resistant inks directly onto a substrate specified by the RTA.

The graphic shown is for reference only. Final content for each sign type BC-6 shall vary with location. Typical content may include, but shall not be limited to, a schematic representation of the applicable bus routes, showing route numbers, stops, and estimated travel times; a table of places served by the bus routes shown on the sign; and bus schedules for each bus route. Digital art for sign type BC-6 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required site-specific graphics using existing BC-6 signs as precedents for layout and color. Bus schedule information shall be provided by the RTA.

Sign type BC-6 shows bus routes as schematic lines that reflect the actual roadways. Key elements like Lake Michigan, rivers, or nearby major highways may also be shown to help provide location references. The route diagram is not to scale. Examples of existing BC-6 signs, digital template files for the BC-6 graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new BC-6 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) size shown applies when sign type BC-6 appears in a CWS-1 snap frame. The print size / lamination size may need to be adjusted to coordinate with the CWS snap frame, or to respond to specific conditions at each installation location.

Coordinate the BC-6 graphic and the overall panel size with the mounting conditions and hardware at each installation location.
**SECTION B1**

**Information Graphics**

**Bus Connections Map Sign Type BC-6**

**Design and Layout Notes**

**Description**

**General Design and Layout Information – Sign Type BC-6**

- Each sign type BC-6 typically includes separate file components that are linked into a single, master product file using Adobe InDesign software. See the drawing above for additional information regarding the file components.

- The header for sign type BC-6 includes the overall location name or the overall station name. The header content will change at different sites. Generally, the footer information does not vary except for the inclusion on the Amtrak logo at locations where appropriate.

- A blue band below the header organizes the graphic into a column for “Bus Times From This Location” (bus schedules) and an area for the route diagram titled “Bus Network From This Location.” Information in this band does not change.

- Bus routes are presented as a schematic diagram. Each route is assigned a color. If sign type BT is also used at the site, use the same colors for the bus routes that are used on the BT signs. See Section A2 for information regarding the colors to be used. The routes are not to scale, but do generally follow a simplified overall roadway configuration and correspond to compass directions. North is at the top of the diagram.

- Simplified representations of landmarks like rivers, Lake Michigan, major highways, and city names may be included to help orient the routes and give overall context to the diagram. Buildings, street names, and other physical or geographic features are not included.

- Time point stops, approximate travel times, and transfer locations/shared stops are indicated along the schematic route lines. Transfer locations are identified using symbols. Route termini are also indicated. RTA will provide the bus route information to be shown.

- Below the route diagram, a blue band creates a space for a table listing “Places Served By Bus From This Location.” The table alphabetically lists the time point stops, transfer locations, and termini shown on the diagram along with the corresponding bus route numbers and the bus stops used to access each bus route. The route numbers are shown in the color used for the route in the diagram.

- Bus timetables are shown to the left of the route diagram. Timetables are headed and separated by color bands that correspond to the colors used for the bus routes shown on the route diagram. The timetables list the route number, the service provider logo, the route name, the route terminus, and the bus stop from which the bus departs. On the timetables, AM bus times are shown in Roman, PM bus times are shown in Bold. The PM bus times also have a shaded background using a 30% tint of the bus route color.

- When developing art for sign type BC-6, schedule information shall be provided by the RTA in XML format. Bus timetables are individual InDesign files that are linked into both the BC-6 master file and each Bus Times (BT) page C3.8 InDesign file. Import the XML schedule information into the formatted individual InDesign timetable files provided by the RTA.

- New BC-6 graphics shall be developed using existing examples as precedents for layout, color, and content. Typography and symbol sizes and styles for new BC-6 signs shall match typography and symbols on existing BC-6 signs.
**General**

Sign type ID-1 is a single or double-sided aluminum panel that identifies a transit facility or location. Sign type ID-1 includes a map of the area around the facility or location that provides pedestrians with general location and transit information.

The graphic shown is for reference only. Final content for each sign type ID-1 shall vary with location. Typical content may include, but shall not be limited to, a simplified map of the area surrounding the transportation center or location, the location and type of transportation options available nearby, bus stops, nearby parking, and select landmarks and public buildings. The overall area included on the map may vary depending on the where the map is located. Typically, the area represented on the map should be about 1/2 of a mile on each side (.25 square miles), the transit facility or location identified in the sign header should be in the center of the map, and the destinations shown should all be within walking distance. Maps located in downtown Chicago may use a different scale. Destinations shown should be permanent and non-commercial locations. These may include, but are not limited to, parks, schools, and government and civic buildings.

Digital art for sign type ID-1 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required site-specific graphics using existing ID-1 signs as precedents for content, layout, and color. Examples of existing ID signs, digital template files for the ID-1 graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new ID-1 graphics must be reviewed and accepted by the RTA prior to production of the final signs. See page B1.14 for Design and Layout Notes.

1. **Aluminum Sign Panel**
   The sign substrate is a .08” thick solid aluminum panel. Single-sided signs shall have painted backs.

2. **Background**
   The overall background of the sign and the white text and graphics shall be an exterior-grade, premium cast white printable graphic film. Double sided panels shall have the printed film applied to both sides of the panel. Single sided panels shall have the printed film applied to the face side of the sign and the back side of the sign shall be painted color 1.

3. **Digitally Printed Graphics**
   The graphics shall be digitally printed at high resolution directly onto the graphic film using custom formulated, UV-resistant, exterior grade, opaque inks. The inks shall be formulated to match the colors specified and be compatible with the graphic film. Protect printed graphics with an exterior grade clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The graphic film and the clear protective overlaminate shall be trimmed flush with the edges of the sign.

4. **Holes for Mounting Hardware**
   Coordinate the location and size of mounting holes with how the sign will be mounted, the type of mounting hardware to be used, and with the printed graphics. All holes shall be drilled in the shop.

5. **Mounting Brackets**
   ID-1 signs can be mounted to new sign posts or to existing sign posts or other existing structures. Coordinate the type of mounting bracket with the type of sign post and other mounting conditions to be used at each installation location. See Section C4 for additional information on sign posts and sign mounting brackets.
**General Information**

**Sign Post and Sign Mounting Information:**
Sign type ID-2 can be wall mounted or mounted to new or existing sign posts. See Section C4 for additional information.

**Description**

**General**
Sign type ID-2 is a single or double-sided aluminum panel that identifies a transit facility or location. Sign type ID-2 includes a map of the area around the facility or location that provides pedestrians with general location and transit information.

The graphic shown is for reference only. Final content for each sign type ID-2 shall vary with location. Typical content may include, but shall not be limited to, a simplified map of the area surrounding the transportation center or location, the location and type of transportation options available nearby, bus stops, nearby parking, and select landmarks and public buildings. The overall area included on the map may vary depending on the where the map is located. Typically, the area represented on the map should be about 1/2 of a mile on each side (.25 square miles), the transit facility or location identified in the sign header should be in the center of the map, and the destinations shown should all be within walking distance. Maps located in downtown Chicago may use a different scale. Destinations shown should be permanent and non-commercial locations. These may include, but are not limited to, parks, schools, and government and civic buildings.

Digital art for sign type ID-2 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required site-specific graphics using existing ID-2 signs as precedents for content, layout, and color. Examples of existing ID signs, digital template files for the ID-2 graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new ID-2 graphics must be reviewed and accepted by the RTA prior to production of the final signs. See page B1.14 for Design and Layout Notes.

**Aluminum Sign Panel**
The sign substrate is a .08" thick solid aluminum panel. Single-sided signs shall have painted backs.

**Background**
The overall background of the sign and the white text and graphics shall be an exterior-grade, premium cast white printable graphic film. Double sided panels shall have the printed film applied to both sides of the panel. Single sided panels shall have the printed film applied to the face side of the sign and the back side of the sign shall be painted color 1.

**Digitally Printed Graphics**
The graphics shall be digitally printed at high resolution directly onto the graphic film using custom formulated, UV-resistant, exterior grade, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with an exterior grade clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The graphic film and the clear protective overlaminate shall be trimmed flush with the edges of the sign.

**Holes for Mounting Hardware**
Coordinate the location and size of mounting holes with how the sign will be mounted, the type of mounting hardware to be used, and with the printed graphics. All holes shall be drilled in the shop.

**Mounting Brackets**
ID-2 signs can be mounted to new sign posts or to existing sign posts or other existing structures. Coordinate the type of mounting bracket with the type of sign post and other mounting conditions to be used at each installation location. See Section C4 for additional information on sign posts and sign mounting brackets.
**Information Graphics**

**Transportation Center ID Sign Types ID-1 and ID-2**

**Design and Layout Notes**

- Each sign type ID-1 or ID-2 typically includes separate file components that are linked into a single, master product file using Adobe InDesign software. See the drawing above for additional information regarding the file components.
- Sign types ID-1 and ID-2 are single or double-sided aluminum panels that identify a transit facility or location. The headers for sign types ID-1 or ID-2 shall have the message “Transit Information” with the information symbol, as well as the transit facility or location’s name or description. The header content will change at different sites. The footer information does not vary.
- Sign types ID-1 and ID-2 include maps. The ID-1 map artwork is approximately 11” x 1’-1/2” and the ID-2 map artwork is approximately 1’-4" x 1’-4". The maps are centered horizontally and vertically in white area below the header. The maps shall typically show the facility listed in the header in the center of the map and the area around the facility within a radius of approximately 1/4-mile. Maps located in downtown Chicago may use a different scale and may include a “walking circle” centered on the transit facility; circle shall represent destinations within a 10-minute walk. Information shown on the maps includes the transit modes at the location, nearby bus stops bus stops with route numbers and boarding area letters (if used), drop-off locations, entrances, and accessibility information like ramps and elevators. Maps also include streets and parking facilities. Map graphics vary with location.
- Typically, the map graphics on the BA, ID, and MN signs at a given interagency location or facility shall use the same Illustrator base map. The map graphic for ID-1 and ID-2 signs located in downtown Chicago is similar to the map graphic used on MD-6 signs. Sign type-specific layers shall be added to each base map file as needed to meet the specific content requirements of each sign type.
- New ID-1 and ID-2 graphics shall be developed using existing examples as precedents for layout, color, and content. For each transit facility or location, the development of the base map graphics for sign type ID-1 and ID-2 must be coordinated with the map graphics for BA, ID, and MN signs as required. For ID-1 and ID-2 signs located in downtown Chicago, coordinate the development of the map graphics for the ID-1 and ID-2 signs with the map graphic for sign type MD-6 as required.
- Items on the maps are consistently colored. Color usage shall be as per the map color palette shown in Section A2 and as per the existing ID-1 and ID-2 maps.
- Street name and building label typography on the maps should be aligned and organized as much as possible. Typography and symbol sizes and styles for new ID-1 and ID-2 signs shall match typography and symbols on existing ID-1 and ID-2 signs.
**SECTION B1**

Information Graphics

**Transportation Center ID Sign Type ID-6**

**General Information**

**Description**

**General**

Sign type ID-6 identifies a transit facility or location. It includes a general, introductory map graphic of the area around the facility or location, along with a listing of the transit modes available there. The map includes basic orientation information and key locations and destinations. Sign type ID-6 content will vary with location. See page B1.16 for Design and Layout Notes.

**Identity Product Graphic**

The ID-6 identity map graphic and header graphics shall be digitally printed at high resolution using UV resistant inks directly onto a substrate specified by the RTA.

The graphic shown is for reference only. Final content for each sign type ID-6 shall vary with location. Typical content may include, but shall not be limited to, a schematic overall plan of the facility, the location and type of transportation options available, bus stops, facility entrances, pick-up and drop-off locations, nearby streets and parking. Digital art for sign type ID-6 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required site-specific graphics using existing ID-6 signs as precedents for content, layout, and color. Examples of existing ID-6 signs, digital template files for the ID-6 graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new ID-6 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) size shown applies when sign type ID-6 appears in a CWS-1 snap frame. The print size / lamination size may need to be adjusted to coordinate with the CWS snap frame, or to respond to specific conditions at each installation location.

Coordinate the ID-6 graphic and the overall panel size with the mounting conditions and hardware at each installation location.
SECTION B1
Information Graphics

Transportation Center ID
Sign Type ID-6

Design and Layout Notes

Description

General Design and Layout
Information - Sign Type ID-6

- Each sign type ID-6 typically includes separate file components that are linked into a single, master product file using Adobe InDesign software. See the drawing above for additional information regarding the file components.
- The header for sign type ID-6 includes the overall location name or location description as well as identification of the transit modes found at the location. The header content will change at different sites. Generally, the footer information does not vary except for the inclusion of the Amtrak logo at locations where appropriate.
- The identification sign map artwork is approximately 2'-1" x 2'-4", centered horizontally and vertically in white area below the header. Identification sign maps shall typically include the facility listed in the header and the area immediately around the facility within a radius of approximately 1/4-mile. Maps located in downtown Chicago may use a different scale and may include a “walking circle” centered on the transit facility; circle shall represent destinations within a 10-minute walk. Information shown on the maps includes the transit modes at the location, bus stops with route numbers and boarding area letters (if used), drop-off locations, entrances, and accessibility information like ramps and elevators. Maps also include streets and parking facilities. Map graphics vary with location.
- Typically, the map graphics on the BA, ID, and MN signs at a given interagency location or facility shall use the same Illustrator base map. The map graphic for ID-6 signs located in downtown Chicago is similar to the map graphic used on MD-6 signs. Sign type-specific layers shall be added to each base map file as needed to meet the specific content requirements of each sign type.
- New ID-6 graphics shall be developed using existing examples as precedents for layout, color, and content. For each transit facility or location, the development of the base map graphics for sign type ID-6 must be coordinated with the map graphics for BA, ID, and MN signs as required. For ID-6 signs located in downtown Chicago, coordinate the development of the map graphics for the ID-6 signs with the map graphic for sign type MD-6 as required.
- Items on the maps are consistently colored. Color usage shall be as per the map color palette shown in Section A2 and as per the existing ID-6 maps.
- Street name and building label typography on the maps should be aligned and organized as much as possible. Typography and symbol sizes and styles for new ID-6 signs shall match typography and symbols on existing ID-6 signs.
SECTION B1
Information Graphics

Downtown Chicago
Transit Map
Sign Type MD-6

General Information

Description

General
Sign type MD-6 provides a downtown Chicago map with select transit routes and landmarks included. Sign type MD-6 content will not vary with location. MD maps are based on artwork from the printed RTA Downtown Map. See page B1.18 for Design and Layout Notes.

Downtown Map Graphic
The MD graphic shall be digitally printed at high resolution using UV resistant inks directly onto a substrate specified by the RTA.

The graphic shown is for reference only. The content for sign type MD-6 shall not vary with location. Digital art for sign type MD-6 shall be provided by the RTA. If directed to do so by the RTA, incorporate content revisions into the existing art. These revisions may include, but shall not be limited to, changes to the Places of Interest Index, revisions to the CTA train route graphics, changes to bus route graphics, or changes to the destinations and locations shown on the map. All new MD-6 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) size shown applies when sign type MD-6 appears in a CWS-1 snap frame. The print size / lamination size may need to be adjusted to coordinate with the CWS snap frame, or to respond to specific conditions at each installation location.

Coordinate the MD-6 graphic and the overall panel size with the mounting conditions and hardware at each installation location.
**SECTION B1**

**Information Graphics**

**Downtown Chicago Transit Map**

**Sign Type MD-6**

**Design and Layout Notes**

---

**Elevation - Sign Type MD-6**

Scale: 1" = 1'-0"

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**Description**

**General Design and Layout Information – Sign Type MD-6**

- Each sign type MD-6 typically includes separate file components that are linked into a single, master product file using Adobe InDesign software. See the drawing above for additional information regarding the file components.
- MD-6 signs have a standard layout and generally do not change with location. Digital art for sign type MD-6 shall be provided by the RTA.
- MD-6 signs may require minor corrections or adjustments to reflect facility changes, bus service changes, or other service changes.
- The map graphics used on ID-1 and ID-2 signs located in downtown Chicago are based off the map graphic used on MD-6 signs. Coordinate the development of the map graphics for sign types ID-1 and ID-2 with the map graphic used on sign type MD-6 as required.
Information Graphics

Section B1

Legend

Neighborhood Map
Sign Type MN-6

General Information

Elevation - Sign Type MN-6
Scale: 1" = 1'-0"

Associated Sign Cabinet / Frame Information:
New Location and Installation:
Sign type MN-6 is typically mounted using a CWS-1 snap frame. For information on CWS-1, see Section B2.

Description

General
Sign type MN-6 identifies nearby neighborhood destinations, within walking distance. Sign type MN-6 content will vary with location. See page B120 for Design and Layout Notes.

Neighborhood Map Graphic
The MN-6 graphic shall be digitally printed at high resolution using UV resistant inks directly onto a substrate specified by the RTA.

The graphic shown is for reference only. Final content for each sign type MN-6 shall vary with location. Typical content may include, but shall not be limited to, a simplified map of the area surrounding the facility listed in the header, the location and type of transportation options available, bus stops, pick-up and drop-off locations, nearby parking, and select landmarks and destinations. The overall area included in the map may vary depending on the where the facility is located and nature and variety of destinations in the general vicinity.

Digital art for sign type MN-6 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required site-specific graphics using existing MN-6 signs as precedents for content, layout, and color. Examples of existing MN-6 signs, digital template files for the MN-6 graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new MN-6 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) size shown applies when sign type MN-6 appears in a CWS-1 snap frame. The print size / lamination size may need to be adjusted to coordinate with the CWS snap frame, or to respond to specific conditions at each installation location.

Coordinate the MN-6 graphic and the overall panel size with the mounting conditions and hardware at each installation location.
**SECTION B1 Information Graphics**

**Neighborhood Map Sign Type MN-6**

**Design and Layout Notes**

**Description**

**General Design and Layout Information – Sign Type MN-6**

- Each sign type MN-6 typically includes separate file components that are linked into a single, master product file using Adobe InDesign software. See the drawing above for additional information regarding the file components.

- The header for sign type MN-6 includes the overall location name or location description and symbols for the transit modes found at the location. The header content will change at different sites. Generally, the footer information does not vary except for the inclusion of the Amtrak logo at locations where appropriate.

- The neighborhood map artwork is approximately 2'-4" x 2'-3". The area represented on the map is typically about 3/4 of a mile on each side. The final size of the map shall be coordinated with the street and places of interest index that appears below the map. The map shall be centered horizontally in white area below the header. The top of the map shall be 1" below the header.

- Neighborhood maps include the facility and the area around the facility, including transit modes, bus stops (with route numbers), drop-off locations, and accessibility information like ramps and elevators. Maps also include streets (typically with street grid / directional numbers added as a separate element), natural landmarks like lakes and rivers, and permanent non-commercial facilities like public buildings, parking facilities, schools and universities, parks, and other nearby transit facilities. In some cases, select commercial facilities may be shown on the map and / or special districts or areas may be shown with a different background color. Maps shall include a "walking circle", 2'-1 1/2" in diameter, centered on the transit facility. Circle shall represent destinations within a 10-minute walk. Map graphics vary with location.

- Typically, the map graphics on the BA, ID, and MN signs at a given interagency location or facility shall use the same Illustrator base map. Sign type-specific layers shall be added to each base map file as needed to meet the specific content requirements of each sign type.

- New MN-6 graphics shall be developed using existing examples as precedents for layout, color, and content. For each transit facility or location, the development of the base map graphics for MN-6 signs must be coordinated with the map graphics for BA and ID signs as required.

- Items on the maps are consistently colored. Color usage shall be as per the map color palette shown in Section A2 and as per existing MN-6 maps.

- Street name and building label typography on the map should be aligned and organized as much as possible. Typography and symbol sizes and styles for new MN-6 signs shall match typography and symbols on existing MN-6 signs.

- The map shall have a coordinate grid with letters on the vertical edges and numbers on the horizontal edges.

- Below the map shall be a Places of Interest Index, a Street Index, and a Legend. The indices shall list the places and features on the map in alphabetical order and shall provide the appropriate alphanumeric map grid references.
1 Elevation - Sign Type TC-6

Scale: 1" = 1'-0"

Associated Sign Cabinet / Frame Information:
New Location and Installation:
Sign type TC-6 is typically mounted using a CWS-1 snap frame. For information on CWS-1, see Section B2.

Description

General
Sign type TC-6 provides information on regional Metra and CTA train connections and routes. Sign type TC-6 content will not vary with location except for the inclusion of the Amtrak logo or South Shore logo in the footer at locations where appropriate. Sign type TC-6 is typically a single Adobe Illustrator file.

Train Connections Graphic
The TC-6 graphic shall be digitally printed at high resolution using UV resistant inks directly onto a substrate specified by the RTA.

The graphic shown is for reference only. The content for each sign type TC-6 shall not vary with location. Digital art for sign type TC-6 shall be provided by the RTA. TC-6 signs may require minor corrections or adjustment to reflect facility changes, or other rail service changes. If directed to do so by the RTA, incorporate content revisions into the existing art. These revisions may include, but shall not be limited to, changes to the Stations Index, revisions to the train route diagrams, or changes to the stations shown in the route diagrams. All new TC-6 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) size shown applies when sign type TC-6 appears in a CWS-1 snap frame. The print size / lamination size may need to be adjusted to coordinate with the CWS snap frame, or to respond to specific conditions at each installation location.

Coordinate the TC-6 graphic and the overall panel size with the mounting conditions and hardware at each installation location.
**Information Graphics**

**Train Route Diagram**

**Sign Type TR-3**

### General Information

Sign type TR-3 is a single or double-sided sign that provides Metra train route information. Sign type TR-3 contents will vary with location.

Sign type TR-3 panels are used at locations where there is not sufficient wall space available to install a sign type TR-6 product or at locations where it may be inappropriate or otherwise unacceptable to use sign type TR-6.

See page B123 for Design and Layout Notes.

1. **Sign Panels and Graphics**

Materials for the production of sign type TR-3 shall be selected based on the location and indicated by the sign type code. Generally, at locations requiring quick turn-around, where the signs will be considered temporary, or where they will be mounted directly to glass, self adhesive printed vinyl will typically be used. At locations where the signs will be mounted directly to walls or to new or existing sign posts, the signs will typically be .080" aluminum with printed vinyl graphics. At locations other than downtown stations where signs will be wall mounted using SWD sign frames, the signs will typically be produced using 1/2" thick acrylic with printed vinyl graphics. At downtown stations where signs will be wall mounted using SWD sign frames, the signs will typically be produced using 1/2" thick Rhino panel, or an equivalent panel with embedded UV resistant graphics accepted by the RTA. At locations other than downtown stations where signs are wall or glass mounted using SWA or SWG sign frames, the signs will typically be produced using .080" aluminum with printed vinyl graphics, or 1/8" thick acrylic with printed vinyl graphics. At downtown stations where signs are wall or glass mounted using SWA or SWG sign frames, the signs will typically be produced using 1/8" thick Rhino panel, or an equivalent panel with embedded UV resistant graphics accepted by the RTA.

Vinyl graphics shall be digitally printed at high-resolution directly to an exterior-grade, premium cast white graphic film using custom formulated, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed vinyl graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlaminate shall be applied to cover the entire sign face and trimmed flush to the edges of the substrate / sign panel. Double sided signs with printed vinyl graphics shall have the printed film and overlaminate applied to both sides of the sign. Single sided signs shall have the printed film and overlaminate applied to the face side of the sign and the back side of the sign shall be painted color 1. Acrylic sign panels shall have returns painted color 1. Backs of single-sided aluminum signs shall be painted color 1.

2. **Holes for Mounting Hardware**

If mounting holes are required, coordinate the location and size of mounting holes with how the sign will be mounted, the type of mounting hardware to be used, and with the printed graphics. All holes shall be drilled in the shop.

3. **Mounting for Sign Type TR-3**

Sign type TR-3 can be wall or glass mounted directly or with a sign frame, mounted to new sign posts, or mounted to existing sign posts or other existing structures. Coordinate the type of mounting adhesives, brackets, and hardware used with the sign panel, sign frame, mounting surface, and other mounting conditions at each installation location. See Sections C4 and D1 for additional information.
**SECTION B1**

**Information Graphics**

**Train Route Diagram**

**Sign Type TR-3**

**Design and Layout Notes**

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### Elevation - Sign Type TR-3

Scale: $1^\circ = 1' - 0''$

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**Description**

**General Design and Layout**

**Information – Sign Type TR-3**

- Each sign type TR-3 typically includes separate file components that are linked into a single, master product file using Adobe InDesign software. See the drawing above for additional information regarding the file Components.

- Sign type TR-3 is a single or double-sided sign that provides Metra train route information. The header for sign type TR-3 shall have the message “Metra Trains” with the Metra trains symbol, and the Metra line name and abbreviation. The line name in the header will change to coordinate with the sign’s location. The footer information does not vary.

- The graphics shown are for reference only. Sign type TR-3 includes a route schematic. The route information for each of the Metra lines is different and each line is identified by a unique color. Graphic details will vary depending on where the sign is located, but each of the Metra lines shall always be shown in their entirety.

- Each route schematic will list all the stations along each line, in order. Typically, the route schematic will start with the northernmost or easternmost station at the top. The schematic will highlight the station in which the sign is located, and, depending on where the sign is located, indicate a typical direction of travel by highlighting the stations down the line. At stations where passengers can transfer to other rail services, the additional rail services shall be identified.

- In addition to the route schematic, sign type TR-3 includes a color-coded band above the schematic that, depending on the sign location, names line’s terminal stations, or identifies if the schematic shows service to or from Chicago, along with the name of the appropriate terminal station. For example, a TR-3 located at a station entrance that provides access to trains running both to and from Chicago on the BNSF line, would have a BNSF green band above the route schematic with the message “Chicago - Union Station (CUS) to Aurora.” A TR-3 located on a platform that provides access to trains to Chicago on the BNSF line, would have a BNSF green band with the message “To Chicago - Union Station (CUS).”

- Digital art for sign type TR-3 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required route schematics and location-specific graphics using existing TR-3 signs as precedents for layout. Basic route information, digital template files for the TR-3 graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new TR-3 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

- Coordinate the TR-3 graphic and the overall panel size.
**SECTION B1 Information Graphics**

**Train Route Diagram**

**Sign Type TR-6**

**General Information**

**Description**

**General**

Sign type TR-6 provides Metra train route information. Sign type TR-6 contents will vary with location.

The graphics shown are for reference only. Graphic details will vary depending on where the sign is located. Sign type TR-6 is the typical sign type for the display of Metra route schematics in CWS-1 snap frames.

Digital art for sign type TR-6 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required route schematics and location-specific graphics using existing TR-6 signs as precedents for layout. Basic route information, digital template files for the TR-6 graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new TR-6 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

See page B1.25 for Design and Layout Notes.

**Train Route Graphic**

Sign type TR-6 shall be digitally printed at high resolution using UV resistant inks directly onto a substrate specified by the RTA.

The typical visual opening (V.O.) size shown applies when sign type TR-6 appears in a CWS snap frame. The print size may need to be adjusted to coordinate with CWS snap frames or to respond to specific conditions at each installation location.

Coordinate the TR-6 graphic and the overall panel size with the mounting conditions and hardware at each installation location.
SECTION B1
Information Graphics

Train Route Diagram
Sign Type TR-6

Design and Layout Notes

Elevation - Sign Type TR-6
Scale: 1" = 1'-0"

Description

General Design and Layout Information - Sign Type TR-6

- Each sign type TR-6 typically includes separate file components that are linked into a single, master product file using Adobe InDesign software. See the drawing above for additional information regarding the file Components.
- Sign type TR-6 provides Metra train route information. The header for sign type TR-6 shall have the message “Metra Trains” with the Metra trains symbol, and, depending on the location, either the transit facility or location’s name, or the Metra line name and abbreviation. The facility / location name or the line name in the header will change to coordinate with the sign’s location. The footer information does not vary.
- The graphics shown are for reference only. Sign type TR-6 includes one or more route schematics. The route information for each of the Metra lines is different and each line is identified by a unique color. Graphic details will vary depending on where the sign is located, but each of the Metra lines shall always be shown in their entirety.
- Each route schematic will list all the stations along each line, in order. When TR-6 shows only one line, the route schematic will start with the northernmost or easternmost station at the top. When TR-6 is used on a platform in a station with more than one line, the route schematic shall reflect the typical direction of travel for trains boarded from the platform. When TR-6 shows more than one line and is not used on a platform, the route schematic shall start with the northernmost or westernmost stations on the left.
- The schematic will highlight the station in which the sign is located, and, depending on where the sign is located, indicate the typical direction of travel by highlighting the stations down the line. At stations where passengers can transfer to other rail services, the additional rail services shall be identified.
- In addition to the route schematics, sign type TR-6 includes color-coded bands above the schematics. On signs with only one line, the band may name the line’s terminal stations, or information indicating if the schematic shows service to or from Chicago, along with the name of the appropriate terminal station. For example, a TR-6 located at a station entrance that provides access to trains running both to and from Chicago on the BNSF line, would have a BNSF green band above the route schematic with the message “Chicago - Union Station (CUS) to Aurora.” If the TR-6 shows more than one route schematic, the color coded bands shall provide the Metra line name for each schematic along with the the line’s abbreviation.
- Coordinate the TR-6 graphics and the overall panel size.
**SECTION B1**  
Information Graphics

**Sign Types ID-1, ID-2, and TR-3**

Typical Mounting Hole Placement

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**Sign Types ID-1, ID-2, and TR-3**

**Typical Mounting Hole Placement**

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**Description**

**General**

Sign type ID-1, ID-2, and TR-3 panels can be side / flag mounted using CMFB or CMFS mounting hardware or center mounted using CMCB, CMCC, CMCS, CMWA, or CMWB mounting hardware. Position mounting holes in the panels as shown based on the mounting method used at each sign installation location. Dimensions shown are to the center of the holes.
SECTION B2
Frames for Information Graphics

Section Introduction

Description

General
Section B2 general reference.
CWS Series Snap Frames

Snap frames may be specified to hold non-illuminated information graphics.

The graphics are described in Section B1.

The snap frames can be mounted onto a freestanding structure or a wall structure.
SECTION B2
Frames for Information Graphics

Standard Snap Frame Size Summary

CWS-1
Snap Frame for Single Graphic Display (Typical)

Overall frame sizes are based on the Alpina Security FlipUp snap frame.

(V.O. = Visual Opening)

Frame fabrication and mounting as outlined in this Manual may need to be revised in order to coordinate with site conditions and maintain design intent.

See the Technical Specifications for additional information and requirements.
## Section B2 Frames for Information Graphics

### CWS-1 Snap Frame

#### Outside Elevation

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**Description**

**General**

The CWS-1 frame is a custom snap frame fabricated from aluminum and displays a single graphic panel.

The CWS-1 snap frame is used to display sign types BC-6, ID-6, MD-6, MN-6, TC-6, and TR-6.

The CWS snap frames mount to the SWM, SFM, or SPY sign structures.

(V.O. = Visual Opening)

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**1 Snap Frame**

CWS-1 shall be a custom-sized Alpina “FlipUp” “Deep Bottom” FF-RP snap frame cabinet with 1.75” round/ security edge profile, or an equivalent vandal-resistant aluminum snap frame accepted by the RTA. Frame is fabricated using single faced opening; four hinged, round profile, vandal-resistant security frame extrusions, 1/8” clear polycarbonate overlay window, and 0.040” black styrene backer sheet. An ABS spatula, or similar tool, required to open the vandal-resistant frame, shall be provided with each frame. Frame shall have a silver, exterior-grade, vandal-resistant, anodized aluminum finish.

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**2 Security Screws**

Frame shall have tamper-resistant, stainless steel, 10-24 pin-in hex drive security locking screws.

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**Associated Printed Graphics:**

The following information graphics are used with the CWS-1 snap frame:

- Sign Type BC-6 - See Section B1
- Sign Type ID-6 - See Section B1
- Sign Type MD-6 - See Section B1
- Sign Type MN-6 - See Section B1
- Sign Type TC-6 - See Section B1
- Sign Type TR-6 - See Section B1

**Associated Sign Structures:**

The CWS-1 snap frame can be mounted to the following sign structures:

- Sign Type SFM - See Section B3
- Sign Type SPY - See Section B3
- Sign Type SWM - See Section B4
**SECTION B2**

Frames for Information Graphics

CWS Series Snap Frames

Side Elevation

### Description

**General**

The CWS series frames are custom snap frames fabricated from aluminum and display a single graphic panel.

The CWS series snap frames mount to the SWM, SFM, or SPY sign structures.
SECTION B3
Freestanding Structures for Sign Frames / Cabinets

Section Introduction

Freestanding sign structure

Description

General
Section B3 general reference.
**SFM Series Sign Structure**  
Single sided structure with one frame  
The structure will hold CWS snap frames.  
The snap frames are described in Section B2.

**SFM Series Sign Structure**  
Double sided structure with one frame per side  
The structure will hold CWS snap frames.  
The snap frames are described in Section B2.

**SPY Series Sign Structure**  
Multi sided structure with multiple frames  
The structure will hold CWS snap frames.  
The snap frames are described in Section B2.

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**Description**

**General**  
There are a variety of types of freestanding sign structures. CWS snap frames are mounted to the freestanding sign structures.

Freestanding structures may be used in exterior or interior locations where there are no suitable wall mounting surfaces for the signs.
SECTION B3
Freestanding Structures
for Sign Frames / Cabinets

Sign Structure Size Summary

**Description**

**General**
The freestanding sign structures are available in a variety of sizes. Coordinate the size and type of freestanding structure used with the information to be displayed and the space available at the installation location.

To coordinate with site conditions and to maintain design intent, sign structure fabrication and mounting as outlined in these Guidelines may need to be revised.

See the Technical Specifications for additional information and requirements.

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**SFM-1.1 / SFM-1.2 Sign Structure**

- 3'-8" x 6'-10"

**SFM-2.1 / SFM-2.2 Sign Structure**

- 6'-8 1/2" x 6'-10"

**SFM-3.1 / SFM-3.2 Sign Structure**

- 9'-11" x 6'-10"

**SFM-4.1 / SFM-4.2 Sign Structure**

- 12'-11 1/2" x 6'-10"

**SPY-1.3 Sign Structure**

- 3'-10" x 6'-10"
**Section B3 Freestanding Structures for Sign Frames / Cabinets**

### SFM-1.1 Sign Structure

**Description**

**General**

The SFM-1.1 sign structure is freestanding and fabricated from stainless steel. One CWS snap frame can be mounted on one side of the SFM-1.1 sign structure. See page B3.5 for details of SFM-1.2 structures that have one frame mounted on each side. See page B3.6 for details of SFM structures that have more than one frame mounted on each side.

#### Stainless Steel Faces

The faces of the SFM-1.1 sign structure shall be fabricated from stainless steel. The faces shall have a brushed finish, horizontal grain. The faces shall be rigid, smooth, and flat. The faces shall be removable and shall be securely held in position by concealed, vandal-resistant hardware. No hardware shall be visible on the faces of the SFM-1.1 sign structure. The faces of the sign structure shall not have seams.

#### Frame Mounted to the Face of the SFM-1.1 Sign Structure

A CWS snap frame shall be properly, safely, and securely mounted to one face of the SFM-1.1 sign structure with concealed vandal-resistant hardware. All mounting hardware and components shall be suitable for exterior use. The mounting hardware shall allow for removal of the mounted sign frame for maintenance, repairs, and updates. Coordinate the fabrication of the sign structure with the components to be mounted to the structure. See page E4.3 for additional information regarding mounting frames to the sign structure.

#### Support Legs

The SFM-1.1 sign structure shall be properly, safely, and securely supported on stainless steel legs. The legs shall have a brushed finish, horizontal grain. The legs are to be closed at the top with flush, welded, stainless steel caps.

#### Threaded Hole for Lifting Eye

Flush top cap with threaded hole for lifting eye. Seal hole with flush stainless steel set screw and silicone after installation.

#### Structure Mounting

Provide all mounting hardware and materials as needed to properly, safely, and securely mount the SFM-1.1 sign structure. Coordinate the fabrication of the stainless steel legs with the structure mounting and site conditions. See pages B3.9 - B3.12 for additional information.

**Associated Frame Information:**

The following frames can be mounted to the SFM-1.1 Sign Structure: CWS snap frames, see Section B2.

**Associated Structure Mounting Information:**

For information on mounting the SFM-1.1 sign structure, see pages B3.9 - B3.12.
SECTION B3
Freestanding Structures for Sign Frames / Cabinets

SFM-1.2 Sign Structure

Associated Frame Information:
The following frames can be mounted to the SFM-1.2 Sign Structure:
CWS snap frames, see Section B2.

Associated Structure Mounting Information:
For information on mounting the SFM-1.2 sign structure, see pages B3.9 - B3.12.

Description

General
The SFM-12 sign structure is freestanding and fabricated from stainless steel. One CWS snap frame can be mounted on each side of the SFM-12 sign structure. See page B3.4 for details of SFM-11 structures that have one frame mounted on one side. See page B3.6 for details of SFM structures that have more than one frame mounted on each side.

Stainless Steel Faces
The faces of the SFM-12 sign structure shall be fabricated from stainless steel. The faces shall have a brushed finish, horizontal grain. The faces shall be rigid, smooth, and flat. The faces shall be removable and shall be securely held in position by concealed, vandal-resistant hardware. No hardware shall be visible on the faces of the SFM-12 sign structure. The faces of the sign structure shall not have seams.

Frames Mounted to the Faces of the SFM-1.2 Sign Structure
CWS snap frames shall be properly, safely, and securely mounted to both faces of the SFM-1.2 sign structure with concealed vandal-resistant hardware. All mounting hardware and components shall be suitable for exterior use. The mounting hardware shall allow for removal of the mounted sign frames for maintenance, repairs, and updates. Coordinate the fabrication of the sign structure with the components to be mounted to the structure. See page E4.3 for additional information regarding mounting frames to the sign structure.

Support Legs
The SFM-12 sign structure shall be properly, safely, and securely supported on stainless steel legs. The legs shall have a brushed finish, horizontal grain. The legs are to be closed at the top with flush, welded, stainless steel caps.

Threaded Hole for Lifting Eye
Flush top cap with threaded hole for lifting eye. Seal hole with flush stainless steel set screw and silicone after installation.

Structure Mounting
Provide all mounting hardware and materials as needed to properly, safely, and securely mount the SFM-1.2 sign structure. Coordinate the fabrication of the stainless steel legs with the structure mounting and site conditions. See pages B3.9 - B3.12 for additional information.
**SECTION B3**
Freestanding Structures for Sign Frames / Cabinets

**SFM-2, SFM-3, and SFM-4 Sign Structure**

**Description**

**General**
The SFM sign structure is freestanding and fabricated from stainless steel. Two or more CWS snap frames can be mounted on each side of the SFM sign structure shown on this page. See pages B3.4 and B3.5 for details of SFM structures that have one frame mounted.

**Stainless Steel Faces**
The faces of the SFM sign structure shall be fabricated from stainless steel. The faces shall be rigid, smooth, and flat, and have a horizontal brushed finish. The faces shall be removable and shall be securely held in position by concealed, vandal-resistant hardware. No hardware shall be visible on the faces of the SFM sign structure. The faces of the SFM sign structure shall have minimal seams. Indicate the location of any seams on the Shop Drawings.

**Frames Mounted to the Faces of the SFM Sign Structure**
CWS snap frames shall be properly, safely, and securely mounted to one or both faces of the SFM sign structure with concealed vandal-resistant hardware suitable for exterior use. The mounting hardware shall allow for removal of the mounted frames for maintenance, repairs, and updates. Coordinate the fabrication of the sign structure with the components to be mounted to the structure. See page E4.3 for additional information regarding mounting frames to the sign structure.

**Support Legs**
The SFM sign structure shall be properly, safely, and securely supported on stainless steel legs. The legs shall have a horizontal brushed finish. The legs are to be closed at the top with flush, welded, stainless steel caps. Based on final sign size, structural engineer to determine final support leg quantity and dimensions as required to properly, safely, and securely support the sign.

**Threaded Hole for Lifting Eye**
Flush top cap with threaded hole for lifting eye. Seal hole with flush stainless steel set screw and silicone after installation.

**Structure Mounting**
Provide all mounting hardware and materials as needed to properly, safely, and securely mount the SFM sign structure. Coordinate the fabrication of the stainless steel legs with the structure mounting and site conditions. See pages B3.9 - B3.12 for additional information.

**SFM Width**
SFM sign structures that accommodate two or more CWS snap frames are available in three standard widths to accommodate two, three, or four snap frames on one or both sides of the structure. In the Message Schedule, the Support Structure code indicates the number of frames to be mounted to the SFM sign structure, and if the structure is single or double sided. See Section A3 for details regarding the codes. The snap frames shall be positioned and spaced on the sign structure as shown. For each SFM size, provide any additional structural components and additional support legs needed to properly, safely, and securely support the structure and all the components mounted to the structure.

**Associated Frame Information:**
The following frames can be mounted to this SFM Sign Structure: CWS snap frames, see Section B2.

**Associated Structure Mounting Information:**
For information on mounting the SFM sign structure, see pages B3.9 - B3.12.
SECTION B3
Freestanding Structures for Sign Frames / Cabinets

SPY-1.3 Sign Structure

1 Elevation: SPY-1.3 Sign Structure
Scale: 1/2" = 1'-0"

Associated Frame Information:
The following frames can be mounted to the SPY-1.3 Sign Structure:
CWS snap frames, see Section B2.

2 Plan View - SPY-1.3 Sign Structure
Scale: 1/2" = 1'-0"

Associated Structure Mounting Information:
For information on mounting the SPY-1.3 sign structure, see pages B3.9 - B3.12.

Description

General
The SPY-1.3 sign structure is a freestanding, three-sided pylon fabricated from stainless steel. CWS snap frames can be mounted on each side of the structure.

Stainless Steel Faces
The faces of the SPY-1.3 sign structure shall be fabricated from stainless steel. The faces shall have a brushed finish, horizontal grain. The faces shall be rigid, smooth, and flat. The faces shall be removable and shall be securely held in position by concealed, vandal-resistant hardware. No hardware shall be visible on the faces of the SPY-1.3 sign structure. The faces of the sign structure shall not have seams.

Frames Mounted to the Faces of the SPY-1.3 Sign Structure
A CWS snap frame shall be properly, safely, and securely mounted to each of the faces of the SPY-1.3 sign structure with concealed vandal-resistant hardware. All mounting hardware and components shall be suitable for exterior use. The mounting hardware shall allow for removal of the mounted sign frames for maintenance, repairs, and updates. Coordinate the fabrication of the sign structure with the components to be mounted to the structure. See page E4.3 for additional information regarding mounting frames to the sign structure.

Support Legs
The SPY-1.3 sign structure shall be properly, safely, and securely supported on cylindrical stainless steel legs. The legs shall have a brushed finish, horizontal grain. The legs are to be closed at the top with flush, welded, stainless steel caps.

Threaded Hole for Lifting Eye
Flush top cap with threaded hole for lifting eye. Seal hole with flush stainless steel set screw and silicone after installation.

Structure Mounting
Provide all the mounting hardware and materials needed to properly, safely, and securely mount the SPY-1.3 sign structure. Coordinate the fabrication of the stainless steel legs with the structure mounting and site conditions. See pages B3.9 - B3.12 for additional information.
**Description**

1. **Stainless Steel Faces**
   The faces of the SFM and SPY sign structures shall be fabricated from stainless steel.

2. **Frames Mounted to the Faces of the SFM & SPY Sign Structures**
   CWS snap frames shall be properly, safely, and securely mounted to one or both sides of the sign structure with concealed vandal-resistant hardware. All mounting hardware and components shall be suitable for exterior use. The mounting hardware shall allow for removal of the mounted sign frames for maintenance, repairs, and updates. Coordinate the fabrication of the sign structure with the components to be mounted to the structure. See page E4.3 for additional information regarding mounting frames to the sign structure.

3. **Support Legs**
   The SFM and SPY sign structures shall be properly, safely, and securely supported on stainless steel legs. The legs shall have a brushed finish, horizontal grain. The legs shall be closed at the top with flush, welded, stainless steel caps.

4. **Internal Framing**
   Provide internal framing and bracing as needed for the SFM and SPY sign structures to be rigid and structurally sound and for the sign structure to be properly, safely, and securely mounted to various surfaces. The internal framing shall also properly, safely, and securely support any sign components which are mounted to the SFM and SPY sign structures.

5. **Structure Mounting**
   Provide all mounting hardware and materials as needed to properly, safely, and securely mount the SFM and SPY sign structures. Coordinate the fabrication of the stainless steel legs with the structure mounting and site conditions. See pages B3.9 - B3.12 for additional information.
**SECTION B3**
Freestanding Structures for Sign Frames / Cabinets

**SMFS Structure Mounting (Sleeved Legs)**

**Description**

**General**
Structure mounting SMFS is for securing ground mount sign structures at locations where site conditions are sloping or uneven and the flexibility provided by sleeved legs would be preferable to other mounting approaches. The SMFS can compensate for slopes up to approximately 5" across the width of the sign structure.

**1 Stainless Steel Legs From SFM or SPY Sign Structure**
Coordinate the SMFS fabrication with the materials, finishes, and construction of the SFM and SPY as required. The SFM or SPY legs shall sleeve over mounting stub posts. Coordinate the size of the SFM or SPY legs with the stub posts. The length of the sign structure legs may need to be adjusted to coordinate with site conditions and to keep the distance from the ground to any point along the bottom edge of the sign from exceeding 2'-3".

**2 SMFS Stub Posts**
Provide brushed stainless steel stub posts welded to stainless steel mounting flanges. The stub posts shall precisely sleeve within the SFM or SPY sign structure legs. Size the stub posts and mounting flanges as required to properly, safely, and securely support the sign structure and all the sign components mounted to the sign structure.

**3 Existing Pavement or New Concrete Foundations**
The SMFS can be used at locations with existing pavement or at locations where new foundations are required. Verify on site the conditions at each installation location. Coordinate the foundations and mounting hardware with the sign structure and with the existing conditions at each installation location. New concrete foundations shall be professionally engineered. Provide heavy-duty anchor bolts and assembly bolts as required to properly, safely, and securely anchor the sign structure and all the sign components mounted to the sign structure. Provide any additional concrete, bracing, framing, or other additional support components required to properly, safely, and securely support the entire sign structure and all the sign components mounted to the sign structure.

**4 Post Bolts**
Provide heavy duty stainless steel bolts with finished cap nuts as required to properly, safely, and securely secure the SFM or SPY sign structure to the stub posts.

**5 Anchor Bolts & Mounting Hardware**
Provide all anchor bolts and mounting hardware as needed to properly, safely, and securely mount the entire sign structure to the foundation or the existing pavement. Secure the stub posts to the anchor bolts with appropriate locking nuts. Provide appropriate acorn-type cap nuts, or similar finished cap nuts accepted by the RTA, to finish the tops of the anchor bolts.

**6 Install Signs Plumb and Level**
Coordinate the SFM and the SPY sign structure with the SMFS mounting so that the complete sign assembly is plumb and level. The distance from the ground to any point along the bottom of the sign structure shall not exceed 2'-3". Provide appropriate grout to fill any gaps between the flanges and the tops of the foundations or pavement as required.

**Associated Sign Structures:**
The SMFS structure mounting can be used with the following sign structures:
- SFM-1.1, see page B3.4 for additional information.
- SFM-1.2, see page B3.5 for additional information.
- SFM Variable Width, see page B3.6 for additional information.
- SPY-1.3, see page B3.7 for additional information.

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**RTA Interagency Signage Standards Manual**
Date: 08.29.14
Revised: 07.22.16, 04.17.19

Section B3
B3.9
**Description**

**General**
Structure mounting SMAB is for securing ground mount sign structures to existing pavement.

**Stainless Steel Legs From SFM or SPY Sign Structure**
Coordinate the fabrication of the sign structure with the sign mounting as needed to maintain the correct overall sign structure height and to not exceed the maximum distance from the ground to the bottom of the sign. Coordinate SMAB with the site conditions and the materials, finishes, and construction of the stainless steel legs as required. Prior to fabrication, inform the RTA of any conditions or locations that would cause the maximum distance from the ground to the bottom of the sign to be exceeded. The length of the sign structure legs may need to be adjusted to coordinate with the site conditions and to keep the distance from the ground to any point along the bottom of the sign from exceeding 2'-3".

**Mounting Flanges**
Provide a stainless steel mounting flange for each of the legs of the sign structure. Weld the mounting flanges to the bases of the stainless steel legs. All welded frame joins shall be carefully ground smooth and finished as needed for a seamless appearance and continuous finish. Size the mounting flanges as required to properly, safely, and securely support the entire sign.

**Existing Floor or Pavement**
Verify on site the conditions at each installation location. Coordinate the sign anchor bolts and mounting hardware with the conditions at each installation location as required to properly, safely, and securely install the entire sign.

**Anchor Bolts & Mounting Hardware**
Provide all anchor bolts and mounting hardware as needed to properly, safely, and securely mount the entire sign. Coordinate the anchor bolts and mounting hardware with the mounting surface and site conditions as required. Install signs plumb and level. Provide appropriate systems and set ups to accommodate uneven surfaces at installation locations. Provide leveling hardware as required. Secure the sign structure to the anchor bolts with appropriate locking nuts. Provide appropriate stainless steel acorn-type cap nuts, or similar finished stainless steel cap nuts accepted by the RTA, to finish the tops of the anchor bolts. Provide any additional bracing, framing, or other additional support and mounting components required to properly, safely, and securely support and install the entire sign.

**Non-shrink Grout**
Provide appropriate non-shrink grout to fill the space between the flanges and the tops of the finished floor or pavement as required.
**SMCF Structure Mounting**

**General**
Structure mounting SMCF is for securing ground mount sign structures at locations where new 4'-0" deep concrete foundations are required.

1. **Stainless Steel Legs From SFM or SPY Sign Structure**
Coordinate the fabrication of the sign structure with the sign mounting and foundation as needed to maintain the correct overall sign structure height and to not exceed the maximum distance from the ground to the bottom of the sign. Coordinate SMCF with the site conditions and the materials, finishes, and construction of the stainless steel legs as required. Prior to fabrication, inform the RTA of any conditions or locations that would cause the maximum distance from the ground to the bottom of the sign to be exceeded. The length of the sign structure legs may need to be adjusted to coordinate with the site conditions and to keep the distance from the ground to any point along the bottom of the sign from exceeding 2'-3".

2. **Mounting Flanges**
Provide a stainless steel mounting flange for each of the legs of the sign structure. Weld the mounting flanges to the bases of the stainless steel legs. All welded frame joins shall be carefully ground smooth and finished as needed for a seamless appearance and continuous finish. Size the mounting flanges as required to properly, safely, and securely support the entire sign.

3. **New Concrete Foundation**
Provide new, professionally engineered concrete foundations. Coordinate the foundations with the sign structure and with the existing conditions at each installation location. At locations where new foundations are in walkways, the tops of the foundations shall be flush with the surrounding pavement. Verify on site the conditions at each installation location. Provide heavy-duty stainless steel anchor bolts set into the foundations as required to properly, safely, and securely anchor the entire sign. At all locations, carefully finish exposed portions of the foundations to provide a neat, smooth, and finished appearance. Provide expansion joints and expansion joint filler between foundations and adjoining paving as required to minimize cracking. Provide any additional bracing, framing, or other additional support and mounting components required to properly, safely, and securely support and install the entire sign. See page B3.12 for additional information.

4. **Mounting Hardware**
Provide all mounting hardware as needed to properly, safely, and securely mount the entire sign. Coordinate the mounting hardware with the mounting surface and site conditions as required. Install signs plumb and level. Provide appropriate systems and set ups to accommodate uneven surfaces at installation locations. Provide leveling hardware as required. Secure the sign structure to the anchor bolts with appropriate locking nuts. Provide appropriate stainless steel acorn-type cap nuts, or similar finished stainless steel cap nuts accepted by the RTA, to finish the tops of the anchor bolts.

5. **Non-shrink Grout**
Provide appropriate non-shrink grout to fill the space between the flanges and the tops of the foundations as required.

**Associated Sign Structures:**
The SMCF structure mounting can be used with the following sign structures:
- SFM-1.1, see page B3.4 for additional information.
- SFM-1.2, see page B3.5 for additional information.
- SPY-1.3, see page B3.7 for additional information.

**Reference Elevation - SMCF**
Scale: 3/8" = 1'-0"

**Detail - SMCF**
Scale: NTS
See page B3.12 for additional information
3/4" CHAMFER
(NO CHAMFER
WHEN FLUSH
WITH GROUND
LINE)

0" to 2"

**New Concrete Foundation for SMCF Mounting – Isometric View**

Scale: NTS

See page B3.11 for additional information on SMCF structure mounting.

**Description**

**General**

If required, provide new, professionally engineered concrete foundations. Coordinate the size and type of foundations with the sign structure and with the existing conditions at each installation location. Verify on site the conditions at each installation location. At locations where new foundations are in walkways, the tops of the foundations shall be flush with the surrounding pavement. Provide heavy-duty stainless steel anchor bolts as required to properly, safely, and securely anchor the entire sign. At all locations, carefully finish exposed portions of the foundations to provide a neat, smooth, and finished appearance. Provide expansion joints and expansion joint filler between foundations and adjoining paving as required to minimize cracking. Provide any additional bracing, framing, or other additional support and mounting components required to properly, safely, and securely support and install the entire sign.

See the Technical Specifications for additional information and requirements.
**SECTION B3**
Freestanding Structures for Sign Frames / Cabinets

**Cut Out Letters Elevation**

**Associated Sign Structures:**
- SFM-1.1, see page B3.4 for additional information.
- SFM-1.2, see page B3.5 for additional information.
- SFM Variable Width, see page B3.6 for additional information.
- SPY-1.3, see page B3.7 for additional information.

**Description**

**General**
SFM and SPY sign structures include cut out acrylic letters and a milled acrylic symbol panel with a stainless steel insert attached directly to the structure.

**Cut Out Letters**
1/4" thick letters water jet cut from acrylic. Letters shall have a painted finish. Letters shall be permanently pin mounted to the sign structure.

**Milled Acrylic Symbol Panel With Stainless Steel Insert**
1/4" thick milled acrylic symbol panel with 1/8" thick raised symbol and border. The acrylic panel shall have painted finish (all surfaces) and shall be permanently pin mounted to the sign structure. Symbol background shall be a cut-out 16 gauge stainless steel insert with a horizontal brushed finish. Stainless steel shall be precisely cut-out to fit within the acrylic panel and around the raised symbol.

**Vinyl Graphics**
In certain cases, it will be desired to convert a SFM sign structure that was originally fabricated as single-sided, with letters and symbol installed on one side, to a double-sided structure. In these instances, the letters and symbol shall be added to the second side of the sign structure as cut-out, applied, opaque graphic sheeting. The vinyl letters and symbol shall be the same size and position as the acrylic letters and symbol.
**SECTION B3**  
Freestanding Structures for Sign Frames / Cabinets

### Cut Out Letters Section

**Detail Section - Cut Out Letters Mounted to SFM or SPY Sign Structures**

*Scale: 1/2" = 1"*

**Associated Sign Structures:**
- SFM-1.1, see page B3.4 for additional information.
- SFM-1.2, see page B3.5 for additional information.
- SFM Variable Width, see page B3.6 for additional information.
- SPY-1.3, see page B3.7 for additional information.

**Description**

**General**
Each SFM and SPY sign structure includes cut out acrylic letters and a milled acrylic symbol panel with a stainless steel insert attached directly to the structure.

**1 SFM or SPY Sign Structure**
Coordinate the construction of the SFM and SPY sign structures so that the pin mounted cut out letters and milled acrylic symbol panel can be properly, safely, securely, and permanently mounted to the faces of the structures.

**2 Stainless Steel Mounting Pins**
Provide threaded stainless steel mounting pins as needed to properly, safely, securely, and permanently mount the cut out letters and milled acrylic symbol panel. Coordinate the quantity, size, and length of the pins with the size and weight of the letters and symbol panel and the construction of SFM and SPY sign structures. Properly, safely, securely, and permanently secure the pins to the backs of the letters and symbol panel.

**3 Stainless Steel Lock Nuts**
Provide the appropriate stainless steel lock nuts as needed to work with the mounting pins to properly, safely, securely, and permanently secure the cut out letters and milled acrylic symbol panel. Add silicone adhesive to the end of the mounting pins to lock the nuts in position.

**4 Letters and Milled Acrylic Symbol Panel with Stainless Steel Insert**
1/4" thick water jet cut acrylic letters and 1/4" thick milled acrylic symbol panel with cut-out 16 gauge stainless steel insert.
**SECTION B4**

Wall Mount Structures for Sign Frames / Cabinets

**Section Introduction**

---

**Description**

**General**

Section B4 general reference.
SECTION B4
Wall Mount Structures for Sign Frames / Cabinets

Sign Structure Overview

Description

General
SWM sign structures are wall mounted. CWS snap frames are mounted to the SWM sign structures. SWM sign structures may be used in exterior or interior locations where there are suitable wall mounting surfaces for the signs.
SECTION B4
Wall Mount Structures for Sign Frames / Cabinets

Sign Structure Size Summary

**Description**

**General**
The SWM series sign structures are available in a variety of sizes. Coordinate the size and type of wall mounted structure used with the information to be displayed and the space available at the installation location.

To coordinate with site conditions and to maintain design intent, sign structure fabrication and mounting as outlined in these Guidelines may need to be revised.

See the Technical Specifications for additional information and requirements.
**Description**

**General**
The SWM-1.1 sign structure is wall mounted and fabricated from stainless steel. One CWS snap frame can be mounted to the SWM-1.1 sign structure. See page B4.5 for details of SWM structures that have more than one frame mounted.

**Stainless Steel Face and Returns**
The face and returns of the SWM-1.1 shall be fabricated from stainless steel. The SWM-1.1 face and returns shall have a brushed finish, horizontal grain. The face and returns shall be rigid, smooth, and flat. The face shall be removable and shall be securely held in position by concealed, vandal-resistant hardware. No hardware shall be visible on the face of the SWM-1.1 sign structure. The face of the SWM-1.1 sign structure shall not have seams.

**Frame Mounted to the Face of the SWM-1.1 Sign Structure**
A CWS snap frame shall be properly, safely, and securely mounted to the face of the SWM-1.1 sign structure with concealed vandal-resistant hardware. All mounting hardware and components shall be suitable for exterior use. The mounting hardware shall allow for removal of the mounted sign frame for maintenance, repairs, and updates. Coordinate the fabrication of the sign structure with the components to be mounted to the structure. See page E4.3 for additional information regarding mounting frames to the sign structure.

**Wall Surface**
The SWM-1.1 sign structure shall be mounted to a variety of wall surfaces. Prior to fabrication, verify on site the existing wall materials, construction, and conditions. Verify if any additional structural elements, bracing, or other materials are needed to safely, properly, and securely mount the SWM-1.1 sign structure.

**Associated Frame Information:**
The following frames can be mounted to the SWM-1.1 Sign Structure: CWS snap frames, see Section B2.
**SECTION B4**

**Wall Mount Structures for Sign Frames / Cabinets**

**SWM Variable Width Sign Structure**

---

### General

The SWM sign structure is wall mounted and fabricated from stainless steel. Two or more CWS snap frames can be mounted to the SWM sign structure shown on this page. See page B4.4 for details of SWM structures that have one frame mounted.

### Stainless Steel Face and Returns

The face and returns of the SWM sign structure shall be fabricated from stainless steel and shall have a horizontal brushed finish. The face and returns shall be rigid, smooth, and flat. The face shall be removable and shall be securely held in position by concealed, vandal-resistant hardware. No hardware shall be visible on the face of the SWM sign structure. The face of the SWM sign structure shall have minimal seams. Indicate the location of any seams on the Shop Drawings.

### Frames Mounted to the Face of the SWM Sign Structure

CWS snap frames shall be properly, safely, and securely mounted to the face of the SWM sign structure with concealed vandal-resistant hardware. All mounting hardware and components shall be suitable for exterior use. The mounting hardware shall allow for removal of the mounted sign frames for maintenance, repairs, and updates. Coordinate the fabrication of the sign structure with the components to be mounted to the structure. See page E4.3 for additional information regarding mounting frames to the sign structure.

### SWM Width

SWM sign structures that accommodate two or more CWS snap frames are available in three standard widths to accommodate two, three, or four snap frames on the structure. In the Message Schedule the Support Structure code indicates the number of frames to be mounted to the SWM sign structure. See Section A3 for details regarding the codes. The snap frames shall be positioned and spaced on the sign structure as shown.
**Section - SWM Sign Structure**

**Scale: 1 1/2" = 1'-0"**

### Description

**General**
The SWM sign structures are wall mounted and fabricated from stainless steel. CWS snap frames can be mounted to the faces of the SWM sign structures.

**Wall Surface**
The SWM sign structures shall be mounted to a variety of wall surfaces. Prior to fabrication, verify on site the existing wall materials, construction, and conditions. Verify if any additional structural elements, bracing, or other materials may be needed to properly, safely, and securely mount the SWM sign structures.

**Stainless Steel Face and Returns**
The faces and returns of the SWM sign structures shall be fabricated from stainless steel.

**Frames Mounted to the Face of the SWM Sign Structure**
CWS snap frames shall be safely, properly, and securely mounted to the face of the SWM sign structure. All mounting hardware and components shall be suitable for exterior use. The mounting hardware shall allow for removal of the mounted sign frames for maintenance, repairs, and updates. See page E1.4 for additional information regarding mounting frames to the sign structure.

**Concealed Wall Mounting**
Provide all mounting hardware and materials as needed to properly, safely, and securely mount the SWM sign structures to various wall surfaces. In addition to the SWM sign structures and the required mounting hardware, provide any additional structural elements, bracing, or other materials that may be needed to properly, safely, and securely support the sign structures and all the sign components mounted to the sign structures. All mounting hardware and components shall be vandal-resistant and suitable for exterior use. Mounting hardware shall not be visible.

**Concealed Internal Framing**
Provide internal framing and bracing as needed for the SWM sign structures to be rigid and structurally sound and for the SWM sign structures to be properly, safely, and securely mounted to various wall surfaces. The internal framing shall also properly, safely, and securely support any sign components which are mounted to the SWM sign structures.

1. Concealed, vandal-resistant hardware shall secure the stainless steel face and returns to the frame. No hardware shall be visible on the panel sign face. The sign face shall be removable.

2. See page B4.7 for additional information.

3. Provide drain holes as required to prevent water from collecting inside the structure.
SECTION B4
Wall Mount Structures for Sign Cabinets / Frames

Cut Out Letters
Elevation

Detailed Elevation - Cut Out Letters on SWM-1.1 Sign Structure
Scale: 3/4" = 1'-0"

Associated Sign Structures:
SWM-1.1, see page B4.4 for additional information.
SWM Variable Width, see page B4.5 for additional information.

Description

General
SWM sign structures include cut out acrylic letters and a milled acrylic symbol panel with a stainless steel insert attached directly to the structure.

1 Cut Out Letters
1/4" thick letters water jet cut from acrylic. Letters shall have a painted finish. Letters shall be permanently pin mounted to the sign structure.

2 Milled Acrylic Symbol Panel With Stainless Steel Insert
1/4" thick milled acrylic symbol panel with 1/8" thick raised symbol and border. The acrylic panel shall have painted finish (all surfaces) and shall be permanently pin mounted to the sign structure. Symbol background shall be a cut-out 16 gauge stainless steel insert with a horizontal brushed finish. Stainless steel shall be precisely cut-out to fit within the acrylic panel and around the raised symbol.
SECTION B4
Wall Mount Structures for Sign Cabinets / Frames

Cut Out Letters Section

1 Detail Section - Cut Out Letters Mounted to SWM Sign Structures
   Scale: 1/2" = 1"

Associated Sign Structures:
SWM-1.1, see page B4.4 for additional information.
SWM Variable Width, see page B4.5 for additional information.

Description

General
Each SWM sign structure includes cut out acrylic letters and a milled acrylic symbol panel with a stainless steel insert attached directly to the structure.

1 SWM Sign Structure
Coordinates the construction of the SWM sign structure so that the pin mounted cut out letters and milled acrylic symbol panel can be properly, safely, securely, and permanently mounted to the face of the structure.

2 Stainless Steel Mounting Pins
Provide threaded stainless steel mounting pins as needed to properly, safely, securely, and permanently mount the cut out letters and milled acrylic symbol panel. Coordinate the quantity, size, and length of the pins with the size and weight of the letters and symbol panel and the construction of SWM sign structure. Properly, safely, securely, and permanently secure the pins to the backs of the letters and symbol panel.

3 Stainless Steel Lock Nuts
Provide the appropriate stainless steel lock nuts as needed to work with the mounting pins to properly, safely, securely, and permanently secure the cut out letters and milled acrylic symbol panel. Add silicone adhesive to the end of the mounting pins to lock the nuts in position.

4 Letters and Milled Acrylic Symbol Panel with Stainless Steel Insert
1/4" thick water jet cut acrylic letters and 1/4" thick milled acrylic symbol panel with cut-out 16 gauge stainless steel insert.
PART C

Bus Stop Signs
Bus Boarding Signs
Bus Area, Bus Times Product
Post & Hardware

Introduction

**Description**

**General**

Part C general reference.
**Section Introduction**

**Description**

**General**

Section C1 General Reference.

---

**Bus Stop sign**

**Bus Times**

Joliet Station

<table>
<thead>
<tr>
<th>Route</th>
<th>Departure Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSES</td>
<td></td>
</tr>
<tr>
<td>508</td>
<td>509</td>
</tr>
<tr>
<td>509</td>
<td>7:10  7:40  8:10 9:10 10:10 11:10 12:10 1:10 2:10 3:10 3:40 4:10 4:40 5:10 5:40 6:10 7:10 8:10 9:10 10:10 11:10 12:10 1:10 2:10 3:10 4:10 5:10 6:10 7:10 8:10 9:10 10:10 11:10 12:10 1:10 2:10 3:10</td>
</tr>
</tbody>
</table>

---

**Departure times from Bus Stop**

---

**YOU ARE HERE Jefferson St**

**Approximate travel time**

- 507: 7 mins
- 509: 3 mins
- 508: 6 mins
- 507: 16 mins
- 509: 19 mins
- 508: 7 mins
- 507: 11 mins
- 509: 8 mins
- 508: 12 mins
- 507: 16 mins
- 509: 20 mins

---

**Route terminus**

**Legend**

- ➠ Transfer to/from other Buses
 SECTION C1
Bus Stop Signs

Sign Type Overview

Description

General
The BS series sign types identify bus stops and provide bus route information.
**Description**

**General**

The BS series sign types are available in two sizes.

*Sign Type BS-1*

*Sign Type BS-2*
### SECTION C1
**Bus Stop Signs**

#### Sign Types BS-1 and BS-2

**General Information**

Sign types BS-1 and BS-2 are double sided panels that identify bus stops and provide bus route numbers and information. The information displayed on each BS sign will be unique. The messages shown are for reference only. Digital art for sign type BS may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required site-specific graphics using existing BS signs as precedents for layout. Digital template files, base art files for the header and footer graphics, and bus schedule information shall be supplied by the RTA. All new BS graphics must be reviewed and accepted by the RTA prior to production of the final signs. See the Technical Specifications for additional information. See page C1.5 for Design and Layout Notes.

**Description**

#### Aluminum Sign Panel

The sign substrate is a .080" thick solid aluminum panel with 1.5" radius corners.

#### Reflective Background

The overall background of the sign and the white text and graphics shall be printable white 3M Engineer Grade Reflective Sheeting or an equal reflective film accepted by the RTA.

#### Digitally Printed Graphics

The graphics shall be digitally printed directly onto the reflective sheathing using custom formulated UV-resistant, exterior-grade inks. Colors shall be transparent, black shall be opaque. The inks shall be formulated to be compatible with the reflective sheathing, match the colors specified, and preserve the sheeting reflectivity. Protect the printed graphics with an exterior grade clear protective anti-graffiti overlaminate that is compatible with the reflective sheeting and the printed graphics. The reflective sheeting and the clear overlaminate shall be trimmed flush with the edges of the sign.

#### Holes for Mounting Hardware

Coordinate the location and size of mounting holes with the type of mounting bracket and other mounting hardware to be used with the sign. All holes shall be drilled in the shop.

#### Mounting Brackets/Hardware

See Section C4 for information on the mounting brackets and hardware to be used with sign type BS.

---

**Elevation - Sign Type BS-1**

Scale: 1 1/2" = 1'-0"

For locations where BS series signs are mounted to new sign posts, see Section C4 for information on the posts and the sign mounting brackets and hardware.

**Elevation - Sign Type BS-2**

Scale: 1 1/2" = 1'-0"

For locations where BS series signs are mounted to existing sign posts or other existing structures, see Section C4 for information on the sign mounting brackets and hardware.
SECTION C1
Bus Stop Signs

Sign Types BS-1 and BS-2

Design and Layout Notes

**Description**

**General Design and Layout Information – BS Signs**

- Digital art for new BS signs shall be prepared using Adobe Illustrator.
- Headers and footers for all BS signs have a standard layout. The information shown in the headers and footers does not vary.
- Large CTA and Pace logos are 4 1/2" high. Logos are centered in area above the route listings. If both CTA and Pace bus routes serve the stop, then both logos appear centered in the band, spaced 2 5/8" apart.
- Bus route numbers are aligned to the right. Bus routes are presented in numerical order.
- CTA and Pace logos appear to the right of the bus route numbers. The tops of the logos align with the top of the typography.
- Bus route names and destinations appear to the right of the logos. Text describing the bus route destinations appears below the bus route names. Route names appear in Bold and route destinations appear in Roman.
- Route names and route destination descriptions should be as consistent as possible with the destination descriptions provided in Pace and CTA printed schedules. If route names or destination descriptions need to be edited in order to fit on the sign, the edited description should match the printed description as closely as possible.
- A 1" margin on either side of the sign panel should be kept clear of route numbers and route description text in order to prevent the numbers or text from being obscured by the panel mounting brackets. If it is absolutely necessary for numbers or text to run into the 1" margin, verify that the numbers or text will not be obscured by the mounting brackets.
- At bus stop locations that serve a large number of bus routes, an additional bus stop sign may need to be added in order to display all of the bus routes. For each sign, the same information shall appear on both sides of the sign.
- Select the smallest sign required to display the bus routes. If the routes do fit on sign type BS-1, use sign type BS-2. If the routes do not fit on BS-2, a second BS-2 panel shall be added. At locations where more than one bus stop sign is required, all the signs shall be the same size. Typography and symbol sizes and styles for new BS signs shall match typography and symbols on existing BS signs.
**SECTION C1**  
**Bus Stop Signs**

**Sign Types BS-1 and BS-2**

**Mounting Bracket Hole Placement**

---

### Description

**General**

Sign types BS-1 and BS-2 are double sided panels that identify bus stops and provide bus route numbers and information. The information displayed on each BS sign will be unique.

The messages shown are for reference only.
Description

General
Section C2 General Reference.
SECTION C2
Bus Boarding Signs

Sign Type Overview

**Sign Type BB-1**
Bus Boarding Area Identification Post
Topper

Sign type BB-1 is typically used when new posts are provided.

**Sign Type BB-2**
Bus Boarding Area Identification Flag

Sign type BB-2 is typically used where new signs are mounted to existing posts, columns, or walls.

**Sign Type BB-3**
Combination Bus Stop and Bus Boarding Area Identification Flag

Sign type BB-3 is typically used when it is not possible to install a BB-1 or BB-2 sign.

**Description**

**General**
Sign type BB is used at bus stop locations where lettered boarding areas are to be identified.
SECTION C2
Bus Boarding Signs

Standard Size Summary

**Description**

**General**

Sign type BB is available in two sizes.
**SECTION C2**  
*Bus Boarding Signs*

**Sign Type BB-1**

**General Information**

**Elevation - Sign Type BB-1**

Scale: 3" = 1'-0"

**Sign Post and Sign Mounting Information:**  
Sign type BB-1 is typically used at locations using new sign posts. See Section C4 for information on the posts and the sign mounting brackets and hardware.

**Description**

**General**

Sign type BB-1 are aluminum, double sided panels that identify lettered bus boarding areas. The messages shown are for reference only. See the Message Schedule for the actual content scheduled for each sign type BB-1 location. Digital art for sign type BB-1 may be provided by the RTA. When directed to do so by the RTA, develop the required graphics using Adobe Illustrator. Symbol art shall be provided by the RTA.

**Aluminum Sign Panel**

The sign substrate is a .080" thick solid aluminum panel.

**Mounting Brackets / Hardware**

See Section C4 for information on the mounting brackets and hardware to be used with sign type BB-1.

**Background**

The overall background of the sign and the white text and graphics shall be an exterior-grade, premium, cast, white printable graphic film. The film shall be applied to both sides of the sign panel.

**Mounting Tab**

Coordinate the mounting tab with the mounting bracket to be used with the sign.

**Digitally Printed Graphics**

The graphics shall be digitally printed at high resolution directly onto the graphic film using custom formulated, exterior grade, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlaminate shall be applied to cover the entire sign face and trimmed flush to the edges of the sign panel.
**Sign Type BB-2**

**General Information**

1. **Elevation - Sign Type BB-2**
   
   Scale: 3" = 1'-0"

   **Sign Post and Sign Mounting Information:**
   
   For locations where sign type BB-2 signs are mounted to new sign posts, see Section C4 for information on the posts and the sign mounting brackets and hardware.

   For locations where sign type BB-2 signs are mounted to existing sign posts or other existing structures, see Section C4 for information on the sign mounting brackets and hardware.

**Description**

**General**

Sign type BB-2 are aluminum, double sided panels that identify lettered bus boarding areas. The messages shown are for reference only. See the Message Schedule for the actual content scheduled for each sign type BB-2 location. Digital art for sign type BB-2 may be provided by the RTA. When directed to do so by the RTA, develop the required graphics using Adobe Illustrator. Symbol art shall be provided by the RTA.

1. **Aluminum Sign Panel**
   
   The sign substrate is a .080" thick solid aluminum panel with 1.5" radius corners.

2. **Mounting Brackets / Hardware**

   See Section C4 for information on the mounting brackets and hardware to be used with sign type BB-2.

3. **Background**

   The overall background of the sign and the white text and graphics shall be an exterior-grade, premium, cast, white printable graphic film. The film shall be applied to both sides of the sign panel.

4. **Digitally Printed Graphics**

   The graphics shall be digitally printed at high resolution directly onto the graphic film using custom formulated, exterior grade, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlamine shall be applied to cover the entire sign face and trimmed flush to the edges of the sign panel.

5. **Holes for Mounting Hardware**

   Coordinate the location and size of mounting holes with the type of mounting bracket and other mounting hardware to be used with the sign. All holes are to be drilled in the shop.
SECTION C2
Bus Boarding Signs

Sign Type BB-3

General Information

General
Sign type BB-3 is a double sided panel that identifies bus stops and provides bus route numbers and information. The sign also identifies bus boarding areas. BB-3 signs are typically installed at locations where a BB-1 or BB-2 sign cannot be used. The information displayed on each BB-3 sign will be unique. The messages shown are for reference only. Digital art for sign type BB-3 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required site-specific graphics using existing BB-3 signs as precedents for layout. Digital template files, base art files for the header and footer graphics, and bus schedule information shall be supplied by the RTA. BB-3 signs use the same header, footer, and bus route layout as BS-1 and BS-2 signs. All new BB-3 graphics must be reviewed and accepted by the RTA prior to production of the final signs. See the Technical Specifications for additional information.

1 Aluminum Sign Panel
The sign substrate is a .080" thick solid aluminum panel with 1.5" radius corners.

2 Reflective Background
The overall background of the sign and the white text and graphics shall be printable white 3M Engineer Grade Reflective Sheeting or an equal reflective film accepted by the RTA.

3 Digitally Printed Graphics
The graphics shall be digitally printed directly onto the reflective sheathing using custom formulated UV-resistant, exterior-grade inks. Colors shall be transparent, black shall be opaque. The inks shall be formulated to be compatible with the reflective sheathing, match the colors specified, and preserve the sheeting reflectivity. Protect the printed graphics with an exterior grade clear protective anti-graffiti overlaminate that is compatible with the reflective sheathing and the printed graphics. The reflective sheathing and the clear overlaminate shall be trimmed flush with the edges of the sign.

4 Mounting
BB-3 signs may be mounted to new sign posts, existing sign posts, or other existing structures. Coordinate sign fabrication with the type of mounting bracket and other mounting hardware to be used with the sign. All holes are to be drilled in the shop.

RTA Interagency Signage Standards Manual

Date: 08.29.14
Revised: 04.17.19, 07.22.16, 11.07.19

C2.6
**Description**

**General**

Section C3 General Reference.
SECTION C3
Boarding Area & Bus Times
Products

Sign Type & Cabinet Overview

**Sign Type BA**
Boarding Area Graphic
The Boarding Area graphic directs
to the the bus boarding areas for a particular location.

**Sign Type BT**
Bus Times Graphic
The Bus Times graphic shows bus route and schedule information at a particular boarding area.

**CPN Series Cabinet**
Bus Area / Bus Times graphic Display
The CPN sign cabinet houses the BA and BT printed products.

**Description**

**General**
The BA and BT sign types provide information about bus boarding areas as well as bus route and schedule information. The BA and BT sign types are mounted in the CPN series sign cabinets.
### Description

#### General

The BA and BT sign types, as well as the CPN sign cabinets are available in two sizes.

**Sign Type BA-1**
- Scale: 100%
- Date: 09.01.15
- Sign Type: BA-2
- 8 1/4" V.O. (9" Print Size)

**Sign Type BA-2**
- Scale: 100%
- Date: 09.01.15
- Sign Type: BA-2
- 8 1/4" V.O. (9" Print Size)

**Sign Type BT-1**
- Scale: 100%
- Date: 09.01.15
- Sign Type: BT-1
- 8 1/4" V.O. (9" Print Size)

**Sign Type BT-2**
- Scale: 100%
- Date: 09.01.15
- Sign Type: BT-2
- 8 1/4" V.O. (9" Print Size)

**CPN-1 Sign Cabinet**
- Scale: 100%
- Date: 09.01.15
- 2'-3" V.O. (2'-4" Print Size)
- 3'-5 1/2" V.O. (3'-6 1/2" Print Size)

**CPN-2 Sign Cabinet**
- Scale: 100%
- Date: 09.01.15
- 2'-3" V.O. (2'-4" Print Size)
- 3'-5 1/2" V.O. (3'-6 1/2" Print Size)

---

**SECTION C3**

**Boarding Area & Bus Times**

**Products**

**Standard Size Summary**
SECTION C3
Boarding Area & Bus Times
Products

Header and Footer Layouts

Description

Shown are the typical layouts for the header and footer portions of the following sign types:

BA – Boarding Area
BT – Bus Times

Headers shall include the mode symbol for Buses. The primary header text for sign type BA shall always be “Bus Stops.” The primary header text for sign type BT shall always be “Bus Times.” The sign type BT header also includes a boarding area letter symbol that varies by location. The secondary header text for both sign types shall identify the bus boarding area location and shall also vary by location.

The footer graphics for sign types BA and BT do not vary with location. All footers for sign types BA and BT shall include contact information for RTA Travel Information, as well as the RTA and Service Board Logos.

Digital base art files, for use when developing final art for sign type BA and BT header and footer graphics, shall be provided by the RTA.
When they appear in the footers of interagency signs and graphics, the RTA and Service Board logos shall be sized as shown in this Manual. Shown are the proportions for sizing and placing the RTA and Service Board logos when they appear in the footers of the following sign types:

BA – Boarding Area  
BT – Bus Times

For similar interagency graphics that include the RTA and Service Board logos that are not currently covered by this manual, the RTA and Service Board logos shall typically be sized per the proportions indicated.

Pre-production proofs, or similar pre-production review graphics, of all interagency signs and graphics shall be provided for review by the RTA prior to final production of any signs or graphics.
SECTION C3
Boarding Area & Bus Times
Products

Boarding Area Graphic
Sign Type BA

General Information

1 Elevation - Sign Type BA-1
Scale: 1" = 1'-0"

2 Elevation - Sign Type BA-2
Scale: 1" = 1'-0"

Associated Sign Cabinet Information:
Sign type BA is mounted using a type CPN sign cabinet. See page C3.10 for additional information.

Description

General
Sign type BA provides information on the location of bus boarding areas. Sign type BA signs are mounted at bus stop locations. Sign type BA content will vary with location. See page C3.7 for Design and Layout Notes.

1 Boarding Area Graphic
Sign type BA graphics shall be digitally printed at high resolution using UV-resistant inks directly onto a substrate to be specified by the RTA. The graphics shown are for reference only.

Final content for each sign type BA shall vary with location. Typical content shall include a simplified map of the area surrounding the interagency location, directions to bus boarding areas, and identification of the bus routes that can be accessed at each boarding area. The sign type BA map shall include the location and type of transportation options available, bus boarding areas, pick-up and drop-off locations, and nearby parking. Digital art for sign type BA may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required site-specific graphics using existing BA signs as precedents for content, layout, and color.

Examples of existing BA signs, digital template files for the sign type BA graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new sign type BA graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) sizes for sign types BA-1 and BA-2 are shown. Coordinate the BA-1 and the BA-2 graphics and the overall panel sizes with the sign cabinets.
SECTION C3
Boarding Area & Bus Times
Products

Boarding Area Graphic
Sign Type BA

Design and Layout Notes

Description

General Design and Layout Information – BA Signs

- Each sign type BA typically includes separate file components that are linked into a single, master product file using Adobe InDesign software.
- Headers and footers for all BA signs have standard layouts. The header includes the overall location name or location description for the bus boarding area and will change at different sites. The footer information does not vary.
- Boarding area map artwork is approximately 7 3/4” x 6 7/8”, centered horizontally and vertically in white area below the header. North is at the top of the diagram. Map graphics vary with location.
- Boarding area maps include the facility or location identified in the header and the area immediately around the facility or location.
- Information shown on the maps includes the transit modes at the location, bus boarding areas (with route numbers), drop-off locations, entrances, and accessibility information like ramps and elevators. Maps also include streets and parking facilities. Map graphics vary with location.
- Typically, the map graphics on the ID, MN, and BA signs at a given interagency location or facility shall use the same Illustrator base map. Sign type-specific layers shall be added to each base map file as needed to meet the specific content requirements of each sign type.
- New BA graphics shall be developed using existing examples as precedents for layout, color, and content. For each transit facility or location, the development of the base map graphics for sign type BA must be coordinated with the map graphics for MN and ID signs as required.
- Typography and symbol sizes and styles for new BA signs shall match typography and symbols on existing BA signs.
- Items on the maps are consistently colored. Color usage shall be as per the map color palette shown in Section A2 and as per the existing BA maps.
- Street name and building label typography on the maps should be aligned and organized as much as possible. Typography and symbol sizes and styles for new BA signs shall match typography and symbols on existing BA signs.
- Below the map, directional information to bus boarding areas and interagency destinations is provided. Included are the bus boarding area symbols and associated bus route numbers. Route descriptions or names are typically not shown but may be provided if required for clarity. BA directional information will vary with location.
**SECTION C3**
Boarding Area & Bus Times Products

**Bus Times Graphic Sign Type BT**

**General Information**

**Elevation - Sign Type BT-1**

*Scale: 1” = 1'-0"*

**Elevation - Sign Type BT-2**

*Scale: 1” = 1'-0”*

**Associated Sign Cabinet Information:**
Sign type BT is mounted using a type CPN sign cabinet. See page C3.10 for additional information.

**Description**

**General**
Sign type BT provides bus schedule information and schematic diagrams of bus routes at bus stops. Typically scheduled bus times should be used on information products. When headway time is less than 15 minutes, the RTA may select to show headway intervals. Sign type BT content will vary with location. See page C3.9 for Design and Layout Notes.

**Bus Times Graphic**
Sign type BT graphics shall be digitally printed at high resolution using UV-resistant inks directly onto a substrate to be specified by the RTA. The graphics shown are for reference only.

Final content for each sign type BT shall vary with location. Typical content may include, but shall not be limited to, a schematic representation of the applicable bus routes showing route numbers, stops, estimated travel times, and bus schedules for each bus route. Digital art for sign type BT may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required site-specific graphics using existing sign type BT signs as precedents for content, layout, and color. Bus schedule information shall be provided by the RTA.

Sign type BT shows bus routes as schematic lines that originate from a single location. The route diagram is not to scale. Examples of existing sign type BT signs, digital template files for sign type BT graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new sign type BT graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) sizes for sign types BT-1 and BT-2 are shown. Coordinate the BT-1 and the BT-2 graphics and the overall panel sizes with the sign cabinets.
SECTION C3
Boarding Area & Bus Times Products

Bus Times Graphic
Sign Type BT

Design and Layout Notes

Description

General Design and Layout

Information - BT Signs

- Each sign type BT typically includes separate file components that are linked into a single, master product file using Adobe InDesign software.
- Header and footers for all BT signs have standard layouts. The header includes the overall location name or location description for the bus boarding area and the boarding area letter symbol. The header content will change at different sites. The footer information does not vary.
- A blue band below the header establishes the origin point for the bus route diagram. The bus route numbers are listed in the band, in order. Each route is assigned a color. See Section A2 for a listing and order of the colors to be used for bus routes. When multiple bus routes are shown on one BT sign, use contrasting colors for the routes.
- Routes are presented schematically using line diagrams. The route diagrams are not to scale, and show bus routes as lines.
- Time point stops, approximate travel times, and transfer locations/shared stops are indicated along the schematic route lines. Transfer locations are identified using symbols. Route termini are also indicated.
- Information on CTA and Pace bus tracker services is located in a band below the bus route diagram.
- Bus timetables are shown below the route diagram and the bus tracker band. The timetables indicate departure times from the boarding area at the BT location.
- When developing art for BT signs, schedule information shall be provided by the RTA in XML format. Bus timetables are individual InDesign files that are linked into the BT master file. Import the schedule information into formatted InDesign timetable files provided by the RTA.
- Timetables are headed and separated by color bands that correspond to the colors used for the bus routes shown on the route diagram. Below the color bands are the bus route numbers, the service logo, the route name and description, and the boarding area. On the timetables, AM bus times are shown in Roman, PM bus times are shown in Bold. The PM bus times also have a shaded background the using a 30% tint of the bus route color.
- A key with additional information is placed at the bottom of the BT sign panel, above the footer.
- New BT graphics shall be developed using existing examples as precedents for layout, color, and content. Typography and symbol sizes and styles for new BT signs shall match typography and symbols on existing BT signs.
SECTION C3
Boarding Area & Bus Times
Products

CPN Sign Cabinets
Mounting Configuration

1. Schematic Elevation - CPN Sign Cabinet and CMBP Type Bracket Configurations
   Scale: N.T.S.

Associated Mounting Hardware Information:
The CMBP sign bracket is used to support CPN sign cabinets.  See page C3.12 for information on the CMBP type brackets.  See page C3.11 for information on CPN sign cabinets.

Associated Information Graphics:
The following graphic products are used with the CPN sign cabinet:
Sign Type BA-1 and BA-2 - See page C3.6
Sign Type BT-1 and BT-2 - See page C3.8

Description

General
CMBP type brackets are used to mount CPN sign cabinets to new or existing sign posts or similar existing structures.  CMBP brackets can include custom fabricated components.

CPN series sign cabinets are fabricated from aluminum and are used to display sign type BA and BT graphics.  When more than one CPN series cabinet is used at one location, the size of all the cabinets at the location shall match.
**Section C3**

**Boarding Area & Bus Times Products**

**CPN Sign Cabinet**

**Description**

**General**
CPN series sign cabinets are fabricated from aluminum and are used to display sign type BA and BT graphics. CPN sign cabinets mount to sign posts using CMBP type brackets.

**Aluminum Sign Cabinet**
The CPN sign cabinet shall be fabricated aluminum with an exterior grade textured matte polyurethane powder coat finish over a 2-part epoxy undercoat. The cabinet shall be very durable and vandal resistant. Provide mounting holes as required to coordinate with the CMBP type bracket.

**Internal Framing**
Provide internal framing and bracing as needed for the cabinet to be rigid and structurally sound and to safely, securely, and properly support and mount the cabinet. Provide framing to keep the graphics inside the cabinet flat and properly positioned. Provide access to the back of the cabinet and the cabinet mounting hardware.

**Graphics**
Graphic inserts for CPN cabinets shall be digitally printed at high resolution using UV-resistant inks directly onto a substrate to be specified by the RTA. The graphics shall be easily removable for maintenance.

**Access to the CPN Interior**
The top and bottom sections of the cabinet shall be removable to provide access to the interior of the cabinet for maintenance and to change graphics. The openings in the cabinet must be weather tight when closed. The removable sections must be secured to the cabinet with vandal-resistant stainless steel hardware. The hardware shall have retaining washers, or similar, so that the hardware can not be lost when the section is removed. No hardware shall be visible on the CPN face and all hardware and fasteners must be suitable for use in exterior locations.

**Polycarbonate Window**
Provide a precisely cut opening in the face of the CPN cabinet. The opening shall be backed up by a clear scratch resistant polycarbonate window. The mounting for the polycarbonate shall allow the polycarbonate to be easily removed and replaced for maintenance.

**Mounting Hardware**
Coordinate with the CMBP type bracket to provide all required mounting hardware.

---

**Associated Mounting Hardware Information:**
The CMBP type bracket is used to support CPN sign cabinets. See page C3.12 for information on the CMBP type brackets. See page C3.10 for more information on CPN sign cabinets.

**Associated Information Graphics:**
The following graphic products are used with the CPN sign cabinet:
- Sign Type BA-1 and BA-2 - See page C3.6
- Sign Type BT-1 and BT-2 - See page C3.8
SECTION C3
Boarding Area & Bus Times
Products

CMBP Mounting Assembly

Description

1. General

CPN cabinets are mounted using CMBP mounting assemblies. CMBP-1 and CMBP-2 are typically a specialty mounting bracket supplied by the CPN cabinet manufacturer. CMBP-3, CMBP-4, CMBP-5, and CMBP-6 are custom fabricated aluminum support boxes that are typically mounted using stainless steel u-bolts. CMBP type brackets are typically mounted to new SRSP sign posts. The entire CMBP assembly shall be vandal resistant.

2. Sign Post

Verify if a new SRSP sign post or if an existing sign post is to be used. For new sign posts, see Section C4 for additional information. For existing sign posts or other existing structures, verify on site the existing sign post/structure size, configuration, and materials. Verify that the existing sign post or structure can safely, properly, and securely support the CMBP/CPN assembly.

3. CPN Sign Cabinet

CPN sign cabinets shall be safely, securely, and properly mounted using concealed, heavy duty, exterior grade stainless steel hardware. The hardware shall allow the CPN cabinets to be removed for repairs.

4. Framing and Bracing

Provide internal framing and bracing as needed for the CMBP assembly to be durable, rigid, and structurally sound and for it to safely, properly, and securely support the CPN sign cabinets which shall be mounted to it. Provide stainless steel reinforcement plates inside the CPN cabinets or CMBP support boxes at all mounting bolts.

5. Mounting Bolts/Mounting hardware

Provide all mounting hardware and materials as needed to safely, properly, and securely assemble and mount the complete CMBP/CPN assembly. Coordinate the CMBP mounting hardware with the sign post at each installation location. At locations where the assembly is mounted to an SRSP sign post, CMBP-1 and CMBP-2 are typically a specialty mounting bracket supplied by the CPN cabinet manufacturer, and CMBP-3, CMBP-4, CMBP-5, and CMBP-6 support boxes are typically mounted using standard stainless steel u-bolts. At locations where the assembly is not mounted to an SRSP sign post, determine the type of mounting hardware required. All mounting hardware and components shall be heavy duty, vandal-resistant and suitable for exterior use.

Associated Sign Cabinet Information:
The CMBP type bracket is used to support CPN sign cabinets. See page C3.11 for information on the CPN sign cabinets. See the Message Schedule for information on the quantity and type of CPN sign cabinets at each sign location.
SECTION C3
Boarding Area & Bus Times
Products

Typical Mounting Positions for BA and BT Sign Types

Typical Mounting Position for BA and BT Signs: Locations With More Than One Sign

1
Scale: NTS

Typical Mounting Position for BA and BT Signs: Locations With One BA or BT Sign

2
Scale: NTS

**Description**

**Typical Mounting Positions for BA and BT Sign Types**

Locations for BA and BT sign types must be determined on a case-by-case basis.

When establishing BA and BT locations, factors including, but not limited to, the existing conditions, the location of the sign post the BA and BT signs will be mounted to, and the information to be displayed on the signs must be carefully considered. BA and BT signs must be located so that they can be seen and read by pedestrians without creating a hazardous situation. There must be adequate space around the sign for pedestrians to stand and read the information on the sign. There must also be adequate space for pedestrians to safely circulate around the sign. Signs must not be located close to streets so that pedestrians do not inadvertently step into traffic when walking around the sign or when walking around other pedestrians as they are viewing the sign.

Generally, BT signs shall be mounted facing the sidewalk, parallel to the curb. When BA and BT signs appear together, the BA signs should be mounted perpendicular to the curb. At locations with a large number of buses, two BT signs may be required. Do not mount signs facing the street or on the street side of sign posts.

Each potential location should be carefully examined before signs are specified to confirm what types of signs would be most appropriate and to confirm that there is an appropriate place for each of the signs to be safely installed.
**Description**

**General**

Section C4 general reference.
SECTION C4
Posts & Mounting Hardware

Sign Post & Mounting Hardware Overview

Description

General
Sign posts and mounting hardware include: the SRSP sign post and SRSE post extension; CMFB, CMFC, CMFS, CMCS, and CMCB mounting brackets; and the SMCB sign base and SMDB (with SMRC riser clamp) post mounting.

Also included, but not shown above, are CMCC brackets, and CMWA and CMWB type mountings.
**SECTION C4**

**Posts & Mounting Hardware**

**SRSP-2 Sign Post Mounting Heights**

**Description**

**General**

Sign Post type SRSP is fabricated from 2 3/8" O.D., 11 gauge, hot rolled, electrical resistance welded (ERW), low carbon steel mechanical tubing, ASTM A513, Type 1. The sign posts shall have an epoxy electrocoat base coat and a glossy black powder coat finish coat.

See page C4.5 for details regarding the size and location of the mounting holes in the SRSP-2 sign posts. SRSP-2 sign posts are typically mounted using SMCB sign bases.

See the Technical Specifications for additional information and requirements.
## Description

### General

Sign Post type SRSP is fabricated from 2.3/8” O.D., 11 gauge, hot rolled, electrical resistance welded (ERW), low carbon steel mechanical tubing, ASTM A513, Type 1. The sign posts shall have an epoxy electrocoat base coat and a glossy black powder coat finish coat.

See page C4.6 for details regarding the size and location of the mounting holes in the SRSP-5 sign posts. SRSP-5 sign posts are typically mounted using the SMDB post mounting.

See the Technical Specifications for additional information and requirements.
SECTION C4
Posts & Mounting Hardware

SRSP-2 Sign Post
Post Length and Mounting Hole Locations

1 Elevation - SRSP-2 Sign Post Length and Typical Hole Locations
Scale: 1" = 1'-0"

Description

General
SRSP-2 sign posts shall have holes pre-punched or pre-drilled. The post shall be epoxy electrocoated and powder coated after all holes have been punched or drilled. Typically, the holes shall be placed as shown so that sign types BS and DSS can all be mounted using CMFB brackets without needing to drill additional holes in the post. Depending on the location and the signs to be mounted, additional mounting holes may be specified. See the Technical Specifications for additional information and requirements.
SECTION C4
Posts & Mounting Hardware

SRSP-5 Sign Post
Post Length and Mounting Hole Locations

Elevation - SRSP-5 Sign Post Length and Typical Hole Locations
Scale: 1" = 1'-0"

Description

General
SRSP-5 sign posts shall have holes pre-punched or pre-drilled. The post shall be epoxy electrocoated and powder coated after all holes have been punched or drilled. Typically, the holes shall be placed as shown so that sign types BS and DSS can all be mounted using CMFB brackets without needing to drill additional holes in the post. Depending on the location and the signs to be mounted, additional mounting holes may be specified. See the Technical Specifications for additional information and requirements.
**General**

The SRSE-1 sign post extension is installed at the top of the SRSP-2 or SRSP-5 sign post to allow the mounting of the sign type BB-2 blade.

**Sign Post Extension**

2 3/8” O.D. sign post extension. Materials and finishes used on the extension shall match the materials and finishes used on the SRSP sign posts. The SRSE-1 extension shall precisely fit into the top of any SRSP sign post. The extension shall be securely bolted into position and shall safely, securely, and properly support sign panels and related mounting hardware.

**Insert Stub**

2” O.D. insert stub (verify stub O.D. with SRSP post I.D.). The insert stub shall be securely and precisely welded to the post extension. The stub and the post extension shall align precisely. The stub shall fit precisely into the end of any SRSP sign post. Materials and finishes used on the stub shall match the materials and finishes used on the SRSP sign posts.

**Sign Mounting Bolt Holes**

3/8” diameter sign mounting bolt holes. 2 holes at 180 degrees to accept sign mounting hardware. Sign mounting bolt holes shall align with one set of bolt holes in the insert stub.

**Extension Mounting Bolt Holes**

3/8” diameter bolt holes. 2 sets of 2 holes at 90 degrees. Align one set of holes with the 3/8” diameter sign mounting bolt holes.

**Sign Panel**

Bolts for sign mounting brackets secure extension in position. See the Technical Specifications for additional information and requirements.
**Section C4**

**Posts & Mounting Hardware**

**Possible Sign Panel Mounting Configurations**

---

### Description

**General**

Shown are possible configurations for mounting signs to SRSP sign posts. Groups of sign panels may be mounted in up to four directions on a single post.

Signs shall be mounted so that consistent mounting heights are maintained for signs of the same type mounted to the same sign post.

Where more than one sign panel is mounted to a post, the brackets shall be strap mounted, and the tops of the sign panels shall be aligned with each other.
### Typical Locations for SRSP Sign Posts

Locations for SRSP sign posts must be determined on a case-by-case basis.

When establishing SRSP sign post locations, factors including, but not limited to, the existing conditions and the information included on the signs to be mounted to the SRSP sign posts must be carefully considered.

Generally, interagency signs must be visible to pedestrians but they must also be located so that they do not create situations where information that may be confusing or inappropriate is visible to motorists or cyclists. Signs and sign posts must be located so that they do not block any traffic control signs or other traffic control devices. Signs must be placed so that they are not distracting or confusing to motorists or cyclists. Signs and sign posts must not create blind spots or any other visibility hazards for motorists, pedestrians, and cyclists.

Signs must be also positioned so that they are not hazardous to pedestrians. Signs should not be located in the middle of pedestrian walkways. There must be adequate space around the sign for pedestrians to stand and read the information on the sign. There must also be adequate space for pedestrians to safely circulate around the sign. Signs must not be located close to streets so that pedestrians do not inadvertently step into traffic when walking around the sign or when walking around other pedestrians as they are viewing the sign.

Depending on the existing conditions, it may be appropriate to align new signs and sign posts with existing signs, streetlights, planters, or other existing items. Each potential location should be carefully examined before signs are specified to confirm what types of signs would be most appropriate and to confirm that there is an appropriate place for each of the signs to be safely installed.

---

**Description**

<table>
<thead>
<tr>
<th>Location Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>New signs may be aligned with existing signs or street furniture, if appropriate.</td>
</tr>
<tr>
<td>Existing street furniture</td>
</tr>
<tr>
<td>New sign base (where required), post, and panel</td>
</tr>
<tr>
<td>New BB, BS, and DSS signs are typically oriented in towards, or parallel to, the sidewalk</td>
</tr>
<tr>
<td>C/L</td>
</tr>
<tr>
<td>3'-6&quot; preferred minimum distance from back of curb to center of post</td>
</tr>
<tr>
<td>Street</td>
</tr>
<tr>
<td>Traffic</td>
</tr>
<tr>
<td>Bus Shelter</td>
</tr>
<tr>
<td>3'-6&quot; minimum from edge of sign base</td>
</tr>
</tbody>
</table>

![Diagram](image-url)

**1. Typical Locations for Signs and Posts**

**Scale:** NTS

**2. Typical Locations for Signs and Posts**

**Scale:** NTS
**SECTION C4**
**Posts & Mounting Hardware**

**CMFB Type Bracket**

**General**
The CMFB type bracket is CTA Item No. 2100361, or an equal custom cast aluminum bracket accepted by the RTA. The CMFB type bracket is bolt mounted to sign posts. See the Technical Specifications and page E4.1 of the Appendix for additional information.

The photo shown is for general reference only.

**Sign Post**
Verify if the location shall have a new sign post or if an existing sign post is to be used. For existing sign posts, verify on site the sign post size, height, configuration, and material. Verify if the existing sign post can properly accept the sign panel planned for the location and the required CMFB type brackets.

**CMFB Bracket**
The CMFB bracket shall be CTA Item No. 2100361, or an equal custom cast aluminum bracket accepted by the RTA. The CMFB brackets shall be bolt mounted to sign posts. The brackets shall safely, securely, and properly flag mount aluminum sign panels to a variety of new and existing sign posts.

**Aluminum Sign Panel**
The CMFB type bracket securely flag mounts aluminum sign panels, including sign types BB-2, BS and DSS. Coordinate the bracket quantity, size, and configuration with the type and quantity of signs to be attached and with the sign post that shall support the signs. See the Message Schedule for information on the type and quantity of signs requiring CMFB brackets at each sign location.

**Mounting Bolts/Hardware**
Provide all mounting hardware and materials as needed to safely, properly, and securely mount the aluminum sign panels to the CMFB bracket and the bracket/aluminum sign panel assemblies to the sign post. The CMFB bracket shall be safely, properly, and securely bolt mounted to the sign post. All mounting hardware and components shall be vandal-resistant and suitable for exterior use. The mounting hardware shall allow for removal of the sign panels for maintenance, repairs, and updates.

**Associated Sign Types:**
The following sign types can be mounted using the CMFB type bracket:
- Sign Type BB - See Section C2
- Sign Type BS - See Section C1
- Sign Type DSS - See Section D3
**Description**

**General**
The CMFC type bracket is a standard type of aluminum sign mounting bracket used to mount sign type BB-1 to the tops of new SRSP sign posts.

1 **SRSP Sign Post**
Use CMFC hardware with new SRSP sign posts.

2 **CMFC Bracket**
The CMFC bracket shall be a standard aluminum sign bracket suitable for safely, securely, and properly mounting sign type BB-1 to the top of an SRSP sign post. The CMFC bracket shall be sized to fit precisely over the top of the SRSP sign post. The bracket shall have a glossy black powder coat finish.

3 **Stainless Steel Set Screws**
The sign bracket shall be safely, securely, and properly attached to the top of the SRSP sign post by stainless steel allen set screws. Stainless steel allen set screws shall also be used to safely and securely hold the sign panel in position.

4 **Aluminum Sign Panel**
The CMFC type mounting brackets shall safely, securely, and properly mount sign type BB-1 aluminum sign panels to SRSP sign posts.

**Elevation - CMFC**

Scale: 3" = 1'-0"

**Associated Sign Types:**
The CMFC type mounting hardware is used with Sign Type BB-1 - See Section C2
SECTION C4
Posts & Mounting Hardware

CMFS Type Bracket

Description

General
The CMFS type bracket is CTA Item No. 2100361 or an equal custom cast aluminum bracket accepted by the RTA. The CMFS type bracket is strap mounted to sign posts. See the Technical Specifications and page E4.1 of the Appendix for additional information.

The photo shown is for general reference only.

1 Sign Post
Verify if the location shall have a new sign post or if an existing sign post or other existing structure is to be used. For existing sign posts and structures, verify on site the sign post or structure size, height, configuration, and material. Verify if the existing sign post or other existing structure can properly accept the sign panels planned for the location and the required CMFS type brackets.

2 CMFS Bracket
The CMFS type bracket shall be CTA Item No. 2100361, or an equal custom cast aluminum bracket accepted by the RTA. The CMFS brackets shall be mounted using stainless steel straps. The brackets shall safely, properly, and securely flag mount aluminum sign panels to a variety of new and existing sign posts and structures.

3 Aluminum Sign Panel
The CMFS type bracket securely flag mounts aluminum sign panels including, sign types BB-2, BS and DSS. Coordinate the bracket quantity, size, and configuration with the type and quantity of signs to be attached and with the sign post or structure that shall support the signs. See the Message Schedule for information on the type and quantity of signs requiring CMFS brackets at each sign location.

4 Mounting Bolts/Hardware
Provide all mounting hardware and materials as needed to safely, properly, and securely mount the aluminum sign panels to the CMFS bracket and the bracket/aluminum sign panel assemblies to the sign post or structure. The CMFS bracket shall be safely, properly, and securely strap mounted to the sign post or structure using heavy duty stainless steel sign straps. All mounting hardware and components shall be vandal-resistant and suitable for exterior use. The mounting hardware shall allow for removal of the sign panels for maintenance, repairs, and updates.

Associated Sign Types:
The following sign types can be mounted using the CMFS type bracket:
Sign Type BB - See Section C2
Sign Type BS - See Section C1
Sign Type DSS - See Section D3
### Description

#### General

The CMFS type bracket is CTA Item No. 2100361 or an equal custom cast aluminum bracket accepted by the RTA. The CMFS type bracket is strap mounted to sign posts. See the Technical Specifications and page E1.2 of the Appendix for additional information.

#### SRSP Sign Post

The CMFS type bracket shall be CTA Item No. 2100361, or an equal custom cast aluminum bracket accepted by the RTA. The CMFS brackets shall be mounted using stainless steel straps. The brackets shall safely, securely, and properly flag mount aluminum sign panels to a variety of new and existing sign posts and structures. The mounting hardware shall allow for removal of the sign panels for maintenance, repairs, and updates.

#### Aluminum Sign Panel

The CMFS type bracket securely flag mounts aluminum sign panels including, sign types BB-2, BS and DSS. Coordinate the bracket quantity, size, and configuration with the type and quantity of signs to be attached and with the sign post that shall support the signs. See the Message Schedule for information on the type and quantity of signs requiring CMFS brackets at each sign location.

#### Positioning Bolt

At locations where CMFS brackets are used to mount multiple signs to a single SRSP sign post, provide stainless steel positioning bolts. The positioning bolts pass through the CMFS bracket into one of the predrilled holes in the SRSP post and are held in place by the stainless steel mounting straps. The bolts prevent the sign panels from spinning on the post.

#### Mounting Hardware

Provide all mounting hardware and materials as needed to safely, properly, and securely mount the aluminum sign panels to the CMFS bracket and the bracket/aluminum sign panel assemblies to the sign post. The CMFS bracket shall be safely, properly, and securely strap mounted to the sign post using heavy duty stainless steel sign straps. All mounting hardware and components shall be vandal-resistant and suitable for exterior use.

---

**Associated Sign Types:**
The following sign types can be mounted using the CMFS type bracket:

- **Sign Type BB** - See Section C2
- **Sign Type BS** - See Section C1
- **Sign Type DSS** - See Section D3

---

**Plan View - CMFS**

Scale: NTS
**Description**

**General**
The CMCS type bracket is a standard type of stainless steel sign mounting bracket. Mounting type CMCS is strap mounted to sign posts.

**Sign Post**
Verify if the location shall have a new sign post or if an existing sign post or other existing structure is to be used. For existing sign posts and structures, verify on site the sign post or structure size, height, configuration, and material. Verify if the existing sign post or other existing structure can properly accept the sign panels planned for the location and the required CMCS type brackets.

**CMCS Bracket**
The CMCS bracket shall be a standard stainless steel sign bracket suitable for mounting signs centered on sign posts and other structures. The bracket shall securely mount aluminum sign panels to a variety of new and existing sign posts and other structures.

**Aluminum Sign Panel**
The CMCS bracket securely mounts aluminum sign panels including, but not limited to, sign types BS, DSS, ID-1, and ID-2. Coordinate the bracket quantity, size, and configuration with the type and quantity of signs to be attached and with the sign post or structure that shall support the signs. See the Message Schedule for information on the type and quantity of signs requiring CMCS brackets at each sign location.

**Mounting Bolts/Hardware**
Provide stainless steel screws, flat washers, lock washers, and nylon washers as needed to properly, safely, and securely mount the aluminum sign panel to the CMCS bracket. Install washers in the following order: 1) screw head, 2) lock washer, 3) flat washer, 4) nylon washer, 5) sign panel. The CMCS bracket and aluminum sign panel assembly shall be securely strap mounted to the sign post or other structure using heavy-duty stainless steel sign straps. All mounting hardware and components shall be vandal-resistant and suitable for exterior use. The mounting hardware shall allow for removal of the sign panels for maintenance, repairs, and updates.

**Associated Sign Types:**
The following sign types can be mounted using the CMCS type bracket:
- Sign Type BS - See Section C1
- Sign Type DSS - See Section D3
- Sign Types ID-1 and ID-2 - See Section B1

---

**Elevation - CMCS**
Scale: 1 1/2” = 1’-0”

**Section - CMCS**
Scale: 1 1/2” = 1’-0”

Multiple sign panels may be installed on the same post

Use one set of straps to mount multiple sign panels
### Description

**General**
The CMCC type bracket is a standard stainless steel sign bracket suitable for mounting sign panels to CTA elevated columns and similar structures.

1. **Existing CTA Elevated Train Support Column or Similar Structures**
   Verify on site the existing conditions at each mounting location.

2. **CMCC Bracket**
The CMCC bracket shall be a standard stainless steel sign bracket suitable for mounting signs to CTA elevated columns and similar structures.

3. **Mounting Hardware**
Provide stainless steel screws, flat washers, lock washers, and nylon washers as needed to properly, safely, and securely mount the aluminum sign panel to the CMCC bracket. Install washers in the following order: 1) screw head, 2) lock washer, 3) flat washer, 4) nylon washer, 5) sign panel. The CMCC bracket and aluminum sign panel assembly shall be securely strap mounted to the column using heavy-duty stainless steel sign straps. All mounting hardware and components shall be vandal-resistant and suitable for exterior use. The mounting hardware shall allow for removal of the sign panels for maintenance, repairs, and updates.

4. **Aluminum Sign Panel**
The CMCC type bracket securely mounts aluminum sign panels including, but not limited to, sign types BS, DSS, ID-1, and ID-2 to existing CTA columns and similar structures. Coordinate the bracket quantity, size, and configuration with the type and quantity of signs to be attached to the column. See the Message Schedule for information on the type and quantity of signs requiring CMCC brackets at each sign location.

5. **Aluminum Spacers**
Provide aluminum spacers behind sign panels when needed to secure or stabilize the panels. Paint spacers to match the back of the sign face. Coordinate spacers with the stainless steel sign straps so that spacers are securely held in the correct position.

6. **Epoxy**
At locations where the existing conditions are such that the mounting bracket can slide on the stainless steel strap, secure the bracket to the strap with a small amount of high-strength epoxy and an additional bent piece of stainless steel strapping. Carefully apply the epoxy to the back of the bracket at the strap so that it is not readily visible and so that the bracket is securely held in position.

---

**Elevation - CMCC**
Scale: 1 1/2" = 1'-0"

Associated Sign Types:
The following sign types can be mounted using the CMCC type bracket:
- Sign Type BS - See Section C1
- Sign Type DSS - See Section D3
- Sign Types ID-1 and ID-2 - See Section B1

**Section - CMCC**
Scale: 1 1/2" = 1'-0"

**Photo Example of Epoxy Added to Bracket**
Scale: NTS
SECTION C4
Posts & Mounting Hardware

CMCB Type Mounting

1 Elevation - CMCB
Scale: 1 1/2" = 1'-0"

2 Section - CMCB
Scale: 1 1/2" = 1'-0"

Associated Sign Types:
The following sign types can be mounted using the CMCB type mounting hardware:
Sign Type DSS - See Section D3
Sign Types ID-1 and ID-2 - See Section B1

Description

General
The CMCB type bracket is a standard type of stainless steel sign mounting bracket used to center-mount sign panels to new SRSP sign posts.

1 SRSP Sign Post
Use CMCB hardware with new SRSP sign posts. At locations where signs are mounted using CMCB hardware, the SRSP sign posts may require additional mounting holes. Coordinate the SRSP posts with locations using CMCB hardware so that the required mounting holes are provided before the posts are finished.

2 CMCB Bracket
The CMCB bracket shall be a standard stainless steel sign bracket suitable for mounting signs to SRSP sign posts.

3 Mounting Hardware
The stainless steel sign mounting bracket shall be used to bolt mount the sign panel to the SRSP sign post. Provide stainless steel screws, flat washers, lock washers, and nylon washers as needed to properly, safely, and securely mount the aluminum sign panel to the SRSP sign post. Install washers in the following order: 1) screw head, 2) lock washer, 3) flat washer, 4) nylon washer, 5) sign panel. All mounting hardware and components shall be vandal-resistant and suitable for exterior use. The mounting hardware shall allow for removal of the sign panels for maintenance, repairs, and updates.

4 Aluminum Sign Panel
The CMCB type mounting hardware securely mounts aluminum sign panels including, but not limited to, sign types DSS, ID-1, and ID-2 to SRSP sign posts. Coordinate the bracket quantity and sign panel configuration with the type and quantity of signs to be attached. See the Message Schedule for information on the type and quantity of signs requiring CMCB mounting hardware at each sign location.
CMWA Type Mounting

**Description**

**General**
The CMWA mounting is used for mounting sign panels to existing walls that cannot be drilled to accept the CMWB mounting.

1. **Existing Wall**
   Verify on site the existing wall conditions at each mounting location.

2. **Mounting Tape / Adhesive**
   Provide appropriate adhesives and double faced tapes as needed to properly, safely, and securely mount the aluminum sign panels to the existing wall.

3. **Aluminum Sign Panel**
The CMWA type mounting securely mounts aluminum sign panels including, but not limited to, sign types BS, DSS, ID-1, ID-2, and TR-3 to existing walls. See the Message Schedule for information on the type and quantity of signs requiring CMWA mounting at each sign location.

**Associated Sign Types:**
The following sign types can be mounted using the CMWA type mounting:
- Sign Type BS - See Section C1
- Sign Type DSS - See Section D3
- Sign Types ID-1 and ID-2 - See Section B1
- Sign Type TR-3 - See Section B1
**SECTION C4**  
**Posts & Mounting Hardware**

**CMWB Type Mounting**

1. **Elevation - CMWB**  
   Scale: 1 1/2" = 1'-0"

2. **Section - CMWB**  
   Scale: 1 1/2" = 1'-0"

**Associated Sign Types:**  
The following sign types can be mounted using the CMWB type bracket:  
- Sign Type BS - See Section C1  
- Sign Type DSS - See Section D3  
- Sign Types ID-1 and ID-2 - See Section B1  
- Sign Type TR-3 - See Section B1

**Description**

**General**  
The CMWB mounting hardware is used for mounting sign panels to existing walls.

**Existing Wall**  
Verify on site the existing wall conditions at each mounting location.

**Mounting Hardware**  
Provide stainless steel screws, flat washers, lock washers, nylon washers, and appropriate anchors as needed to properly, safely, and securely mount the aluminum sign panel to the existing wall. Install washers in the following order: 1) screw head; 2) lock washer; 3) flat washer; 4) nylon washer; 5) sign panel. All mounting hardware and components shall be vandal-resistant and suitable for exterior use.

3. **Aluminum Sign Panel**  
The CMWB type mounting hardware securely mounts aluminum sign panels including, but not limited to, sign types BS, DSS, ID-1, ID-2, and TR-3 to existing walls. See the Message Schedule for information on the type and quantity of signs requiring CMWB mounting hardware at each sign location.
**Description**

**General**
Type SMCB sign base is CTA Item No. 2100007 or an equal custom cast iron sign base accepted by the RTA. The SMCB sign base shall be anchored to a variety of paving materials. See the Technical Specifications and page E4.2 of the Appendix for additional information.

The photo shown is for general reference only.

**Sign Post**
Verify if the location shall have a new sign post or if an existing sign post is to be used. For existing sign posts, verify on site the sign post size, configuration and material. Verify if the existing sign post can safely, securely, and properly be mounted using a SMCB type sign base.

**SMCB Sign Base**
The SMCB sign base shall be CTA Item No. 2100007 or an equal custom cast iron sign base accepted by the RTA. The base shall safely, securely, and properly support signs and sign posts. The base shall be safely, securely, and properly anchored to a variety of paving and ground conditions and materials. Verify the existing conditions and materials at all installation locations. Provide professionally engineered concrete foundations as needed. Provide all mounting hardware and materials as needed to safely, securely, and properly install the SMCB sign base and the sign posts/sign panel assemblies that are mounted to the SMCB bases. All mounting hardware and components shall be vandal-resistant and suitable for exterior use. The mounting hardware shall allow for removal of the sign posts and sign bases for maintenance, repairs, and updates. Signs shall be installed level and plumb.

**Plan View - SMCB Sign Base**

Scale: NTS

**Associated Sign Posts:**
Type SRSP-2 sign posts. See pages C4.3 and C4.5.
**Description**

**General**
The SMCB sign base shall be anchored to a variety of paving materials. Shown is the design intent for mounting the SMCB sign base to existing concrete. For all SMCB locations, provide appropriate mounting anchors and all other materials required to properly, safely, and securely mount the SMCB sign base.

**1 Sign Post**

**2 SMCB Sign Base**

**3 Leveling Hardware**
Provide durable, concealed, corrosion-resistant hardware as required to make the sign base level.

**4 Existing Concrete**
Verify the existing concrete can safely, securely, and properly support the installed sign.

**5 Anchor Hardware**
Determine the type of anchor hardware required to safely, securely, and properly secure the SMCB sign base and anchor the installed sign. All hardware must be corrosion-resistant, vibration-resistant, and suitable for use in exposed exterior locations.

See the Technical Specifications for additional information and requirements.
SECTION C4
Posts & Mounting Hardware

SMCB Sign Base
Typical Mounting to Existing Pavers

SMCB Mounting Detail – Typical Installation in Existing Pavers

Scale: 1" = 1'-0"

Description

General
The SMCB sign base shall be anchored to a variety paving materials. Shown is the design intent for mounting the SMCB sign base at locations with existing pavers. For all SMCB locations, provide appropriate mounting anchors and all other materials required to properly, safely, and securely mount the SMCB sign base.

1 Sign Post
2 SMCB Sign Base
3 Leveling Hardware

Provide durable, concealed, corrosion-resistant hardware as required to make the sign base level.

4 Existing Pavers
Verify the existing conditions at the installation location. Coordinate the SMCB mounting with the existing conditions. Replace or reinstall pavers as needed to restore the appearance of the area around the sign.

5 Conditions and Materials Below the Pavers
Verify the existing conditions and materials below the pavers. Verify if the sign can be safely, securely, and properly installed. Determine if the existing conditions and materials can safely, securely, and properly support the installed sign.

6 Anchor Hardware
Determine the type of anchor hardware required to safely, securely, and properly secure the SMCB sign base and anchor the installed sign. All hardware must be corrosion-resistant, vibration-resistant, and suitable for use in exposed exterior locations.

7 New Concrete Foundation (If Required)
If required to safely, securely, and properly mount the sign, provide a new, professionally engineered sign foundation. Coordinate the sign foundation with the sign and the existing conditions. Carefully install the new concrete so that the sign can be safely, securely, and properly installed.

See the Technical Specifications for additional information and requirements.
SECTION C4
Posts & Mounting Hardware

SMDB Direct Bury Sign Post Mounting

Associated Sign Posts:
Type SRSP-5 sign post. See page C4.6.

Description

General
The SMDB direct bury sign post mounting shall be used at locations where a SRSP sign post is installed in dirt.

1. **SRSP Sign Post**
   Sign post type SRSP-5 is typically used at direct bury locations.

2. **SMRC Riser Clamp**
   Stainless steel pipe riser clamp is installed on SRSP-5 sign post 10" below grade to prevent post from being rotated.

3. **Backfill**
   6" backfill at top of hole to restore site conditions.

4. **Existing Soil**
   Verify the existing conditions at the installation location. Verify if the sign can be safely, securely, and properly installed.

5. **Pea Gravel**

6. **Sand**

See the Technical Specifications for additional information and requirements.
**PART D**

**Directional Wall Signs**

**Directional Overhead Signs**

**Directional Street Signs**

**Freestanding Structures**

---

**Description**

**General**

Part D general reference.
SECTION D1
Directional Wall Signs

Section Introduction

Description

General
Section D1 general reference.
SECTION D1
Directional Wall Signs

Overview

Introduction - Sign Type DSW / Directional Sign - Wall Mounted

The DSW sign types are wall mounted directional signs. DSW signs are typically used in interior locations. To provide the flexibility to respond to a variety of architectural conditions and message requirements, the signs have a variety of standard sizes, message layouts, and materials. The following pages provide general guidance on how to determine the correct size, layout, and material for sign type DSW.

Step 1 - Select the appropriate panel width

Sign type DSW has three standard panel widths: 2'-0", 2'-6", 3'-0". Measure the wall space available at the location where the sign is to be installed and select the panel width that coordinates best with the architectural conditions. Select the 2'-6" wide panel if there are no architectural restrictions or message requirements that would make one of the other panel widths more appropriate. See page D1.5 for additional information.

Step 2 - Determine the messages to appear on the sign and the sign layout

Determine the information that needs to appear on the sign. Content needs to be focused and concise. Keep messages simple. Examine the architectural and wayfinding contexts at the intended sign location. Consider the sign as a component within the overall wayfinding program.

Sign type DSW layouts are typically based on the following overall Message Hierarchy:

1) Information related to CTA Trains
   a) CTA Trains
   b) CTA Train lines
   c) Accessibility or other directional information related to CTA Trains
   d) Miscellaneous information related to CTA Trains

2) Information related to Metra Trains
   a) Metra Trains
   b) Metra Train Stations
   c) Metra Trains identified by end-of-line stations (e.g. Metra Trains to Kenosha)
   d) Accessibility or other directional information related to Metra Trains
   e) Miscellaneous information related to Metra Trains

3) Information related to CTA and Pace Buses (includes Bus Stops)
   a) Bus Stops
   b) Accessibility or other directional information related to CTA and Pace Buses
   c) Miscellaneous information related to CTA and Pace Buses

4) Information related to other transportation options (e.g. Intercity Buses, Amtrak Trains)

5) Misc. General Information

6) Toilets

7) Streets

8) Major Destinations (Parks, Cultural Institutions, Civic Institutions, etc.)

Organize messages based on the Message Hierarchy. Layout the messages using the typical reference examples shown on the following pages as guides. There are a variety of message layouts available. Layouts are selected based on the type of message and the quantity of information to be displayed. Maintain the text size, line spacing, character spacing, symbol and arrow sizes and positions, and margins indicated in the reference examples.

Messages typically include symbols. Only symbols from the accepted symbol vocabulary and provided by the RTA should be used. If a message does not have a symbol, position the message on the sign as if it did have a symbol, leaving the symbol area blank.

Generally, do not use abbreviations. Commonly used abbreviations like “Ave” or “St” may be used if required to help a message fit on a sign.

General message groups are separated by a line. For example, a line is used to separate the messages relating to CTA Trains from the messages relating to Metra Trains. A line does not appear after the last message on the sign.

Within message groups, the messages are typically arranged with the arrows ordered “up”, “left”, “right”, and “down/behind”. When bus stop symbols are used on a sign, the bus stop messages and their associated arrows are ordered so that the bus stop symbols appear in alphabetical order.

See pages D1.6 to D1.13 for additional information. All layouts need to be submitted to the RTA for review prior to fabrication.

Step 3 - Determine panel height

Based on the quantity and types of messages to appear, determine the height of the panel from one of three standards: 1'-3", 1'-11", or 2'-6". See pages D1.14 to D1.16 for additional information.

Step 4 - Determine panel thickness / type

Sign type DSW has several standard panel thicknesses and materials. Determine the panel thickness and material based on where and how the sign is to be mounted.

Typically, a DSW sign shall be mounted using an SWD sign frame that is secured to the wall with appropriate hardware and anchors. When using the SWD sign frame, the DSW panel shall be 1/2" thick.

When a DSW sign is mounted to glass or to a wall that can not be drilled, the DSW panel shall be 1/8" thick, and the sign will be mounted using SWA or SWG sign frame that is secured to the glass or wall using appropriate adhesives.

DSW signs can be fabricated using .080" thick aluminum panels with printed vinyl graphics. The panels are typically wall mounted directly using appropriate adhesives, or they are mounted using an aluminum sign frame that is secured to the wall with appropriate hardware and anchors.

For temporary installations, self-adhesive vinyl sheeting with printed graphics may be applied directly to walls or to glass surfaces.

See pages D1.3 and D1.4 for additional information regarding the DSW panel materials and how they are typically used.
SECTION D1
Directional Wall Signs

Material and Mounting Options

Introduction

The following chart provides general information regarding the standard materials available for the production of sign type DSW and where these materials are typically used. For any particular DSW location, there may be more than one appropriate material or mounting method. Final material selection and specification shall be based on a variety of factors, including, but not limited to, the type of station or location where the sign is to be placed, the anticipated life expectancy for the sign, the surface where the sign is to be mounted, and the budget available for fabrication and installation. Materials and methods not listed may be used to meet special requirements. All material selections must be submitted to the RTA for review prior to fabrication.

<table>
<thead>
<tr>
<th>Sign Type Material Code*</th>
<th>Material Details</th>
<th>Typical Application</th>
<th>Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Self-adhesive vinyl with digitally printed graphics</td>
<td>Provide high resolution inkjet or silkscreen printed decal signs on opaque 3M vinyl sheeting, or an equivalent, durable, self-adhesive material, for single sided application. Decals shall be removable and shall have an exterior-grade adhesive. Provide a clear protective anti-graffiti overlaminate as recommended by the sheeting manufacturer to protect the decal’s typography and graphics. Decal graphics shall be printed using durable, exterior grade, UV resistant, and water resistant inks. Alternate printing methods may be used if accepted by the RTA.</td>
<td>Locations where signs are adhered directly to glass. Locations where temporary or short-term signs are needed.</td>
</tr>
<tr>
<td>5</td>
<td>.080” aluminum panel with digitally printed applied vinyl graphics</td>
<td>The sign face panel shall be .080” thick painted aluminum with applied vinyl graphics. The overall background of the sign and the white text and graphics shall be an exterior-grade, premium, cast, white printable graphic film. The graphics shall be digitally printed directly onto the graphic film using custom formulated, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. Provide appropriate adhesives and double faced tapes as needed to properly, safely, and securely mount the sign panel to the existing wall or glass.</td>
<td>Wall or glass mounted signs in non-downtown stations. Locations where graffiti or vandalism is a concern.</td>
</tr>
</tbody>
</table>
### SECTION D1
Directional Wall Signs

**Material and Mounting Options**

<table>
<thead>
<tr>
<th>Sign Type Material Code</th>
<th>Material</th>
<th>Material Details</th>
<th>Typical Application</th>
<th>Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>1/8&quot; thick Rhino panel</td>
<td>The sign face panel shall be a 1/8&quot; thick exterior-grade Rhino panel, or an equivalent panel with embedded UV-resistant graphics accepted by the RTA.</td>
<td>Wall mounted signs in downtown stations where frames can not be mounted using mechanical fasteners. Signs in downtown stations that are mounted to glass.</td>
<td>SWA, SWG (see page D1.18)</td>
</tr>
<tr>
<td>9</td>
<td>1/2&quot; thick Rhino panel</td>
<td>The sign face panel shall be a 1/2&quot; thick exterior-grade Rhino panel, or an equivalent panel with embedded UV-resistant graphics accepted by the RTA.</td>
<td>Wall mounted signs in downtown stations where frames can be mounted using mechanical fasteners. Floor/ground mounted signs in downtown stations.</td>
<td>SWD (see page D1.17) SFD (see Section D4)</td>
</tr>
<tr>
<td>12</td>
<td>1/8&quot; thick acrylic with digitally printed applied vinyl graphics</td>
<td>The sign face panel shall be 1/8&quot; thick painted acrylic with applied vinyl graphics. The overall background of the sign and the white text and graphics shall be an exterior-grade, premium, cast, white printable graphic film. The graphics shall be digitally printed directly onto the graphic film using custom formulated, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics.</td>
<td>Wall mounted signs in non-downtown stations where frames can not be mounted using mechanical fasteners. Signs in non-downtown stations that are mounted to glass.</td>
<td>SWA, SWG (see page D1.18)</td>
</tr>
<tr>
<td>13</td>
<td>1/2&quot; thick acrylic with digitally printed applied vinyl graphics</td>
<td>The sign face panel shall be 1/2&quot; thick painted acrylic with applied vinyl graphics. The overall background of the sign and the white text and graphics shall be an exterior-grade, premium, cast, white printable graphic film. The graphics shall be digitally printed directly onto the graphic film using custom formulated, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics.</td>
<td>Wall mounted signs in non-downtown stations where frames can be mounted using mechanical fasteners. Floor/ground mounted signs in non-downtown stations.</td>
<td>SWD (see page D1.17) SFD (see Section D4)</td>
</tr>
</tbody>
</table>

* See Section A3 for additional information regarding sign type material codes
SECTION D1
Directional Wall Signs

Overview

1 Elevation - Available DSW Panel Sizes
Scale: 1 1/2" - 1'-0"

Description

Step 1:
Select the Appropriate Panel Width

Sign type DSW has three standard panel widths: 2'-0", 2'-6", and 3'-0". And, DSW signs have three standard panel heights: 1'-3", 1'-11", and 2'-6".

The chart above summarizes the 9 standard DSW panel sizes available.

To determine the appropriate panel width, measure the wall space available at the desired location and select the panel width that best fits the architectural condition. Select 2'-6" wide panel if there are no restrictions.

Panel sizes are determined by the amount and type of information to be displayed and the amount of space available for the sign. See page D1.6 for additional information on establishing and formatting sign messages.
SECTION D1
Directional Wall Signs

Overview

SECTION D1
Directional Wall Signs

Description

Step 2: Determine the Messages

Determine the information that needs to appear on the sign. Content needs to be focused and concise. Keep messages simple. Examine the architectural and wayfinding contexts at the intended sign location. Consider the sign as a component within the overall wayfinding program.

Organize messages based on the Message Hierarchy. Layout the messages using the typical reference examples shown on this and the following pages as guides. There are a variety of message layouts available. Layouts are selected based on the type of message and the quantity of information to be displayed.

Maintain the text size, line spacing, character spacing, symbol and arrow sizes and positions, and margins indicated in the reference examples. Messages typically include symbols. Only symbols from the accepted symbol vocabulary and provided by the RTA should be used. If a message does not have a symbol, position the message on the sign as if it did have a symbol, leaving the symbol area blank.

Generally, do not use abbreviations. Commonly used abbreviations like “Ave” or “St” may be used if required to help a message fit on a sign. General message groups are separated by a line. For example, a line is used to separate the messages relating to CTA Trains from the messages relating to Metra Trains. A line does not appear after the last message on the sign.

Within message groups, the messages are typically arranged with the arrows ordered “up”, “left”, “right”, and “down/behind”. When bus stop symbols are used on a sign, the bus stop messages and their associated arrows are ordered so that the bus stop symbols appear in alphabetical order.

The messages and layouts shown here are for reference only. See the Message Schedule for the correct messages for each sign type DSW location, or, when directed to do so by the RTA, determine the required content.

Digital art for DSW signs may be provided by the RTA. When directed to do so by the RTA, determine the appropriate layouts and set up the digital art for the DSW signs based on the layout guidelines, the message content, and the available space.

All layouts need to be submitted to the RTA for review prior to fabrication.

Reference: Sample Message Layouts Using Standard Sizes for DSW Sign Types
**Section D1: Directional Wall Signs**

**Layout Guidelines Example 1**

**Elevation - Schematic DSW Layout Guidelines Example 1**

**Sign Panel Size:**
For additional information on standard DSW panel sizes, see pages D1.14, D1.15, D1.16.

**Panel Fabrication:**
For additional information on sign type DSW sign panel fabrication and mounting options, see pages D1.3 and D1.4.

**Description**

**General**
The DSW series sign types are wall mounted signs that provide directional information. See page D1.2 for additional information and guidance on the messages that appear on sign type DSW and on how to determine the correct size and layout for sign type DSW.

The messages shown are for reference only.

**Layout**
The elevation shown provides typical layout guidance for conditions with a single one-line message. The message may include one arrow, one or more symbols, and message text. See page D1.8 for information on positioning symbols and message text when more than one symbol is used. If the message does not include a symbol, the typography for that message shall be positioned 3 1/8" to the right of the arrow position box (5 7/8" from the left edge of the panel). If a CTA train line symbol is part of the message, the symbol shall appear center aligned on the message cap height and 7/8" to the right of the appropriate message. If no arrow is used, positions of the type and symbols do not change.

The font for messages shall be Helvetica LT Std Bold.

Related messages are grouped as per the message hierarchy (see page D1.2 for a description of the message hierarchy). Message groups are separated by lines. A line also appears along the top edge of the sign, before the first message.
**SECTION D1**
Directional Wall Signs

**Layout Guidelines Example 2**

**Elevation - Schematic DSW Layout Guidelines Example 2**

Scale: 1 1/2" - 1'-0"

**Sign Panel Size:**
For additional information on standard DSW panel sizes, see pages D1.14, D1.15, D1.16.

**Panel Fabrication:**
For additional information on sign type DSW sign panel fabrication and mounting options, see pages D1.3 and D1.4.

### Description

**General**
The DSW series sign types are wall mounted signs that provide directional information. See page D1.2 for additional information and guidance on the messages that appear on sign type DSW and on how to determine the correct size and layout for sign type DSW.

The messages shown are for reference only.

**Layout**
The elevation shown provides typical layout guidance for conditions with a single multi-line message. The message may include one arrow, one or more symbols, and two or more lines of message text. See page D1.7 for information on positioning the symbol and message text when only one symbol is used. If the message does not include a symbol, the type for that message shall be positioned 3 1/8" to the right of the arrow position box (5 7/8" from the left edge of the panel). If a CTA train line symbol is part of the message, the symbol shall appear center aligned on the message cap height and 7/8" to the right of the appropriate message. If no arrow is used, positions of the type and symbols do not change.

The font for messages shall be Helvetica LT Std Bold.

Related messages are grouped as per the message hierarchy (see page D1.2 for a description of the message hierarchy). Message groups are separated by lines. A line also appears along the top edge of lines. A line appears at the bottom of the last message group on the sign panel.

The arrow position box does not appear on the final sign face.
**SECTION D1**

**Directional Wall Signs**

**Layout Guidelines Example 3**

_Elevation - Schematic DSW Layout Guidelines Example 3_

Scale: 1 1/2" - 1'-0"

**Sign Panel Size:**
For additional information on standard DSW panel sizes, see pages D1.14, D1.15, D1.16.

**Panel Fabrication:**
For additional information on sign type DSW sign panel fabrication and mounting options, see pages D1.3 and D1.4.

---

### Description

**General**

The DSW series sign types are wall mounted signs that provide directional information. See page D1.2 for additional information and guidance on the messages that appear on sign type DSW and on how to determine the correct size and layout for sign type DSW.

The messages shown are for reference only.

---

**Layout**

The elevation shown provides typical layout guidance for conditions with two or more single-line messages. The messages may include one arrow, one or more symbols, and two or more single-line messages. If one of the messages does not include a symbol, the type for that message shall be positioned 3 1/8" to the right of the arrow position box (5 7/8" from the left edge of the panel). If a CTA train line symbol is part of the message, the symbol shall appear center aligned on the message cap height and 7/8" to the right of the appropriate message. If no arrow is used, positions of the type and symbols do not change.

The font for messages shall be Helvetica LT Std Bold.

Related messages are grouped as per the message hierarchy (see page D1.2 for a description of the message hierarchy). Message groups are separated by lines. A line also appears along the top edge of the sign, before the first message.
SECTION D1
Directional Wall Signs

Layout Guidelines Example 4

**Elevation - Schematic DSW Layout Guidelines Layout 4**

Scale: 1 1/2" - 1'-0"

**Sign Panel Size:**
For additional information on standard DSW panel sizes, see pages D1.14, D1.15, D1.16.

**Panel Fabrication:**
For additional information on sign type DSW sign panel fabrication and mounting options, see pages D1.3 and D1.4.

**Description**

**General**
The DSW series sign types are wall mounted signs that provide directional information. See page D1.2 for additional information and guidance on the messages that appear on sign type DSW and on how to determine the correct size and layout for sign type DSW.

The messages shown are for reference only.

**Layout**
The elevation shown provides typical layout guidance for conditions with combination of single and multi-line messages. The messages may include one arrow, one or more symbols, and multi-line and single-line messages. If one of the messages does not include a symbol, the type for that message shall be positioned 3 1/8" to the right of the arrow position box (5 7/8" from the left edge of the panel). If a CTA train line symbol is part of the message, the symbol shall appear center aligned on the message cap height and 7/8" to the right of the appropriate message. If no arrow is used, positions of the type and symbols do not change.

Related messages are grouped as per the message hierarchy (see page D1.2 for a description of the message hierarchy). Message groups are separated by lines. A line also appears along the top edge of the sign, before the first message.

The font for messages shall be Helvetica LT Std Bold.
SECTION D1
Directional Wall Signs

Layout Guidelines Example 5

**Elevation - Schematic DSW Layout Guidelines Example 5**

Scale: 1 1/2" - 1'-0"

**Sign Panel Size:**
For additional information on standard DSW panel sizes, see pages D1.14, D1.15, D1.16.

**Panel Fabrication:**
For additional information on sign type DSW sign panel fabrication and mounting options, see pages D1.3 and D1.4.

**Description**

**General**
The DSW series sign types are wall mounted signs that provide directional information. See page D1.2 for additional information and guidance on the messages that appear on sign type DSW and on how to determine the correct size and layout for sign type DSW.

The messages shown are for reference only.

**Layout**
The elevation shown provides typical layout guidance for conditions with more than one arrow. In addition to the arrows, messages may include one or more symbols and a combination of multi-line or single-line messages. If one of the messages does not include a symbol, the type for that message shall be positioned 3 1/8" to the right of the arrow position box (5 7/8" from the left edge of the panel). If a CTA train line symbol is part of the message, the symbol shall appear center aligned on the message cap height and 7/8" to the right of the appropriate message.

The font for messages shall be Helvetica LT Std Bold.

Related messages are grouped as per the message hierarchy (see page D1.2 for a description of the message hierarchy). Message groups are separated by lines. A line also appears along the top edge of the sign, before the first message.
SECTION D1
Directional Wall Signs

Layout Guidelines Example 6

1 Elevation - Schematic DSW Layout Guidelines Example 6

Scale: 1 1/2" - 1'-0"

Sign Panel Size:
For additional information on standard DSW panel sizes, see pages D1.14, D1.15, D1.16.

Panel Fabrication:
For additional information on sign type DSW sign panel fabrication and mounting options, see pages D1.3 and D1.4.

Description

General
The DSW series sign types are wall mounted signs that provide directional information. See page D1.2 for additional information and guidance on the messages that appear on sign type DSW and on how to determine the correct size and layout for sign type DSW.

The messages shown are for reference only.

Layout
The elevation shown provides typical layout guidance for conditions with a single one-line message and multiple CTA train line symbols with one arrow. Use the CTA train line symbols that show the line color and line name whenever possible. If there is limited space, use the train line symbols that only show the line color.

The font for messages shall be Helvetica LT Std Bold.

Related messages are grouped as per the message hierarchy (see page D1.2 for a description of the message hierarchy). Message groups are separated by lines. A line also appears along the top edge of the sign,

before the first message.
SECTION D1
Directional Wall Signs

Layout Guidelines Example 7

Description

General
The DSW series sign types are wall mounted signs that provide directional information. See page D1.2 for additional information and guidance on the messages that appear on sign type DSW and on how to determine the correct size and layout for sign type DSW.

The messages shown are for reference only.

Layout
The elevation shown provides typical layout guidance for conditions with a single one-line message and multiple CTA train line symbols with multiple arrows. Use the CTA train line symbols that show the line color and line name whenever possible. If there is limited space, use the train line symbols that only show the line color.

The font for messages shall be Helvetica LT Std Bold.

Related messages are grouped as per the message hierarchy (see page D1.2 for a description of the message hierarchy). Message groups are separated by lines. A line also appears along the top edge of the sign,
SECTION D1
Directional Wall Signs

Description

Step 3: Determine Panel Height

Based on the quantity and types of messages to appear, determine the height of the panel from one of three standards: 1'-3", 1'-11", or 2'-6".

The sign height is based upon the quantity and complexity of the messages that are to appear on the sign.

The sign type code for each DSW sign gives information about the sign's size and material. For example, a typical DSW sign type code is DSW-24x15.8.1. The first two numbers indicate the panel's width and height in inches. In the example given, the panel would be 24" wide x 15" high. The third number indicates the sign panel's thickness and material. The fourth number indicates that the sign panel is single-sided. All DSW sign panels are single-sided.

See pages D1.3 and D1.4 for additional information on sign type DSW sign panel fabrication and mounting options.

See section A3 for additional information regarding sign type codes.

Size Summary
2'-0" Wide Panels

Typical Sign Face Panel Size for Sign Type DSW-24x15

Typical Sign Face Panel Size for Sign Types DSW-24x23

Typical Sign Face Panel Size for Sign Types DSW-24x30
**SECTION D1**  
**Directional Wall Signs**

**Size Summary**  
**2'-6" Wide Panels**

### Description

**Step 3: Determine Panel Height**

Based on the quantity and types of messages to appear, determine the height of the panel from one of three standards: 1'-3", 1'-11", or 2'-6".

The sign height is based upon the quantity and complexity of the messages that are to appear on the sign.

The sign type code for each DSW sign gives information about the sign's size and material. For example, a typical DSW sign type code is DSW-24x15.8.1. The first two numbers indicate the panel's width and height in inches. In the example given, the panel would be 24" wide x 15" high. The third number indicates the sign panel's thickness and material. The fourth number indicates that the sign panel is single-sided. All DSW sign panels are single-sided.

See pages D1.3 and D1.4 for additional information on sign type DSW sign panel fabrication and mounting options.

See section A3 for additional information regarding sign type codes.
### Description

**Step 3:**

**Determine Panel Height**

Based on the quantity and types of messages to appear, determine the height of the panel from one of three standards: 1'-3", 1'-11", or 2'-6".

The sign height is based upon the quantity and complexity of the messages that are to appear on the sign.

The sign type code for each DSW sign gives information about the sign's size and material. For example, a typical DSW sign type code is DSW-24x15.8.1. The first two numbers indicate the panel's width and height in inches. In the example given, the panel would be 24" wide x 15" high. The third number indicates the sign panel's thickness and material. The fourth number indicates that the sign panel is single-sided. All DSW sign panels are single-sided.

See pages D1.3 and D1.4 for additional information on sign type DSW sign panel fabrication and mounting options.

See section A3 for additional information regarding sign type codes.

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**Typical Sign Face Panel Size for Sign Types DSW-36x15**

- **Width:** 3'-0" (width)
- **Height:** 1'-3" (height)

**Typical Sign Face Panel Size for Sign Types DSW-36x23**

- **Width:** 3'-0"
- **Height:** 1'-11"

**Typical Sign Face Panel Size for Sign Types DSW-36x30**

- **Width:** 3'-0"
- **Height:** 2'-6"
Section D1
Directional Wall Signs

SWD Sign Frame for 1/2" Thick Sign Panel

Typical Mounting Elevation
Scale: 1/4" = 1'-0"

Elevation - SWD Sign Structure
Scale: 1 1/2" = 1'-0"

For Sign Face Layout Information:
1/2" thick sign type DSW or TR-3 sign face panels are typically mounted to SWD sign frames. See page D1.2 for additional information on the types of messages that appear on sign type DSW and how to determine the correct size and layout for sign type DSW. See pages D1.3 and D1.4 for additional information on sign type DSW sign panel fabrication and mounting options. For information on sign type TR-3, see Section B1.

Description

General
SWD sign frames are used to wall mount 1/2" thick DSW or TR sign face panels at locations where walls can be drilled and the sign face panels and sign frames can be mounted using appropriate mechanical anchors and fasteners. The SWD sign frames are fabricated from aluminum. Typically, the DSW or TR sign face panels shall be acrylic with printed vinyl graphics. At select locations, the RTA may choose to use Rhino panel, or an equivalent panel with embedded UV resistant graphics that has been accepted by the RTA, as the DSW or TR sign face panel material. The DSW or TR sign type code will designate the material to be used for the sign face panel.

1 Aluminum Reveal Panel
Painted aluminum reveal panel supports the removable sign face panel. The reveal panel is safely, securely, and properly mounted to the sign's internal framing. When the sign is complete, hardware shall not be visible on the reveal panel. The reveal panel shall have laser cut openings to accept the mounting clips on the back of the sign face panel. Coordinate the size and location of the openings in the reveal panel with the sign panel mounting clips so that the clips properly engage with the reveal panel and so that the sign panel is safely, securely, and properly held in the correct position. Portions of the reveal panel will be visible between the sign panel and the side bars.

2 Sign Panels
1/2" thick DSW or TR sign face panels shall be mounted to the SWD frames with concealed mounting clips. The mounting clips shall allow for removal of the sign face panels for maintenance, repairs, and updates.

3 Side Bars
Provide painted aluminum side bars at each end of the sign face panel. The face of the side bars shall be flush with the face of the DSW or TR sign face panel.

4 Internal Framing
Provide concealed internal framing and bracing as needed for the sign type SWD to be rigid and structurally sound and to properly, safely, and securely support the sign face panels which shall be mounted to it.

5 Removable Top Bar
Removable painted aluminum bar locks the DSW or TR sign face panel in position. The bar shall be secured using flush, vandal-resistant, side mounted set screws. The front edge of the bar shall be flush with the front edge of the sign face panel.

6 Concealed Wall Mounting
Provide all mounting hardware and materials as needed for the sign type SWD to be rigid and structurally sound and to properly, safely, and securely support the sign. All mounting hardware and components shall be vandal-resistant and suitable for exterior use. Mounting hardware shall not be visible.
**SECTION D1**

**Directional Wall Signs**

**SWA - Wall Mounting and**

**SWG - Glass Mounting for**

**1/8" Thick Sign Panel**

**Typical Mounting Elevation**

Scale: 1/4" = 1'-0"

Adjust the width and height of the SWA / SWG back panel to coordinate with the width and height of the DSW or TR sign panel.

**Elevation - SWA & SWG Sign Frame/Back Panel**

Scale: 1 1/2" = 1'-0"

For Sign Face Layout Information:

.080" to 1/8" thick Sign type DSW or TR-3 sign panels are typically mounted to SWA or SWG back panels. See page D1.2 for additional information on the types of messages that appear on sign type DSW and how to determine the correct size and layout for sign type DSW. See pages D1.3 and D1.4 for additional information on sign type DSW sign panel fabrication and mounting options. For information on sign type TR-3, see Section B1.

**Description**

**General**

SWA and SWG sign frames/back panels are used to wall or glass mount .080" to 1/8" thick DSW or TR sign face panels at locations where holes can not be drilled and a sign frame/back panel is needed. The SWA sign frames/back panels shall be used at locations where the sign is to be wall mounted. The SWG sign frames/back panels shall be used at locations where the sign is mounted to glass. For both SWA and SWG sign frames/back panels, the sign face panels and the sign frames shall be mounted using appropriate adhesives and/or double faced tape.

SWG and SWA sign frames shall be fabricated from acrylic with a painted finish. SWA includes a cover up panel. Typically, the DSW or TR sign face panels used with the SWA or SWG sign frames/back panels shall be 1/8" thick acrylic with printed vinyl graphics. At select locations, the RTA may choose to use either a .080" thick aluminum with printed vinyl graphics, a 1/8" thick Rhino panel, or an equivalent panel with embedded UV resistant graphics that has been accepted by the RTA, as the DSW or TR sign face panel material. The DSW or TR sign type code will designate the material to be used for the sign face panel.

**Painted Acrylic Backer Panel**

The SWA or SWG sign frame/back panel shall be 1/4" thick painted acrylic. The sign frame/back panel shall be safely and securely mounted to the wall or glass surface. The sign type DSW or TR sign face panel is then properly, safely, and securely mounted to the face of the acrylic sign frame/back panel. The sign frame/back panel shall be painted on all visible surfaces.

**Sign Panels Mounted to the SWA or SWG Sign Structure**

The .080" or 1/8" thick sign type DSW or TR sign panels shall be properly, safely, and securely mounted to the SWA or SWG sign frames/back panels with appropriate mounting tapes and adhesives.

**Wall or Glass Mounting**

Provide appropriate mounting tapes and adhesives as needed to safely, properly, and securely mount the SWA sign frames/back panels to various wall surfaces or to mount the SWG sign frames/back panels to various glass surfaces. All mounting tapes and adhesives shall be suitable for the surfaces the sign is to be mounted to and shall be vandal-resistant and suitable for exterior use.

**Cover-up Panel**

Provide a 1/8" thick painted acrylic cover-up panel on the side of the glass opposite the sign. The cover-up panel shall be sized and finished to match the sign frame/back panel. The cover-up panel shall be properly, safely, and securely mounted to the face of the glass using appropriate mounting tapes and adhesives.
SECTION D1
Directional Wall Signs

DSW Signs Installed Directly on Wall / Glass

1. **Typical Elevation for Sign Type DSW (Directly Mounted)**
   Scale: N.T.S.

2. **Typical Sections**
   Scale: N.T.S.

For Sign Face Layout Information:
See page D1.2 for additional information on the types of messages that appear on sign type DSW and how to determine the correct size and layout for sign type DSW. See pages D1.3 and D1.4 for additional information on sign type DSW sign panel fabrication and mounting options. For information on sign type TR-3, see Section B1.

### Description

**General**
Depending on the location, sign type DSW or TR may be mounted directly to walls or glass using appropriate adhesives and/or double faced tape. Typically, the DSW or TR sign face panels that are mounted directly to walls or glass shall be 1/8" thick acrylic with printed vinyl graphics or self adhesive vinyl with printed graphics that is adhered directly to the wall or glass surface. At select locations, the RTA may choose to use either a .080" thick aluminum with printed vinyl graphics, a 1/8" thick Rhino panel, or an equivalent panel with embedded UV resistant graphics that has been accepted by the RTA, as the DSW or TR sign face panel material. At locations where signs are mounted to glass, a cover up panel shall be provided. The DSW or TR sign type code will designate the material to be used for the sign face panel.

1. **Sign Face Panels**
   At locations where a sign frame/back panel has not been specified, the DSW or TR sign face panels shall be mounted directly to wall or glass using appropriate appropriate adhesives and/or double faced tape.

2. **Wall or Glass Mounting**
   Provide appropriate mounting tapes and adhesives as needed to safely, properly, and securely mount the DSW or TR sign face panels directly to various wall or glass surfaces. All mounting tapes and adhesives shall be suitable for the surface the sign is to be mounted to and shall be vandal-resistant and suitable for exterior use.

3. **Cover-up Panel**
   Provide a 1/8" thick painted acrylic cover-up panel on the side of the glass opposite the sign. At locations where the sign is self adhesive vinyl mounted directly to the glass, the cover-up shall also be self adhesive vinyl. The cover-up panel shall be sized and finished to match the overall color of the sign face panel. The cover-up panel shall be properly, safely, and securely mounted to the face of the glass using appropriate mounting tapes and adhesives.
SECTION D1
Directional Wall Signs

SWSF special frame for .080" thick sign panels, used only at select locations

1 Typical Mounting Elevation
Scale: 1/4" = 1'-0"

Adjust the width and height of the frame to coordinate with the width and height of the DSW or TR sign panel.

DSW series or TR-3 sign panel width
DSW series or TR-3 sign panel height

2 Elevation - SWSF Sign Mounting Frame
Scale: 1 1/2" = 1'-0"

For Sign Face Layout Information:
See page D1.2 for additional information on the types of messages that appear on sign type DSW and how to determine the correct size and layout for sign type DSW. See pages D1.3 and D1.4 for additional information on sign type DSW sign panel fabrication and mounting options. For information on sign type TR-3, see Section B1.

3 Wall Mounting
Sign panel and aluminum frame are mounted to the wall using screws installed through the face of the sign panel. Provide stainless steel screws, flat washers, lock washers, nylon washers, and appropriate anchors as needed to properly, safely, and securely mount the aluminum sign panel and framing to the existing wall. Install washers in the following order: 1) screw head, 2) lock washer, 3) flat washer, 4) nylon washer, 5) sign panel. All mounting hardware and components shall be vandal-resistant and suitable for exterior use.

Description

General
At select locations, sign type DSW or TR sign face panels fabricated from .080" thick aluminum may be mounted to walls using aluminum framing to allow the sign face panels to be installed proud of the wall surface.

1 Aluminum Framing
3/4" square painted aluminum framing mounts sign panel to wall. Exposed ends of framing shall be closed and finished. Edges of framing shall align with edges of sign panel.

2 Sign Panel Mounted to the Aluminum Framing
.080" thick sign type DSW or TR sign panel. Remove any sharp edges from the exposed corners of the sign panel.
**General**

Sign type DSF is a flag mounted, non-illuminated sign. Sign type DSF panels are fabricated from aluminum and are mounted to the SWF sign structure. Sign type DSF is typically oriented perpendicular to the pedestrian flow and is typically used to provide direction or identify locations.
SECTION D1
Directional Wall Signs
Sign Type DSF

**Description**

**General**
Sign type DSF is an overhead, flag mounted, non-illuminated sign. DSF typically displays one symbol and one line of text.

The sign type DSF sign panels are mounted to the SWF sign structure.

**1 Sign Face**
The sign face shall be a seamless 1/8" thick aluminum panel with an opaque painted finish on the panel face and returns.

**2 Opaque Graphics**
Graphics shall be applied opaque graphic film. The font used for the messages shall be Helvetica LT Std Bold.

See the Message Schedule for the correct messages for each sign type DSF location, or, when directed to do so by the RTA, determine the required content.

Digital art for DSF signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSF sign face graphics.

All layouts need to be submitted to the RTA for review prior to fabrication.

**3 Concealed Mounting Hardware**
Provide concealed mounting hardware as required to properly, safely, securely, and permanently mount the sign panel to the SWF sign structure. The mounting hardware shall not be visible after the sign face has been installed. All mounting hardware shall be vandal-resistant, corrosion-resistant and suitable for use in exterior locations. The mounting hardware shall be properly, safely, securely, and permanently attached to the sign panel. Coordinate the mounting hardware with the sign frame as required.

Associated Sign Frame:
Sign flag mounts using SWF sign structure.
SECTION D1
Directional Wall Signs

SWF Sign Structure

**1 Elevation - SWF Sign Structure**
Scale: 1 1/2" = 1'-0"

**For Sign Face Layout Information:**
See page D1.22 for sign face layout information for sign type DSF.

**Description**

**General**
The SWF sign structure is flag mounted and fabricated from aluminum. Sign type DSF sign panels are mounted to sign type SWF. SWF sign structures shall be used at locations where the structure can be mounted to the wall or ceiling using appropriate mechanical anchors and fasteners.

**1 Aluminum Reveal Panel**
Painted aluminum reveal panels support the removable sign panels. The reveal panels are safely, securely, properly, and permanently mounted to the sign's internal framing. When the sign is complete, hardware shall not be visible on the reveal panels. The reveal panels shall have laser cut openings to accept the mounting clips on the backs of the sign panels. Coordinate the size and location of the openings in the reveal panels with the sign panel mounting clips so that the clips properly engage with the reveal panels and so that the sign panels are safely, securely, and properly held in the correct position. Portions of the reveal panels will be visible between the sign panels and the side bars.

**2 DSF Sign Panels**
Two sign type DSF sign panels shall be mounted to the SWF sign structure with concealed hardware. The mounting hardware shall allow for removal of the DSF sign panels for maintenance, repairs, and updates. See page D1.21 for panel fabrication information.

**3 Side Bars**
Provide painted aluminum side bars at each end of the sign frame. The face of the side bars shall be flush with the face of the DSF sign panels.

**4 Internal Framing**
Provide concealed internal framing and bracing as needed for the SWF sign structure to be rigid and structurally sound and to properly and securely support the DSF sign panels which shall be mounted to it.

**5 Removable Bottom Bar**
Removable painted aluminum bar shall lock the DSF sign panels in position. The bar shall be secured using flush, vandal-resistant set screws.

**6 Mounting Hardware**
Provide all mounting hardware and materials as needed to properly, safely, and securely mount the SWF sign structure to various wall or ceiling surfaces. Provide any additional structural elements or materials needed to properly and securely support the sign. All mounting hardware and components shall be vandal-resistant and suitable for exterior use.
**SECTION D2**
Directional Overhead Signs

**Section Introduction**

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**Description**

**General**

Section D2 general reference.
SECTION D2
Directional Overhead Signs

Sign Type Overview

Sign Type DSO
Directional Overhead Signs
The DSO series sign types are overhead mounted signs that provide directional information.

The DSO sign types can be mounted to ceilings using SON or SOC sign structures, or to soffits using SOS sign structures

SON, SOC, and SOS sign structures are described in section D2.

SON Sign Structure
Pendant Mounted Sign Structure
The SON sign structure’s size conforms to the size of the DSO sign panels which it holds.

The DSO sign panels are described in Section D2.

SOC Sign Structure
Ceiling Mounted Sign Structure
The SOC sign structure’s size conforms to the size of the DSO sign panels which it holds.

The DSO sign panels are described in Section D2.

SOS Sign Structure
Soffit Mounted Sign Structure
The SOS sign structure’s size conforms to the size of the DSO sign panels which it holds.

The DSO sign panels are described in Section D2.

Description

General
The DSO series sign types are ceiling or soffit mounted overhead signs and are used to provide directional information. Typically, the DSO series sign types shall be mounted to SON, SOC, or SOS sign structures.
## Standard Size Summary

### Sign Type DSO-48x12
- **Message Line 1**
- **Message Line 2**

### Sign Type DSO-48x16
- **Message Line 1**
- **Message Line 2**
- **Message Line 3**

### Sign Type DSO-72x16
- **Left Message 1**
- **Right Message 1**
- **Right Message 2**
- **Right Message 3**
- **Left Message 2**
- **Left Message 3**

### Sign Type DSO-96x16
- **Left Message 1**
- **Right Message 1**
- **Right Message 2**
- **Right Message 3**

### Sign Type Custom Size Panels
- **Stairs To 154th Street**
- **Pace Buses**
- **Elevator**

### Description

**General**
The DSO series sign panels are available in a variety of sizes. DSO sign panels shall typically be mounted to SON, SOC, or SOS sign structures. DSO sign panels can also be fitted to existing overhead signs. The SON, SOC, and SOS sign structures vary in size to accommodate the DSO sign panels. To coordinate with site conditions and to maintain design intent, sign fabrication and mounting as outlined in these Guidelines may need to be revised.

See the Technical Specifications for additional information and requirements.
### General Design and Layout Information – DSO Signs

- **DSO sign size shall be coordinated with site requirements and message content.** Select a DSO sign type based on the quantity of information to be displayed and the architectural conditions at the installation location.

- **When CTA train lines are displayed, use symbols that show the line color and line name whenever possible.** If there is limited space, use the train line symbols that only show line color.

- **DSO signs with 2 1/4" message typography must be mounted so that the baseline of the first message line is above 10'-0" above the finish floor and there is an unobstructed horizontal viewing distance of 17'-0" or less.** For signs where the baseline of first message line is higher than 10'-0" above the finish floor or where the horizontal viewing distance is greater than 17'-0", the sign face layout must be adjusted to provide message typography that meets the ADA Guidelines for Visual Character Height.

- **Messages are typically ordered as per the following message hierarchy:** 1) Messages for CTA Trains, 2) Messages for Metra Trains, 3) Messages for Buses, and 4) other directional messages (see page D1.2 for additional information regarding message hierarchy). To meet special wayfinding requirements, the message hierarchy may be revised.

- **Typically, DSO signs display messages in groups consisting of one arrow and up to three lines of text with symbols.** Message typography is flush left, and arrows are always placed to the left of the symbols and messages.

- **On signs with more than one arrow for a single group of messages, the messages are typically arranged first by the message hierarchy and second with the arrows ordered “up,” “left,” “right,” and “down/behind.”**

- **When bus stop symbols are used on a sign, the bus stop messages and their associated arrows are ordered so that the bus stop symbols appear in alphabetical order.**

- **DSO signs must not be placed in locations that are inappropriate.**

- **DSO signs must not be placed in locations where they may confuse or distract drivers or cyclists.**
Section D2
Directional Overhead Signs

Sign Type DSO-48x12

Section D2.5
General

Sign Type DSO-48x12.7.1 is an overhead mounted, non-illuminated directional sign. Typically, each sign face displays one arrow and up to two lines of symbols and message copy.

1 Sign Face

The sign face shall be a seamless 1/8" thick aluminum panel with an opaque painted finish on the panel face and returns. Each sign face has graphics on one side. A double-sided sign will require two sign faces.

2 Opaque Graphics

Graphics shall be digitally printed at high-resolution directly to an exterior-grade, premium cast white graphic film using custom formulated, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlaminate shall be applied to cover the entire sign face and trimmed flush to the edges of the sign face panel.

The dotted arrow position box is shown for reference only and shall not appear on the final sign face panel.

The font used for the messages shall be Helvetica LT Std Bold.

See the Message Schedule for the correct messages for each sign type DSO location, or, when directed to do so by the RTA, determine the required content.

Associated Sign Structures:

For ceiling mounted locations, use SON or SOC sign structures. See page D2.14 and D2.15 for additional information.

For soffit or wall mounted locations, use SOS sign structure. See page D2.16 for additional information.

Description

Digital art for DSO signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSO sign face graphics. All layouts need to be submitted to the RTA for review prior to fabrication.

3 Concealed Mounting Hardware

Provide concealed mounting hardware as required to properly, safely, and securely mount the sign panel to the sign structure. The mounting hardware shall not be visible after the sign face has been installed. All mounting hardware shall be vandal-resistant and suitable for use in exterior applications. Coordinate the mounting hardware with the sign structure as required.
Section - Sign Type DSO-48x16.7.1
Scale: 1 1/2" = 1'-0"

**General**
Sign type DSO-48x16.7.1 is an overhead mounted, non-illuminated directional sign. Typically, each sign face displays one arrow and up to three lines of symbols and message copy.

**Sign Face**
The sign face shall be a seamless 1/8" thick aluminum panel with an opaque painted finish on the panel face and returns. Each sign face has graphics on one side. A double-sided sign will require two sign faces.

**Opaque Graphics**
Graphics shall be digitally printed at high-resolution directly to an exterior-grade, premium cast white graphic film using custom formulated, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlaminate shall be applied to cover the entire sign face and trimmed flush to the edges of the sign face panel.

The dotted arrow position box is shown for reference only and shall not appear on the final sign faces.

When part of the message line, symbols 6-1 through 6-13 shall be 3 1/2" high, centered vertically on the text. Symbols 7-1 through 7-16 shall be 3 1/8" high, centered vertically on the text. There shall be 1 1/4" of space between the text and the symbol, and 1 1/4" of space between symbols.

*When directed to do so by the RTA, determine the required content.

Digital art for DSO signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSO sign face graphics.

All layouts need to be submitted to the RTA for review prior to fabrication.

**Concealed Mounting Hardware**
Provide concealed mounting hardware as required to properly, safely, and securely mount the sign panel to the sign structure. The mounting hardware shall not be visible after the sign face has been installed. All mounting hardware shall be vandal-resistant and suitable for use in exterior applications. Coordinate the mounting hardware with the sign structure as required.
SECTION D2
Directional Overhead Signs

Sign Type DSO-72x16

Section - Sign Type DSO-72x16.7.1
Scale: 1 1/2" = 1'-0"

Elevation - Sign Type DSO-72x16.7.1
Scale: 1 1/2" = 1'-0"

Associated Sign Structures:
For ceiling mounted locations, use SON or SOC sign structures. See page D2.14 and D2.15 for additional information.
For soffit or wall mounted locations, use SOS sign structure. See page D2.16 for additional information.

Description

General
Sign type DSO-72x16.71 is an overhead mounted, non-illuminated directional sign. Typically, each sign face displays up to two arrows with up to six lines of symbols and message copy.

1 Sign Face
The sign face shall be a seamless 1/8" thick aluminum panel with an opaque painted finish on the panel face and returns. Each sign face has graphics on one side. A double-sided sign will require two sign faces.

2 Opaque Graphics
Graphics shall be digitally printed at high-resolution directly to an exterior-grade, premium cast white graphic film using custom formulated, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlaminate shall be applied to cover the entire sign face and trimmed flush to the edges of the sign face panel.
The dotted arrow position box is shown for reference only and shall not appear on the final sign face.
The font used for the messages shall be Helvetica LT Std Bold.
See the Message Schedule for the correct messages for each sign type DSO location, or, when directed to do so by the RTA, determine the required content.
Digital art for DSO signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSO sign face graphics.
All layouts need to be submitted to the RTA for review prior to fabrication.

3 Concealed Mounting Hardware
Provide concealed mounting hardware as required to properly, safely, and securely mount the sign panel to the sign structure. The mounting hardware shall not be visible after the sign face has been installed. All mounting hardware shall be vandal-resistant and suitable for use in exterior applications. Coordinate the mounting hardware with the sign structure as required.
**SECTION D2**

**Directional Overhead Signs**

**Sign Type DSO-96x16**

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**Description**

**General**
Sign type DSO-96x16.7.1 is an overhead mounted, non-illuminated directional sign. Typically, each sign face displays up to two arrows with up to six lines of symbols and message copy.

**Sign Face**
The sign face shall be a seamless 1/8" thick aluminum panel with an opaque painted finish on the panel face and returns. Each sign face has graphics on one side. A double-sided sign will require two sign faces.

**Opaque Graphics**
Graphics shall be digitally printed at high-resolution directly to an exterior-grade, premium cast white graphic film using custom formulated, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlaminate shall be applied to cover the entire sign face and trimmed flush to the edges of the sign face panel.

The dotted arrow position box is shown for reference only and shall not appear on the final sign faces.

The font used for the messages shall be Helvetica LT Std Bold.

See the Message Schedule for the correct messages for each sign type DSO location, or, when directed to do so by the RTA, determine the required content.

Digital art for DSO signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSO sign face graphics.

All layouts need to be submitted to the RTA for review prior to fabrication.

**Concealed Mounting Hardware**
Provide concealed mounting hardware as required to properly, safely, and securely mount the sign panel to the sign structure. The mounting hardware shall not be visible after the sign face has been installed. All mounting hardware shall be vandal-resistant and suitable for use in exterior applications. Coordinate the mounting hardware with the sign structure as required.
**SECTION D2**  
**Directional Overhead Signs**

### Layout Alternates

#### DSO Sign Types

**General**

DSO signs are overhead mounted directionals. Typically, DSO signs display messages in groups consisting of one arrow and up to three lines of symbols and message copy. Shown are guidelines for alternate layouts that may be applied to DSO signs that have more than one arrow for a single group of messages, DSO signs that have a message that may require more than one line, or DSO signs with more than one column of messages. The alternate layouts shown may be applied to DSO-48x12.71, DSO-48x16.71, DSO-72x16.71, DSO-96x16.71, and DSO-96x14.11.t.

A similar layout approach may be applied to sign types DSO-110x22.11.t, DSO (material type 7), and DSO (material type 10). For these sign types, the dimensions shown for arrows, line spacing, margins, etc. may need to be revised.

The font used for the messages shall be Helvetica LT Std Bold.

See the Message Schedule for the correct messages for each sign type DSO location, or, when directed to do so by the RTA, determine the required content.

Digital art for DSO signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSO sign face graphics.

All layouts need to be submitted to the RTA for review prior to fabrication.

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**Multi Arrow Layout**

- **Line 1**: 3 1/8" 1 1/4" 2 1/2" 4 1/2"
- **Line 2**: 4 1/2" 3 1/8" 1 3/4" 4 1/2"
- **Line 3**: 4 1/2" 3 1/8" 1 1/4"

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**Layout for Single Multi-Line Message**

- **Line 1a**: 3 1/2" centered vertically on the text
- **Line 1b**: 3 1/8" centered vertically on the text
- **Line 2**: 1 1/4" of space between the text and the symbol, and 1 1/4" of space between symbols.

*When part of the message line, symbols 6-1 through 6-13 shall be 3 1/2" high, centered vertically on the text. Symbols 7-1 through 7-16 shall be 3 1/8" high, centered vertically on the text. There shall be 1 1/4" of space between the text and the symbol, and 1 1/4" of space between symbols.*

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**Elevation - Typ. Alt. Layouts**

Scale: 1 1/2" = 1'-0"
SECTION D2
Directional Overhead Signs

Custom Sizes
Sign Type DSO
(Variable Size, Material Type 11)

Section - Custom Size DSO (Material Type 11)
Scale: N.T.S.

Verify the existing conditions and coordinate the sign face size as required

Elevation - Custom Size DSO (Material Type 11)
Scale: 1 1/2" = 1'-0"

Associated Sign Structure:
This DSO sign type is a new custom sized sign face that is fitted into existing internally illuminated overhead signs.

Description

General
This DSO sign type is a new custom sized sign face that is fitted into existing internally illuminated overhead signs. The typical layout shown shall be used at locations where the baseline of the first (top) message line is not above 10'-0" above the finished floor and there is an unobstructed horizontal viewing distance of 17'-0" or less. A typical application for this sign type is to replace the sign faces in existing CTA sign type E-19 cabinets.

At each location, field verify the existing dimensions, conditions, mounting height, and the construction of the existing sign cabinet where the new sign face is to be fitted. Provide the RTA with documentation of existing dimensions and conditions and notify the RTA of any conditions that might affect the sign's function or appearance. Depending on the existing conditions, the graphic layout may need to be revised from the typical standard shown. Messages on new signs shall conform with applicable ADA guidelines for Visual Characters. Coordinate the size and thickness of the new sign face with the existing sign cabinet as required for the new sign face to fit correctly and function properly. When the new sign face is ready to be installed, remove the existing sign face that is to be replaced.

1 Sign Face
The sign face shall consist of two layers. Layer 1 shall be 1/8" thick clear polycarbonate. Layer 2 shall be 1/8" thick translucent white polycarbonate. The clear polycarbonate is the outermost panel. It is placed in front of the translucent panel. The graphics are applied to the face of the translucent white polycarbonate. The panels shall be installed so that the clear panel may be removed and replaced without having to also replace the translucent panel.

2 Translucent Graphics
White text, symbols, arrows and other white graphics shall be the translucent white polycarbonate. Translucent colors, for example the red bus boarding area symbol background, shall be translucent graphic films applied to the face of the translucent polycarbonate panel. The font used for the messages shall be Helvetica LT Std Bold. See the Message Schedule for the correct messages for each sign type DSO location, or, when directed to do so by the RTA, determine the required content. Digital art for DSO signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSO sign face graphics.

All layouts need to be submitted to the RTA for review prior to fabrication.

3 Opaque Background
The sign face background shall be completely opaque using silkscreen or mask and spray methods.
SECTION D2
Directional Overhead Signs

Custom Sizes
Sign Type DSO
(Approximately 110" x 22", Material Type 11)

Description

General
This DSO sign type is a new custom sized sign face that is fitted into existing internally illuminated overhead signs. The typical layout shown shall be used at locations where the baseline of the first (top) message line is above 10'-0" above the finished floor and there is an unobstructed horizontal viewing distance of 25'-0" or less. A typical application for this sign type is to replace the sign faces in certain existing RTA information sign cabinets. At each location, verify the existing dimensions, conditions, mounting height, and the construction of the existing sign cabinet where the new sign face is to be fitted. Provide the RTA with documentation of existing dimensions and conditions and notify the RTA of any conditions that might affect the sign's function or appearance. Depending on the existing conditions, the graphic layout may need to be revised from the typical standard shown. Messages on new signs shall conform with applicable ADA guidelines for Visual Characters. Coordinate the size and thickness of the new sign face with the existing sign cabinet as required for the new sign face to fit correctly and function properly. When the new sign face is ready to be installed, remove the existing sign face that is to be replaced. If the new sign face is to be installed in an existing RTA information sign that includes a dynamic display, confirm with the RTA if the display is to be removed or retained.

1 Sign Face
The sign face shall consist of two layers. Layer 1 shall be 1/8" thick clear polycarbonate. Layer 2 shall be 1/8" thick translucent white polycarbonate. The clear polycarbonate is the outermost panel. It is placed in front of the translucent panel. The graphics are applied to the face of the translucent white polycarbonate. The panels are to be installed so that the clear panel may be removed and replaced without having to also replace the translucent panel.

2 Translucent Graphics
White text, symbols, arrows and other white graphics shall be the translucent white polycarbonate. Translucent colors, for example the red bus boarding area symbol background, shall be translucent graphic films applied to the face of the translucent polycarbonate panel. The font used for the messages shall be Helvetica LT Std Bold. See the Message Schedule for the correct messages for each sign type DSO location, or, when directed to do so by the RTA, determine the required content. Digital art for DSO signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSO sign face graphics. All layouts need to be submitted to the RTA for review prior to fabrication.

3 Opaque Background
The sign face background shall be completely opaque using silkscreen or mask and spray methods.
SECTION D2
Directional Overhead Signs

Custom Sizes
Sign Type DSO
(Variable Size, Material Type 7)

General
This DSO sign type may be used at locations where the standard sign type DSO sizes are inappropriate and a custom sized overhead sign is required.

At each location, field verify the existing dimensions, conditions, and mounting height. If the new sign face is to be fitted into an existing sign, field verify the construction of the existing sign cabinet where the new sign face is to be fitted. Provide the RTA with documentation of existing dimensions and conditions and notify the RTA of any conditions that might affect the sign's function or appearance. Messages on new signs shall conform with applicable ADA guidelines for Visual Characters. Coordinate the size and thickness of new sign faces with existing sign structures as required for the new faces to fit correctly and function properly. When the new sign face is ready to be installed, remove the existing sign face that is to be replaced. Coordinate the size of new signs with the site conditions.

1 Sign Face
The sign face shall be a seamless aluminum panel with an opaque painted finish on the panel face and returns. Each sign face has graphics on one side. A double-sided sign will require two sign faces.

2 Digitally Printed Opaque Graphics
Graphics shall be digitally printed at high-resolution directly to an exterior-grade, premium cast white graphic film using custom formulated, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlaminate shall be applied to cover the entire sign face and trimmed flush to the edges of the sign face panel.

The font used for the messages shall be Helvetica LT Std Bold.

See the Message Schedule for the correct messages for each sign type DSO location, or, when directed to do so by the RTA, determine the required content.

Digital art for DSO signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSO sign face graphics. The new sign face layout shall be based on the layout guidelines established for other DSO signs, the required content, and the existing site dimensions.

All layouts need to be submitted to the RTA for review prior to fabrication.

Concealed Mounting Hardware
Provide concealed mounting hardware as required to properly, safely, and securely mount the sign panel to the sign structure. The mounting hardware shall not be visible after the sign face has been installed. All mounting hardware shall be vandal-resistant and suitable for use in exterior applications. Coordinate the mounting hardware with the sign structure as required.
SECTION D2
Directional Overhead Signs

Custom Sizes
Sign Type DSO
(Variable Size,
Material Type 10)

Description

1 Sign Face

The sign face shall be a 2mm Dibond or equivalent aluminum composite material with an opaque painted finish on the panel face and returns. The sign face has graphics on one side.

2 Digitally Printed Opaque Graphics

Graphics shall be digitally printed at high-resolution directly to an exterior-grade, premium cast white graphic film using custom formulated, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlaminate shall be applied to cover the entire sign face and trimmed flush to the edges of the sign face panel.

The font used for the messages shall be Helvetica LT Std Bold.

See the Message Schedule for the correct messages for each sign type DSO location, or, when directed to do so by the RTA, determine the required content.

Digital art for DSO signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSO sign face graphics. The new sign face layout shall be based on the layout guidelines established for other DSO signs, the required content, and the existing site dimensions. Messages on new signs shall conform with applicable ADA guidelines for Visual Characters.

All layouts need to be submitted to the RTA for review prior to fabrication.

3 Mounting Hardware

Provide mounting hardware as required to properly, safely, and securely mount the sign panel to the sign frame. Mounting hardware that is visible on the new sign face shall be painted to match the background color. All mounting hardware shall be vandal-resistant and suitable for use in exterior applications. Coordinate the mounting hardware with the sign frame as required.
**SECTION D2**

Directional Overhead Signs

**SON Pendant Mounted Sign Structure**

**Section D2.14**

**Description**

**General**

The SON is a non-illuminated sign structure that is ceiling mounted and fabricated from aluminum. Sign type DSO sign face panels are mounted to the SON sign structure.

**Aluminum Reveal Panel**

Painted aluminum reveal panels support the removable sign faces. The reveal panels are safely, securely, properly, and permanently mounted to the sign’s internal framing. When the sign is complete, hardware shall not be visible on the reveal panels. The reveal panels shall have laser cut openings to accept the mounting clips on the backs of the sign faces. Coordinate the size and location of the openings in the reveal panels with the sign face mounting clips so that the clips properly engage with the reveal panels and so that the sign faces are safely, securely, and properly held in the correct position. Portions of the reveal panels will be visible between the sign faces and the end bars.

**DSO Sign Face Panels**

Sign type DSO sign face panels shall be mounted to both sides of the SON sign structure with concealed mounting clips. If messages are to appear on only one side, a blank sign face panel must be supplied for the opposite side. The sign face panels shall be removable for maintenance, repairs, and updates.

**Ceiling Mount Support Tubes**

Provide painted aluminum tubes to properly and securely support the SON sign structure and the DSO sign panels mounted to it.

**Internal Framing**

Provide concealed internal framing and bracing as needed for the SON sign structure to be rigid and structurally sound and to properly, safely, and securely support the DSO sign face panels which shall be mounted to it.

**Removable Top Bar**

A removable painted aluminum bar shall lock the DSO sign face panels in position. The bar shall be mounted using flush, vandal-resistant hardware.

**Sign Mounting Hardware**

Provide all mounting hardware and materials as needed to properly, safely, and securely mount the SON sign structure to various ceiling surfaces or at other overhead mounting locations. Provide any additional structural elements or materials needed to properly and securely support the sign. All sign hardware and components shall be vandal-resistant and suitable for exterior use.

**Pivot Mounting Hardware**

Provide pivot mounting hardware that shall hold the sign firmly but shall also allow the sign to give if struck.

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**Typical Mounting Height - Pendant Mounted**

Scale: 1/8" = 1'-0"

**Elevation - SON Sign Structure for Ceiling Mounting**

Scale: 1" = 1'-0"

For Sign Face Layout Information: See pages D2.4 - D2.13 for sign type DSO sign face layout information.
SECTION D2
Directional Overhead Signs

SOC Ceiling Mounted Sign Structure

Description

**General**
The SOC sign structure is ceiling mounted and fabricated from aluminum. Sign type DSO sign face panels are mounted to the SON sign structure.

**Aluminum Reveal Panel**
Painted aluminum reveal panels support the removable sign faces. The reveal panels are safely, securely, properly, and permanently mounted to the sign’s internal framing. When the sign is complete, hardware shall not be visible on the reveal panels. The reveal panels shall have laser cut openings to accept the mounting clips on the backs of the sign faces. Coordinate the size and location of the openings in the reveal panels with the sign face mounting clips so that the clips properly engage with the reveal panels and so that the sign faces are safely, securely, and properly held in the correct position. Portions of the reveal panels will be visible between the sign faces and the end bars.

**DSO Sign Face Panels**
Sign type DSO sign face panels shall be mounted to both sides of the SOC sign structure with concealed mounting clips. If messages are to appear on only one side, a blank sign face panel must be supplied for the opposite side. The sign face panels shall be removable for maintenance, repairs, and updates.

**Side Bars**
Provide painted aluminum side bars at each end of the sign frame. The face of the side bars shall be flush with the face of the DSO sign face panels.

**Internal Framing**
Provide concealed internal framing and bracing as needed for the SOC sign structure to be rigid and structurally sound and to properly, safely, and securely support the DSO sign face panels which shall be mounted to it.

**Removable Bottom Bar**
A removable painted aluminum bar shall lock the DSO sign panels in position. The bar shall be secured using flush, vandal-resistant hardware. Concealed screws and rivet nuts shall also secure the sign face to the sign’s internal framing.

**Mounting Bracket**
Provide painted aluminum mounting brackets that shall properly, safely, and securely support the sign. The mounting brackets shall hold the sign firmly but shall also allow the sign to give if struck.

**Ceiling Mounting Hardware**
Provide all mounting hardware and materials as needed to properly, safely, and securely mount the SOC sign structure to various ceiling surfaces. Provide any additional structural elements or materials needed to properly and securely support the sign. All mounting hardware and components shall be vandal-resistant and suitable for exterior use.
SECTION D2
Directional Overhead Signs

SOS Soffit Mounted Sign Structure

1 Typical Mounting Height - Soffit Mounted
Scale: 3/16" = 1'-0"

2 Elevation - SOS Sign Structure for Soffit Mounting
Scale: 1 1/2" = 1'-0"

For Sign Face Layout Information:
See pages D2.4 - D2.13 for sign type DSO sign face layout information.

Description

General
The SOS sign structure is wall mounted and fabricated from aluminum. A sign type DSO sign face panel is mounted to the SOS sign structure.

Aluminum Reveal Panel
Painted aluminum reveal panel supports the removable sign face. The reveal panel is safely, securely, and properly mounted to the sign’s internal framing. When the sign is complete, hardware shall not be visible on the reveal panel. The reveal panel shall have laser cut openings to accept the mounting clips on the back of the sign face. Coordinate the size and location of the openings in the reveal panel with the sign face mounting clips, and if the sign face is removed from the top or bottom, so that the clips properly engage with the reveal panel and so that the sign face is safely, securely, and properly held in the correct position. Portions of the reveal panel will be visible between the sign face and the side bars.

DSO Sign Face Panel
A sign type DSO series sign panel shall be mounted to the SOS sign structure with concealed mounting clips. The SOS sign structure and the DSO sign panel mounting hardware shall allow for removal of the DSO sign face panel for maintenance, repairs, and updates.

Side Bars
Provide painted aluminum side bars at each end of the SOS sign structure. The face of the side bars shall be flush with the face of the DSO sign face panel.

Internal Framing
Provide concealed internal framing and bracing as needed for the SOS sign structure to be rigid and structurally sound and to properly, safely, and securely support the DSO sign face panel which shall be mounted to it.

Removable Top or Bottom Bar
Removable painted aluminum bar locks the DSO sign face panel in position. The bar shall be secured using flush, vandal-resistant hardware. The face of the bar shall be flush with the face of the DSO sign face panel. Typically, the top bar will be removable to allow the sign panel to be removed by sliding the panel up. In certain locations where there is not space above the sign to remove the top bar, the bottom bar will be removable, and the sign panel will slide down to be removed. Additional screws and rivet nuts will be used to hold the sign face panel in place when the bottom bar is removed.

Concealed Wall Mounting
Provide all mounting hardware and materials as needed to properly, safely, and securely mount the SOS sign structure to various wall surfaces. Provide any additional structural elements or materials needed to properly and securely support the sign. All mounting hardware and components shall be vandal-resistant and suitable for exterior use. Mounting hardware shall not be visible.
SECTION D3
Directional Street Signs

Section Introduction

Description

General
Section D3 general reference.
**Sign Type DSS**

**Directional Street Signs**

The DSS sign types provide directional information along public sidewalks.

The DSS sign types are mounted to new sign posts or to existing sign posts, street lights, walls, or other existing structures.

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**Description**

**General**

Sign type DSS has three standard sizes and one special size for use at certain locations. Determine the size required based on the information to be displayed and the space available for the sign.
SECTION D3  
Directional Street Signs

Sign Type DSS  
Standard Size Summary

**Description**

**General**

Sign type DSS has three standard sizes (DSS-1, DSS-3, and DSS-5) and one special size (DSS-2) for use at certain locations. Determine the size required based on the information to be displayed and the space available for the sign.
SECTION D3
Directional Street Signs

Sign Type DSS
Typical Mounting Hole Placement

### Description

**General**

Sign type DSS panels can be side / flag mounted using CMFB or CMFS mounting hardware or center mounted using CMCB, CMCC, CMCS, CMWA, or CMWB mounting hardware. Sign type DSS-2 panels are typically only center mounted. Position mounting holes in the panels as shown based on the method used at each sign installation location. Dimensions shown are to the center of the holes.

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**Side Mount**

- Sign Type DSS-3
- Sign Type DSS-4

**Center Mount**

- Sign Type DSS-1
- Sign Type DSS-2
- Sign Type DSS-3
- Sign Type DSS-4

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SECTION D3
Directional Street Signs

Sign Type DSS-1

General Information

Description

General
Sign type DSS signs are aluminum, single or double-sided panels that provide directional information to pedestrians along sidewalks. The messages shown are for reference only. See the Message Schedule for the actual content scheduled for each DSS sign location, or, when directed to do so by the RTA, determine the required content.

Digital art for DSS signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSS sign face graphics. Digital template files shall be supplied by the RTA. Develop the required graphics using existing DSS sign types as precedents for layout. All new DSS graphics must be reviewed and accepted by the RTA prior to fabrication.

See page D3.6 for Design and Layout Notes.

1 Aluminum Sign Panel
The sign substrate is a .080" thick solid aluminum panel.

2 Background
The overall background of the sign and the white text and graphics shall be an exterior-grade, premium cast white printable graphic film. Double sided panels shall have the printed film applied to both sides of the panel. Single sided panels shall have the printed film applied to the face side of the sign and the back side of the sign shall be painted color 1.

3 Digitally Printed Graphics
The graphics shall be digitally printed at high resolution directly onto the graphic film using custom formulated, exterior grade, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlaminate shall be applied to cover the entire sign face and trimmed flush to the edges of the sign panel.

4 Holes for Mounting Hardware
Coordinate the location and size of mounting holes with the type of bracket or other mounting hardware to be used with the sign. See page D3.4 for mounting hole location information. All holes shall be drilled in the shop.

5 Mounting Brackets
DSS signs can be mounted to new sign posts or to existing sign posts or other existing structures. Coordinate the type of mounting bracket with the type of sign post and other mounting conditions at each installation location. See Section C4 for additional information on sign posts and sign mounting brackets.
SECTION D3
Directional Street Signs

Sign Type DSS-1

Design and Layout Notes

General Design and Layout Information – DSS Signs

- DSS sign size shall be coordinated with site requirements and message content. Generally, DSS-1 shall be used where it is not practical or advisable to use a larger DSS sign. When more than one DSS sign appears at a single location, all the signs shall be the same panel size.
- Three typical message layout sizes are provided: "Large" layouts provide a 3" arrow, 3" symbol, and 1 3/8" text height. "Medium" layouts provide a 2 1/4" arrow, 2 1/4" symbol, and 1" text height. "Small" layouts provide a 1 7/8" arrow, 1 7/8" symbol, and 1" text height. Select a large, medium, or small message layout based on the quantity of information to be displayed.
- Messages are typically ordered as per the following general message hierarchy: 1) Messages for CTA Trains, 2) Messages for Metra Trains, 3) Messages for Buses, and 4) other directional messages (see page D12 for additional information regarding message hierarchy). To meet special wayfinding requirements, the message hierarchy may be revised.
- When CTA train lines are displayed, use symbols that show the line color and line name whenever possible. If there is limited space, use the train line symbols that only show line color.
- If multiple message groups are placed on a single sign panel, separate the message groups with a line. Message groups include CTA train messages, Metra messages, bus messages, and other directional information.
- On signs with more than one arrow for a single message group, the messages within the group are typically arranged with the arrows ordered "up", "left", "right", and "down/behind".
- When all bus stops and/or CTA train lines listed under the message text are in the same direction, place the arrow above the text, with the transit mode symbol to the right of the arrow. Arrows and typography are flush left.
- If the CTA train lines are in different directions, place the arrows below the message text, to the left of the line symbols. Place the transit mode symbol above the message text. Arrows and typography are flush left.
- If bus stops are in different directions, place the arrows below the message text, to the left of the bus stop symbols. Place the transit mode symbol above the text. Bus stop symbols and their associated arrows are ordered so that the bus stop symbols appear in alphabetical order. Arrows and typography are flush left.
- Access symbols (elevator, stairs, etc.) are typically placed above the directional text to the right of the transit mode symbol.
- DSS signs must not be placed in locations that are inappropriate.
- DSS signs must not be placed in locations where they may confuse or distract drivers or cyclists.
SECTION D3
Directional Street Signs

Sign Type DSS-1

Mounting Heights

Description

Typical Mounting Heights for DSS-1 Sign Type

Typical mounting heights are shown above. Mounting heights may need to be adjusted due to site conditions. Post or column mounted signs must meet ADA Guidelines for Protruding Objects. Signs must be located so that they can be seen and read by pedestrians without creating a hazardous situation. There must be adequate space around the sign for pedestrians to stand and read the information on the sign. There must also be adequate space for pedestrians to safely circulate around the sign. Signs must not be located close to streets so that pedestrians do not inadvertently step into traffic when walking around the sign or when walking around other pedestrians as they are viewing the sign. Signs must not be placed in locations where they may confuse or distract drivers or cyclists.

All locations shall be examined on site to determine the final mounting height.

Elevation - Sign Type DSS-1 Mounting Heights

Scale: 1/4" = 1'-0"

One or two signs mounted to existing column. If two signs, second sign is mounted on opposite side.

Two or more signs mounted to existing column, with at least one sign mounted 90° from first sign.
SECTION D3
Directional Street Signs

Sign Type DSS-2

General Information

Description

General
Sign type DSS-2 signs are aluminum single-sided panels that provide directional information to passengers along rail station platforms in downtown Chicago. The messages shown are for reference only. See the Message Schedule for the actual content scheduled for each DSS sign location, or, when directed to do so by the RTA, determine the required content.

Digital art for DSS signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSS sign face graphics. Digital template files shall be supplied by the RTA. Develop the required graphics using existing DSS sign types as precedents for layout. All new DSS graphics must be reviewed and accepted by the RTA prior to fabrication.

See page D3.9 for Design and Layout Notes.

1 Aluminum Sign Panel
The sign substrate is a .080" thick solid aluminum panel.

2 Background
The overall background of the sign and the white text and graphics shall be an exterior-grade, premium cast white printable graphic film. Double sided panels shall have the printed film applied to both sides of the panel. Single sided panels shall have the printed film applied to the face side of the sign and the back side of the sign shall be painted color 1.

3 Digitally Printed Graphics
The graphics shall be digitally printed at high resolution directly onto the graphic film using custom formulated, exterior grade, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlaminate shall be applied to cover the entire sign face and trimmed flush to the edges of the sign panel.

4 Holes for Mounting Hardware
Coordinate the location and size of mounting holes with the type of bracket or other mounting hardware to be used with the sign. See page D3.4 for mounting hole location information. All holes shall be drilled in the shop.

5 Mounting Brackets
DSS signs can be mounted to new sign posts or to existing sign posts or other existing structures. Coordinate the type of mounting bracket with the type of sign post and other mounting conditions at each installation location. See Section C4 for additional information on sign posts and sign mounting brackets.

Sign Post and Sign Mounting Information:
For locations where DSS signs are mounted to new sign posts, see Part C, Section C4 for information on the sign posts and sign mounting brackets.

For locations where DSS signs are mounted to existing posts, see Part C, Section C4 for information on sign mounting brackets for use with existing posts.

Elevation - Sign Type DSS-2 – Center Mounting

Scale: 3” = 1’-0”
### General Design and Layout Information - DSS Signs

- **DSS-2 signs** are typically installed only on columns located on the platforms of downtown Chicago Metra rail stations. When more than one DSS sign appears at a single location, all the signs shall be the same size.
- Three typical message layout sizes are provided: “Large” layouts provide a 3” arrow, 3” symbol, and 1 3/8” text height. “Medium” layouts provide a 2 1/4” arrow, 2 1/4” symbol, and 1” text height. “Small” layouts provide a 1 7/8” arrow, 1 7/8” symbol, and 1” text height. Select a large, medium, or small message layout based on the quantity of information to be displayed.
- Messages are typically ordered as per the following general message hierarchy: 1) Messages for CTA Trains, 2) Messages for Metra Trains, 3) Messages for Buses, and 4) other directional messages (see page D1.2 for additional information regarding message hierarchy). To meet special wayfinding requirements, the message hierarchy may be revised.
- When CTA train lines are displayed, use symbols that show the line color and line name whenever possible. If there is limited space, use the train line symbols that only show line color.
- If multiple message groups are placed on a single sign panel, separate the message groups with a line. Message groups include CTA train messages, Metra messages, bus messages, and other directional information.
- On signs with more than one arrow for a single message group, the messages within the group are typically arranged with the arrows ordered “up”, “left”, “right”, and “down/behind”.
- When all bus stops and / or CTA train lines listed under the message text are in the same direction, place the arrow above the text, with the transit mode symbol to the right of the arrow. Arrows and typography are flush left.
- If the CTA train lines are in different directions, place the arrows below the message text, to the left of the line symbols. Place the transit mode symbol above the message text. Arrows and typography are flush left.
- If bus stops are in different directions, place the arrows below the message text, to the left of the bus stop symbols. Place the transit mode symbol above the bus stop symbols. Bus stop symbols and their associated arrows are ordered so that the bus stop symbols appear in alphabetical order. Arrows and typography are flush left.
- Access symbols (elevator, stairs, etc.) are typically placed above the text to the right of the transit mode symbol.
- DSS signs must not be placed in locations that are inappropriate.
- DSS signs must not be placed in locations where they may confuse or distract drivers or cyclists.
**SECTION D3**
Directional Street Signs

**Sign Type DSS-2**

**Mounting Heights**

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**Description**

**Typical Mounting Heights for DSS-2 Sign Type**

Typical mounting heights are shown above. Mounting heights may need to be adjusted due to site conditions. Post or column mounted signs must meet ADA Guidelines for Protruding Objects. Signs must be located so that they can be seen and read by pedestrians without creating a hazardous situation. There must be adequate space around the sign for pedestrians to stand and read the information on the sign. There must also be adequate space for pedestrians to safely circulate around the sign. Signs must not be located close to streets so that pedestrians do not inadvertently step into traffic when walking around the sign or when walking around other pedestrians as they are viewing the sign. Signs must not be placed in locations where they may confuse or distract drivers or cyclists.

All locations shall be examined on site to determine the final mounting height.
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Large” Graphic Layout
Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

1 Elevation - Sign Types DSS-1 and 2 – CTA Train Message “Large” Layouts

Scale: 3” = 1'-0"

One arrow, CTA ‘L’ line symbols with line names.
Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

One arrow, square CTA ‘L’ line symbols

**Elevation - Sign Types DSS-1 and 2 – CTA Train Message “Large” Layouts**

Scale: \(3^\prime = 1^\prime-0^\prime\)
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

"Large" Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Multiple arrows, square CTA ‘L’ line symbols

Elevation - Sign Types DSS-1 and 2 – CTA Train Message “Large” Layouts

Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Large” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Elevation - Sign Types DSS-1 and 2 – Metra Trains / General Text Message “Large” Layouts

Scale: 3” = 1'-0"

One arrow, one or more messages
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Large” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Two arrows, each with one message

1 Elevation - Sign Types DSS-1 and 2 – Metra Trains / General Text Message “Large” Layouts
Scale: $3" = 1'-0"$
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Large” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

One arrow, bus boarding area symbols

1 Elevation - Sign Types DSS-1 and 2 – Bus Message “Large” Layouts
Scale: 3” = 1'-0"
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Large” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Elevation - Sign Types DSS-1 and 2 – Bus Message “Large” Layouts

Scale: 3” = 1'-0"

Multiple arrows, multiple bus boarding area symbols
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Medium” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

One arrow, CTA ‘L’ line symbols with line names.

Elevation - Sign Types DSS-1 and 2 – CTA Train Message “Medium” Layouts

Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Medium” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

One arrow, multiple square CTA ‘L’ line symbols.

1
Elevation - Sign Types DSS-1 and 2 – CTA Train Message “Medium” Layouts

Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Medium” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Two or more arrows, multiple square CTA ‘L’ line symbols.

Elevation - Sign Types DSS-1 and 2 – CTA Train Message “Medium” Layouts

Scale: 3” = 1'-0"
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Medium” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

One arrow, one or multiple messages.
For Metra directionals, use this layout when there is one or more station in the same direction.

1 Elevation - Sign Types DSS-1 and 2 - Metra Train / General Text Message “Medium” Layouts

Scale: 3” = 1'-0"
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Medium” Graphic Layout Example

Elevation - Sign Types DSS-1 and 2 – Metra Train / General Text Message “Medium” Layouts

Scale: 3" = 1'-0"

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Multiple arrows, multiple messages.
For Metra directionals, use this layout when there is more than one station in multiple directions.
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Medium” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Elevation - Sign Types DSS-1 and 2 – Bus Message “Medium” Layouts

Scale: 3” = 1'-0"
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Medium” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Multiple arrows, multiple bus boarding area symbols symbols.

Elevation - Sign Types DSS-1 and 2 – Bus Message “Medium” Layouts
Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Small” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

One arrow, CTA ‘L’ line symbols with line names.

Elevation - Sign Types DSS-1 and 2 – CTA Train Message “Small” Layouts
Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Small” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Elevation - Sign Types DSS-1 and 2 – CTA Train Message “Small” Layouts

Scale: 3” = 1′-0”

One arrow, square CTA ‘L’ line symbols.
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Small” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Multiple arrows, multiple square CTA ‘L’ line symbols.

Elevation - Sign Types DSS-1 and 2 – CTA Train Message “Small” Layouts
Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Small” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

One arrow, one or multiple messages.
For Metra directionals, use this layout when there is one or more station in the same direction.
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Small” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Multiple arrows, multiple messages.
For Metra directionals, use this layout when there is more than one station in multiple directions.

1 Elevation - Sign Types DSS-1 and 2 – Metra Train / General Text Message “Small” Layouts
Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Small” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Elevation - Sign Types DSS-1 and 2 – Bus Message “Small” Layouts

Scale: 3" = 1'-0"

One arrow, bus boarding area symbols symbols.
SECTION D3
Directional Street Signs

Sign Types DSS-1 and DSS-2

“Small” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Multiple arrows, boarding area symbols symbols.

1 Elevation - Sign Types DSS-1 and 2 – Bus Message “Small” Layouts
Scale: 3" = 1'-0"
Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Note: Use this layout only if there is not enough room on the sign panel to use a layout with text.

One or more arrows, bus boarding area symbols symbols.

1

**Elevation - Sign Types DSS-1 and 2 – Bus Message “Small” Layouts**

*Scale: 3" = 1'-0"*
**SECTION D3
Directional Street Signs**

**Sign Type DSS-3**

**General Information**

**Description**

**General**
Sign type DSS signs are aluminum, single or double-sided panels that provide directional information to pedestrians along sidewalks. The messages shown are for reference only. See the Message Schedule for the actual content scheduled for each DSS sign location, or, when directed to do so by the RTA, determine the required content.

Digital art for DSS signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSS sign face graphics. Digital template files shall be supplied by the RTA. Develop the required graphics using existing DSS sign types as precedents for layout. All new DSS graphics must be reviewed and accepted by the RTA prior to fabrication.

See page D3.34 for Design and Layout Notes.

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**Aluminum Sign Panel**
The sign substrate is a .080" thick solid aluminum panel.

**Background**
The overall background of the sign and the white text and graphics shall be an exterior-grade, premium cast white printable graphic film. Double sided panels shall have the printed film applied to both sides of the panel. Single sided panels shall have the printed film applied to the face side of the sign and the back side of the sign shall be painted color 1.

**Digitally Printed Graphics**
The graphics shall be digitally printed at high resolution directly onto the graphic film using custom formulated, exterior grade, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlaminate shall be applied to cover the entire sign face and trimmed flush to the edges of the sign panel.

**Holes for Mounting Hardware**
Coordinate the location and size of mounting holes with the type of bracket or other mounting hardware to be used with the sign. See page D3.4 for mounting hole location information. All holes shall be drilled in the shop.

**Mounting Brackets**
DSS signs can be mounted to new sign posts or to existing sign posts or other existing structures. Coordinate the type of mounting bracket with the type of sign post and other mounting conditions at each installation location. See Section C4 for additional information on sign posts and sign mounting brackets.
SECTION D3
Directional Street Signs

Sign Type DSS-3

Design and Layout Notes

Description

General Design and Layout Information - DSS Signs

- DSS sign size shall be coordinated with site requirements and message content. Generally, DSS-3 shall be used unless its size is not appropriate for the conditions at the installation site and a smaller sign is needed, or the message content requires a larger sign be used. When more than one DSS sign appears at a single location, all the signs shall be the same panel size.

- Three typical message layout sizes are provided: "Large" layouts provide a 3 7/8" arrow, 3 7/8" symbol, and 2" text height. "Medium" layouts provide a 3" arrow, 3" symbol, and 2" text height. "Extra Large" layouts provide a 5 3/4" symbol and 3" text height. Select a large or medium layout based on the quantity of information to be displayed. The extra large layout is used only as a primary site identification sign.

- Messages are typically ordered as per the following general message hierarchy: 1) Messages for CTA Trains, 2) Messages for Metra Trains, 3) Messages for Buses, and 4) other directional messages (see page D1.2 for additional information regarding message hierarchy). To meet special wayfinding requirements, the message hierarchy may be revised.

- When CTA train lines are displayed, use symbols that show the line color and line name whenever possible. If there is limited space, use the train line symbols that only show line color.

- When CTA train lines are in different directions, place the arrows below the message text, to the left of the line symbols. Place the transit mode symbol above the text. Arrows and typography are flush left.

- If bus stops are in different directions, place the arrows below the message text, to the left of the bus stop symbols. Place the transit mode symbol above the text. Bus stop symbols and their associated arrows are ordered so that the bus stop symbols appear in alphabetical order. Arrows and typography are flush left.

- Access symbols (elevator, stairs, etc.) are typically placed above the directional text to the right of the transit mode symbol.

- DSS signs must not be placed above the directional text to the right of the transit mode symbol.

- DSS signs must not be placed in locations that are inappropriate.

- DSS signs must not be placed in locations where they may confuse or distract drivers or cyclists.

Elevation - Sign Type DSS-3 (Large Layout) Scale: 1 1/2" = 1'-0"

Elevation - Sign Type DSS-3 (Medium Layout) Scale: 1 1/2" = 1'-0"

Elevation - Sign Type DSS-3 (Extra Large Layout) Scale: 1 1/2" = 1'-0"
**SECTION D3**
Directional Street Signs

**Sign Type DSS-3**

**Mounting Heights**

**Elevation - Sign Type DSS-3 Mounting Heights**

Scale: 1/4" = 1'-0"

Description

**Typical Mounting Heights for DSS-3 and BS-1 Sign Types**

Typical mounting heights are shown above. Mounting heights may need to be adjusted due to site conditions. Post or column mounted signs must meet ADA Guidelines for Protruding Objects. Signs must be located so that they can be seen and read by pedestrians without creating a hazardous situation. There must be adequate space around the sign for pedestrians to stand and read the information on the sign. There must also be adequate space for pedestrians to safely circulate around the sign. Signs must not be located close to streets so that pedestrians do not inadvertently step into traffic when walking around the sign or when walking around other pedestrians as they are viewing the sign. Signs must not be placed in locations where they may confuse or distract drivers or cyclists. All locations shall be examined on site to determine the final mounting height.

When adding a DSS-3 or second BS-1 to a location with sign type BB and BS-1 already mounted to an SRSP sign post, mount all the DSS and BS sign panels at the same height.
**SECTION D3**

**Directional Street Signs**

**Sign Type DSS-4**

**General Information**

**General**

Sign type DSS signs are aluminum, single or double-sided panels that provide directional information to pedestrians along sidewalks. The messages shown are for reference only. See the Message Schedule for the actual content scheduled for each DSS sign location, or, when directed to do so by the RTA, determine the required content.

Digital art for DSS signs may be provided by the RTA. When directed to do so by the RTA, prepare the digital art for the DSS sign face graphics.

Digital template files shall be supplied by the RTA. Develop the required graphics using existing DSS sign types as precedents for layout. All new DSS graphics must be reviewed and accepted by the RTA prior to fabrication.

See page D3.37 for Design and Layout Notes.

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**Aluminum Sign Panel**

The sign substrate is a .080" thick solid aluminum panel.

**Background**

The overall background of the sign and the white text and graphics shall be an exterior-grade, premium cast white printable graphic film. Double sided panels shall have the printed film applied to both sides of the panel. Single sided panels shall have the printed film applied to the face side of the sign and the back side of the sign shall be painted color 1.

**Digitally Printed Graphics**

The graphics shall be digitally printed at high resolution directly onto the graphic film using custom formulated, exterior grade, UV-resistant, opaque inks. The inks shall be formulated to match the colors specified and to be compatible with the graphic film. Protect printed graphics with a clear protective anti-graffiti overlaminate that is compatible with the graphic film and the printed graphics. The printed graphic film and overlaminate shall be applied to cover the entire sign face and trimmed flush to the edges of the sign panel.

**Holes for Mounting Hardware**

Coordinate the location and size of mounting holes with the type of bracket or other mounting hardware to be used with the sign. See page D3.4 for mounting hole location information. All holes shall be drilled in the shop.

**Mounting Brackets**

DSS signs can be mounted to new sign posts or to existing sign posts or other existing structures. Coordinate the type of mounting bracket with the type of sign post and other mounting conditions at each installation location. See Section C4 for additional information on sign posts and sign mounting brackets.

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**Elevation - Sign Type DSS-4 – Side Mounting**

Scale: 1 1/2" = 1'-0"

**Sign Post and Sign Mounting Information:**

For locations where DSS signs are mounted to new sign posts, see Part C, Section C4 for information on the sign posts and sign mounting brackets.

For locations where DSS signs are mounted to existing posts, see Part C, Section C4 for information on sign mounting brackets for use with existing posts.
SECTION D3
Directional Street Signs

Sign Type DSS-4

Design and Layout Notes

Description

General Design and Layout Information – DSS Signs

- DSS sign size shall be coordinated with site requirements and message content. Generally, DSS-4 shall be used where the message content requires a sign larger than DSS-3, and the DSS-4 is appropriate for the conditions at the installation location. When more than one DSS sign appears at a single location, all the signs shall be the same panel size.

- Three typical message layout sizes are provided. “Large” layouts provide a 3 7/8” arrow, 3 7/8” symbol, and 2” text height. “Medium” layouts provide a 3” arrow, 3” symbol, and 2” text height. “Extra Large” layouts provide a 5 3/4” symbol and 3” text height. Select a large or medium layout based on the quantity of information to be displayed. The extra large layout is used only as a primary site identification sign.

- Messages are typically ordered as per the following general message hierarchy: 1) Messages for CTA Trains, 2) Messages for Metra Trains, 3) Messages for Buses, and 4) other directional messages (see page D1.2 for additional information regarding message hierarchy). To meet special wayfinding requirements, the message hierarchy may be revised.

- When CTA train lines are displayed, use symbols that show the line color and line name whenever possible. If there is limited space, use the train line symbols that only show line color.

- If multiple message groups are placed on a single sign panel, separate the message groups with a line. Message groups include CTA train messages, Metra messages, bus messages, and other directional information.

- On signs with more than one arrow for a single message group, the messages within the group are typically arranged with the arrows ordered “up”, “left”, “right”, and “down/behind”.

- When all bus stops and/or CTA train lines listed under the message text are in the same direction, place the arrow above the text, with the transit mode symbol to the right of the arrow. Arrows and typography are flush left.

- If the CTA train lines are in different directions, place the arrows below the message text, to the left of the line symbols. Place the transit mode symbol above the message text. Arrows and typography are flush left.

- If bus stops are in different directions, place the arrows below the message text, to the left of the bus stop symbols. Place the transit mode symbol above the text. Bus stop symbols and their associated arrows are ordered so that the bus stop symbols appear in alphabetical order. Arrows and typography are flush left.

- Access symbols (elevator, stairs, etc.) are typically placed above the text to the right of the transit mode symbol.

- DSS signs must not be placed in locations that are inappropriate.

- DSS signs must not be placed in locations where they may confuse or distract drivers or cyclists.
SECTION D3
Directional Street Signs

Sign Type DSS-5

Mounting Heights

Elevation - Sign Type DSS-4 Mounting Heights

Scale: 1/4" = 1'-0"

**Description**

**Typical Mounting Heights for DSS-4 and BS-2 Sign Types**

Typical mounting heights are shown above. Mounting heights may need to be adjusted due to site conditions. Post or column mounted signs must meet ADA Guidelines for Protruding Objects. Signs must be located so that they can be seen and read by pedestrians without creating a hazardous situation. There must be adequate space around the sign for pedestrians to stand and read the information on the sign. There must also be adequate space for pedestrians to safely circulate around the sign. Signs must not be located close to streets so that pedestrians do not inadvertently step into traffic when walking around the sign or when walking around other pedestrians as they are viewing the sign. Signs must not be placed in locations where they may confuse or distract drivers or cyclists. All locations shall be examined on site to determine the final mounting height.

When adding a DSS-4 or second BS-2 to a location with sign type BB and BS-2 already mounted to an SRSP sign post, mount all the DSS and BS sign panels at the same height.
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Large” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Elevation - Sign Types DSS-3 and 4 – CTA Train Message “Large” Layouts

Scale: 3” = 1’-0"

One arrow, CTA ‘L’ line symbols with line names.
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Large” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

CTA Trains

One arrow, multiple square CTA ‘L’ line symbols

Elevation - Sign Types DSS-3 and 4 – CTA Train Message “Large” Layouts

Scale: 3” = 1’-0”
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Large” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Elevation - Sign Types DSS-3 and 4 – CTA Train Message “Large” Layouts

Scale: 3" = 1'-0"

Multiple arrows, square CTA ‘L’ line symbols
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Large” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

One arrow, one or multiple messages.
For Metra directionals, use this layout when there is one or more station in the same direction.

Elevation - Sign Types DSS-3 and 4 - Metra Train / General Text Message “Large” Layouts

Scale: 3” = 1’-0”
SECTION D3
Directional Street Signs

"Sign Types DSS-3 and DSS-4

"Large" Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Multiple arrows, multiple messages.
For Metra directionals, use this layout when there is more than one station in multiple directions.

Elevation - Sign Types DSS-3 and 4 – Metra Train / General Text Message “Large” Layouts

Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Large” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Bus Stops

One arrow, multiple bus boarding area symbols

Elevation - Sign Types DSS-3 and 4 – Bus Message “Large” Layouts

Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Large” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Multiple arrows, multiple bus boarding area symbols

1
Elevation - Sign Types DSS-3 and 4 - Bus Message “Large” Layouts
Scale: 3" = 1'-0"
Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

One arrow, CTA ‘L’ line symbols with line names.

Elevation - Sign Types DSS-3 and 4 – CTA Train Message “Medium” Layouts

Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Medium” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Elevation - Sign Types DSS-3 and 4 – CTA Train Message “Medium” Layouts

Scale: 3” = 1'-0"

One arrow, square CTA ‘L’ line symbols

(New Message Group)
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Medium” Graphic Layout
Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Elevation - Sign Types DSS-3 and 4 – CTA Train Message “Medium” Layouts

Scale: 3" = 1'-0"

Multiple arrows, multiple square CTA ‘L’ line symbols.

If no symbol is specified here, move CTA symbols to the left.

Dividing line does not appear after last message.

Center align symbols and arrow.
**SECTION D3**

*Directional Street Signs*

**“Sign Types DSS-3 and DSS-4”**

**“Medium” Graphic Layout Example**

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

One arrow, one or multiple messages.
For Metra directionals, use this layout when there is one or more stations in the same direction.

**Elevation - Sign Types DSS-3 and 4 – Metra Train / General Text Message “Medium” Layouts**

*Scale: 3” = 1'-0”*
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Medium” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Multiple arrows, multiple messages.
For Metra directionals, use this layout when there is more than one station in multiple directions.

1 Elevation - Sign Types DSS-3 and 4 – Metra Train / General Text Message “Medium” Layouts

Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Medium” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

One arrow, bus boarding area symbols symbols.

Elevation - Sign Types DSS-3 and 4 – Bus Message “Medium” Layouts

Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Medium” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Multiple arrows, multiple bus boarding area symbols symbols.

1 Elevation - Sign Types DSS-3 and 4 – Bus Message “Medium” Layouts
Scale: 3" = 1'-0"

Elevation - Sign Types DSS-3 and 4 – Bus Message “Medium” Layouts

Graphical layout examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Multiple arrows, multiple bus boarding area symbols.

Symbol Typ. Symbol Typ.

Bus Stops

Bus Boarding Area Symbol Typ.

Bus Boarding Area Symbol Typ.

Bus Boarding Area Symbol Typ.

Bus Boarding Area Symbol Typ.

Bus Boarding Area Symbol Typ.

Bus Boarding Area Symbol Typ.

Bus Boarding Area Symbol Typ.

Bus Boarding Area Symbol Typ.

Bus Boarding Area Symbol Typ.

Dividing line does not appear after last message.

Center align symbols and arrow.

Multiple arrows, multiple bus boarding area symbols.

1 Elevation - Sign Types DSS-3 and 4 – Bus Message “Medium” Layouts
Scale: 3" = 1'-0"

Elevation - Sign Types DSS-3 and 4 – Bus Message “Medium” Layouts
Scale: 3" = 1'-0"
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Medium” Graphic Layout Example

Elevation - Sign Types DSS-3 and 4 – Bus Message “Medium” Layouts

Scale: 3” = 1'-0"

Note: Use this layout only if there is not enough room on the sign panel to use a layout with text.

One or more arrows, bus boarding area symbols symbols.

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.
SECTION D3
Directional Street Signs

“Sign Types DSS-3 and DSS-4

“Extra Large” Graphic Layout Example

Graphic Layout Examples are shown for general reference only. Signs may incorporate layout elements from more than one Graphic Layout Example. For each sign location, the sign messages that are to appear are shown in the Message Schedule.

Elevation - Sign Types DSS-3 and 4 – Metra Train / General Text Message “Extra Large” Layouts

Scale: 3” = 1'-0"

1 No arrow, one message
Use this layout only for primary site identification.

1. Elevation - Sign Types DSS-3 and 4 – Metra Train / General Text Message “Extra Large” Layouts

Scale: 3” = 1'-0"
**Description**

**General**

Section D4 general reference.
SECTION D4
Structures for Wall Signs

Structure Overview

SFD Sign Structure
Double sided with one DSW sign face panel per side.

Description

General
The SFD sign structure supports two 1/2" thick DSW sign face panels.

Sign type DSW is described in Section D1.
SECTION D4
Structures for Wall Signs

Structure Size Summary

Description

General
The SFD sign structure supports DSW sign face panels. The width of the SFD structure will vary to coordinate with the width of the DSW sign face panels.

To coordinate with site conditions and to maintain design intent, sign fabrication and mounting as outlined in these Guidelines may need to be revised.

See the Technical Specifications for additional information and requirements.
**Elevation - SFD Sign Structure**

Scale: 1" = 1'-0"

**For Sign Face Layout Information:**
See Section D1 for additional information on the types of messages that appear on sign type DSW and how to determine the correct size and layout for sign type DSW.

**Description**

**General**
The SFD sign frames are ground mounted, freestanding, sign support structures fabricated from aluminum. 1/2" thick sign type DSW sign panels are mounted to the SFD structures.

**1 Aluminum Reveal Panel**
Painted aluminum reveal panels support the removable sign face panels. The reveal panels are safely, securely, properly, and permanently mounted to the sign's internal framing. When the sign is complete, hardware shall not be visible on the reveal panels. The reveal panels shall have laser cut openings to accept the mounting clips on the backs of the sign face panels. Coordinate the size and location of the openings in the reveal panels with the sign panel mounting clips so that the clips properly engage with the reveal panels and so that the sign panels are safely, securely, and properly held in the correct position. Portions of the reveal panels will be visible between the sign panels and the side bars.

**2 DSW Series Sign Face Panels**
1/2" thick sign type DSW sign face panels shall be mounted to both sides of the SFD frame with concealed hardware. All mounting hardware and components shall be vandal-resistant and suitable for exterior use. The mounting hardware shall allow for removal of the DSW sign face panels for maintenance, repairs, and updates.

**3 Aluminum Legs**
Provide painted aluminum legs to properly, safely, and securely support the SFD structure and the sign types mounted to it. The tops of the legs shall be closed with flush aluminum caps. All welded frame joints shall be carefully ground smooth and painted for a seamless appearance and continuous finish.

**4 Internal Framing**
Provide internal framing and bracing as needed for the sign type SFD to be rigid and structurally sound and to properly, safely, and securely support the sign types mounted to the SFD frame. Internal framing shall not be visible when the DSW sign face panels are in position.

**5 Removable Top Bar**
Removable painted aluminum bar locks the DSW panels in position. The bar shall be secured using flush, vandal-resistant, corrosion-resistant set screws.

**6 Structure Mounting**
Provide all mounting hardware and materials as needed to properly and securely mount the SFD sign structure. Coordinate the fabrication of the aluminum legs with the structure mounting and site conditions. See page D4.5 for additional information.

**Associated Structure Mounting Information:**
For information on mounting the SFD sign structure, see page D4.5 for additional information.
Associated Sign Structures:
The SMFD structure mounting can be used with the following sign structures:
SFD See page D4.4 for additional information.

Description

General
Structure mounting SMFD is for ground mounting the SFD sign structure.

1 Aluminum Legs From SFD Sign Structure
Coordinate the fabrication of the SFD sign structure with the SMFD sign mounting and foundation as needed to maintain the correct overall sign structure height and to not exceed the maximum distance from the ground to the bottom of the sign. Coordinate the SMFD structure mounting with the site conditions and the materials, finishes, and construction of the SFD aluminum legs as required. Prior to fabrication, inform the RTA of any conditions or locations that would cause the maximum distance from the ground to the bottom of the sign to be exceeded. The fabrication of the sign SFD sign structure may need to be revised to coordinate with the site conditions and to keep the distance from the ground to any point along the bottom of the sign at 2'-3" or less.

2 SFD Mounting Flanges
Provide an aluminum mounting flange for each of the legs of the sign structure. Weld the mounting flanges to the bases of the aluminum legs. All welded frame joins shall be carefully ground smooth and finished as needed for a seamless appearance and continuous finish. Size the mounting flanges as required to properly, safely, and securely support the entire sign.

3 Existing Floor / Pavement or New Concrete Foundations (if required)
If required, provide new, professionally engineered concrete foundations. Coordinate the size and type of foundations with the sign structure and with the existing conditions at each installation location. Coordinate the foundation with the required anchor bolts and mounting hardware as required to properly, safely, and securely anchor the entire sign. Verify on site the conditions at each installation location. At all locations, carefully finish exposed portions of the foundations to provide a neat, smooth, and finished appearance. Provide any additional bracing, framing, or other additional support and mounting components required to properly, safely, and securely support and install the entire sign.

4 Anchor Bolts & Mounting Hardware
Provide all anchor bolts and mounting hardware as needed to properly, safely, and securely mount the entire sign. Coordinate the anchor bolts and mounting hardware with the mounting surface and site conditions as required. Install signs plumb and level. Provide appropriate systems and set ups to accommodate uneven surfaces at installation locations. Provide leveling hardware as required. Secure the sign structure to the anchor bolts with appropriate locking nuts. Provide appropriate stainless steel acorn-type cap nuts, or similar finished stainless steel cap nuts accepted by the RTA, to finish the tops of the anchor bolts. Provide any additional bracing, framing, or other additional support and mounting components required to properly, safely, and securely support and install the entire sign.

5 Non-shrink Grout
Provide appropriate non-shrink grout to fill the space between the flanges and the tops of the foundations or finished floor / pavement as required.
User Testing Information

The RTA engaged Centralis to conduct field-based user testing at two (Van Buren St and Davis St) of the four test locations for the Interagency Transit Passenger Information Design project. The goals of testing were to validate and help optimize final design and placement of signage based on several scenarios of transferring between different transit modes. A wide variety of participants were selected for the testing. The participants were asked how to navigate from one boarding location to another using the public transportation modes that were detailed on the interagency signage installed at the particular test location.

Key Findings from Centralis' Testing

- Participants felt that the interagency signage reflected well on Chicago as a city that cares about citizens and tourists.
- Overall, both wayfinding signs and map groupings were noticed and understood, with participants finding their destination much more easily than in previous testing. The consistent design and colors of the signage was appreciated.
- People were reassured by consistent wayfinding signage at close intervals, and only struggled at a "decision point" if there was not a sign in immediate view. Participants expect clearer, easier to locate signage when moving from inside to outside when transferring to a different transit mode. Participants expect clear signage visible whenever they are required to make a turn when transferring to a different transit mode.
- Wayfinding signs organized by mode of transit functioned well, although sometimes they did not support awareness of the full range of choices within a mode of transit.
- Arrows and message dividing lines on directional signs proved to be confusing to some participants. The correct directional arrow was not always related to its correct directional message.
- While wayfinding signs provided information for those with limited mobility, it was sometimes overlooked because it was not connected closely enough to modes of transit. Certain map and schedule signs were place too high for participants in wheelchairs to read all of the information on the sign. The type on some maps and schedules was too small for participants to easily read.
- Participants were less familiar with Metra conventions, and many felt that they would need additional signage to identify the correct platform for their direction of travel. Map signage should be place adjacent to monitors.
- Most participants easily determined which map of a map grouping would be most useful for them, but had difficulty determining their current location on a chosen map due to the lack of a "you are here" indicator. Certain participants relied on wayfinding signage rather than maps to find their mode of transit, and others used the opposite approach. This results in maps being required at both the arrival and departure points. Train line maps should be orientated with north at the top. Multiple Metra train lines presented on a single map should be shown as separate routes. Add tourist destinations to maps.
- Participants continually missed references to bus boarding areas because they did not anticipate this convention and current signage did not emphasize it strongly enough.

Conclusion

As RTA's interagency signage and wayfinding program is expanded to new locations, the results from the user tests should be considered as new signs and graphics are developed and located.
The following pages compile the design intent documentation for discontinued interagency sign types. The discontinued sign types will not be specified for use in future interagency locations.

The compiled documentation has been taken from earlier editions of the Interagency Standards Manual and shows design intent only. Some of the sign types included may have been produced and installed at interagency locations, and may still be in use. The documentation included in this section has been provided for reference only and does not show as-built or current conditions.
APPENDIX E2
Legacy Sign Types

Footer Layouts

**Description**

**General**
Shown is the typical layout for the footer portion of the following sign types:

- TR – Train Route (includes only Sign Types TR-5 and TR-6)
- TT – Train Times (includes only Sign Type TT-4)

All footers shall include contact information for RTA Travel Information. The footer for Sign Types TR-5, TR-6, and TT-4 shall include the RTA and Metra logos and the Metra web address.

Shore stations are co-located shall also include the South Shore logo (see page E2.3). Footers at locations where Metra and Amtrak stations are co-located shall also include the Amtrak logo (see page E2.3).

A digital base art file, for use when developing final art for footer graphics, shall be provided by the RTA.

---

**Elevation - Typical Footer for Sign Type TR-5**

Scale: 1 1/2" = 1'-0"

**Elevation - Typical Footer for Sign Types TR-6, TT-4**

Scale: 1 1/2" = 1'-0"
**E2.3 Description**

**General**

Shown are the special layouts for the footer portion of the following sign types:

- TR – Train Route (includes only Sign Types TR-5 and TR-6)
- TT – Train Times (includes only Sign Type TT-4)

All footers shall include contact information for RTA Travel Information. The footer for Sign Types TR-5, TR-6, and TT-4 shall include the RTA and Metra logos and the Metra web address. Footers at locations where Metra and South Shore stations are co-located shall also include the South Shore logo. Footers at locations where Metra and Amtrak stations are co-located shall also include the Amtrak logo.

A digital base art file, for use when developing final art for footer graphics, shall be provided by the RTA.
### Sign Types TC-3.2 & TT-2

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'-4&quot; V.O.</td>
<td>(3'-5&quot; Print Size – Verify print size with CWS snap frame)</td>
</tr>
<tr>
<td>2'-1&quot; V.O.</td>
<td>(2'-1 3/4&quot; Print Size)</td>
</tr>
</tbody>
</table>

### Sign Type TT-3

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'-4&quot; V.O.</td>
<td>(3'-5&quot; Print Size – Verify print size with CWS snap frame)</td>
</tr>
<tr>
<td>2'-4&quot; V.O.</td>
<td>(2'-4 3/4&quot; Print Size)</td>
</tr>
</tbody>
</table>

### Sign Type TT-4

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'-4&quot; V.O.</td>
<td>(3'-5&quot; Print Size – Verify print size with CWS snap frame)</td>
</tr>
<tr>
<td>2'-1&quot; V.O.</td>
<td>(2'-1 3/4&quot; Print Size)</td>
</tr>
</tbody>
</table>

### Sign Type TT-5

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'-7&quot; V.O.</td>
<td>(2'-8&quot; Print Size – Verify print size with CWS snap frame)</td>
</tr>
<tr>
<td>1'-5 1/4&quot; V.O.</td>
<td>(1'-6&quot; Print Size)</td>
</tr>
</tbody>
</table>

### Sign Type TR-1, TR-3

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'-0&quot;</td>
<td></td>
</tr>
<tr>
<td>2'-6&quot;</td>
<td></td>
</tr>
</tbody>
</table>

### Sign Type TR-2, TR-4

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'-6&quot;</td>
<td></td>
</tr>
</tbody>
</table>

### Sign Type TR-5

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'-7&quot; V.O.</td>
<td>(2'-8&quot; Print Size – Verify print size with CWS snap frame)</td>
</tr>
<tr>
<td>1'-5 1/4&quot; V.O.</td>
<td>(1'-6&quot; Print Size)</td>
</tr>
</tbody>
</table>

### Sign Type TR-6

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'-4&quot; V.O.</td>
<td>(3'-5&quot; Print Size – Verify print size with CWS snap frame)</td>
</tr>
</tbody>
</table>

### Description

**General**


(V.O. = Visual Opening)

Print size indicated is for artwork used in CWN sign cabinets. Verify the print size required for use in CWS snap frames.
APPENDIX E2
Legacy Sign Types

Train Connections Map
Laminated Digital Print
Sign Type TC-3.2

General Information

Elevation - Sign Type TC-3.2
Scale: 1” = 1’-0”

Sign Mounting Information:
New Location and Installation:
Sign type TC-3.2 is mounted directly to walls or other surfaces using high strength hook and loop fastener tape or other appropriate adhesive and/or double face tape.

Verify the conditions at each installation location and determine the appropriate adhesive and/or tape.

Description

General
Sign type TC-3.2 provides information on regional Metra and CTA train connections and routes. Sign type TC-3.2 content will not vary with location. See page E2.6 for Design and Layout Notes.

Train Connections Graphic
The TC-3.2 graphic shall be digitally printed at high resolution onto heavy bright white paper using UV resistant inks. The printed piece shall be laminated on both sides with an encapsulated edge seal.

The graphic shown is for reference only. The content for each sign type TC-3.2 shall not vary with location. Digital art for sign type TC-3.2 shall be provided by the RTA. If directed to do so by the RTA, incorporate content revisions into the existing art. These revisions may include, but shall not be limited to, changes to the Stations Index, revisions to the train route diagrams, or changes to the stations shown in the route diagrams. All new TC-3.2 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical size for sign type TC-3.2 is shown. The size may need to be adjusted to respond to specific conditions at each installation location.

Coordinate the TC-3.2 graphic and the overall panel size with the mounting conditions at each installation location.
APPENDIX E2
Legacy Sign Types

Train Connections Map
Laminated Digital Print
Sign Type TC-3.2

Design and Layout Notes

Elevation - Sign Type TC-3.2
Scale: 1" = 1'-0"

Description

General Design and Layout Information – TC Signs

- Sign type TC is typically a single Adobe Illustrator file.
- TC signs have a standard layout and generally do not change with location.
- TC signs may require minor corrections or adjustment to reflect facility changes, or other rail service changes.
APPENDIX E2
Legacy Sign Types

Train Route Diagram - 24" Used with Sign Frame
Sign Type TR-1

## Description

### General
Sign type TR-1 provides Metra train route information. Sign type TR-1 contents will vary with location.

Sign type TR-1 panels are used only at locations where walls can be drilled and the panel and sign frame can be mounted using appropriate mechanical anchors and fasteners.

Sign type TR-1 panels are 1/2" thick and are mounted to fabricated sign frames using appropriate hardware.

### Sign Face Panel
Sign type TR-1 panels shall be 1/2" thick exterior grade Rhino panel, or an equivalent panel with embedded UV resistant graphics accepted by the RTA. Sign type TR-1 is a Metra route schematic. Sign type TR-1 is the typical sign type for the display of Metra route diagrams. The route information for each of the Metra Rail Lines is different and each line is identified by a unique color. Each TR-1 sign along a particular line shall show the entire line, but the graphics will vary depending on where the sign is located.

The route schematic will list all the stations along the line, in order, starting with the northernmost or easternmost station. The graphics will highlight the station in which the sign is located, and, depending on where the sign is located, indicate a typical direction of travel by highlighting the stations down the line in the direction of travel. Stations that offer transfers to other rail service will be indicated with the additional rail service available.

Digital art for sign type TR-1 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required route schematic and location-specific graphics using existing TR-1 signs as precedents for layout. Basic route information, digital template files for the TR-1 graphics, and base art files for the header graphics shall be provided by the RTA. Digital art for new TR-1 signs shall be prepared using Adobe Illustrator. All new TR-1 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

### Concealed Mounting Hardware
Provide concealed mounting hardware as required to properly, safely, and securely mount the sign panel to the SWD sign structure. The mounting hardware shall not be visible after the sign face has been installed. All mounting hardware shall be vandal-resistant, corrosion-resistant, and suitable for use in exterior applications. Coordinate the mounting hardware with the sign frame as required.
Description

General
Sign type TR-2 provides Metra train route information. Sign type TR-2 contents will vary with location.

Sign type TR-2 panels are used only at locations where walls can be drilled and the panel and sign frame can be mounted using appropriate mechanical anchors and fasteners.

Sign type TR-2 panels are 1/2” thick and are mounted to fabricated sign frames using appropriate hardware.

Sign Face Panel
Sign type TR-2 panels shall be 1/2” thick exterior grade Rhino panel, or an equivalent panel with embedded UV resistant graphics accepted by the RTA. Sign type TR-2 is a Metra route schematic. Sign type TR-2 is used when the rail route information cannot be properly displayed on sign type TR-1. The route information for each of the Metra Rail Lines is different and each line is identified by a unique color. Each TR-2 sign along a particular line shall show the entire line, but the graphics will vary depending on where the sign is located.

The route schematic will list all the stations along the line, in order, starting with the northernmost or easternmost station. The graphics will highlight the station in which the sign is located, and, depending on where the sign is located, indicate a typical direction of travel by highlighting the stations down the line in the direction of travel. Stations that offer transfers to other rail service will be indicated with the additional rail service available.

Digital art for sign type TR-2 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required route schematic and location-specific graphics using existing TR-2 signs as precedents for layout. Basic route information, digital template files for the TR-2 graphics, and base art files for the header graphics shall be provided by the RTA. Digital art for new TR-2 signs shall be prepared using Adobe Illustrator. All new TR-2 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

Concealed Mounting Hardware
Provide concealed mounting hardware as required to properly, safely, and securely mount the sign panel to the SWD sign structure. The mounting hardware shall not be visible after the sign face has been installed. All mounting hardware shall be vandal-resistant, corrosion-resistant, and suitable for use in exterior applications. Coordinate the mounting hardware with the sign frame as required.

Associated Sign Structure Information:
New Location and Installation:
Sign type TR-2 is typically mounted using a SWD sign structure. For information on SWD, see Section D1.

Train Route Diagram - 30” Used with Sign Frame
Sign Type TR-2
APPENDIX E2
Legacy Sign Types

Train Route Diagram - 24”
Used with Wall Mounted
Back Panel
Sign Type TR-3

E2.9

Description

General
Sign type TR-3 provides Metra train route information. Sign type TR-3 contents will vary with location.

Sign type TR-3 panels are 1/8” thick and are to be used only at locations where walls cannot be drilled and the panel and sign structure must be mounted using appropriate adhesive and/or double face tape.

1. Sign Face Panel
Sign type TR-3 panels shall be 1/8” thick exterior grade Rhino panel, or an equivalent panel with embedded UV resistant graphics accepted by the RTA. Sign type TR-3 is a Metra route schematic. Sign type TR-3 is used to display Metra route diagrams when it is inappropriate or otherwise unacceptable to use sign type TR-1. The route information for each of the Metra Rail Lines is different and each line is identified by a unique color. Each TR-3 sign along a particular line shall show the entire line, but the graphics will vary depending on where the sign is located.

The route schematic will list all the stations along the line, in order, starting with the northernmost or easternmost station. The graphics will highlight the station in which the sign is located, and, depending on where the sign is located, indicate a typical direction of travel by highlighting the stations down the line in the direction of travel. Stations that offer transfers to other rail service will be indicated with the additional rail service available.

Digital art for sign type TR-3 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required route schematic and location-specific graphics using existing TR-3 signs as precedents for layout. Basic route information, digital template files for the TR-3 graphics, and base art files for the header graphics shall be provided by the RTA. Digital art for new TR-3 signs shall be prepared using Adobe Illustrator. All new TR-3 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

Sign type TR-3 is mounted directly to walls or other surfaces using high strength hook and loop fastener tape, double-face tape, or other appropriate adhesive. Verify the conditions at each installation location and determine the appropriate adhesive and/or tape.

Associated Sign Structure Information:
Sign type TR-3 is mounted using an SWA or SWG sign structure. See Section D1 for additional information.

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APPENDIX E2
Legacy Sign Types

Train Route Diagram - 30" Used with Wall Mounted Back Panel
Sign Type TR-4

Associated Sign Structure Information:
Sign type TR-4 is mounted using an SWA or SWG sign structure. See Section D1 for additional information.

Description

General
Sign type TR-4 provides Metra train route information. Sign type TR-4 contents will vary with location.

Sign type TR-4 panels are 1/8" thick and are to be used only at locations where walls cannot be drilled and the panel and sign structure must be mounted using appropriate adhesive and/or double face tape.

Sign Face Panel
Sign type TR-4 panels shall be 1/8" thick exterior grade Rhino panel, or an equivalent panel with embedded UV resistant graphics accepted by the RTA. Sign type TR-4 is a Metra route schematic. Sign type TR-4 is used to display Metra route diagrams when it is inappropriate or otherwise unacceptable to use sign type TR-2. The route information for each of the Metra Rail Lines is different and each line is identified by a unique color. Each TR-4 sign along a particular line shall show the entire line, but the graphics will vary depending on where the sign is located.

The route schematic will list all the stations along the line, in order, starting with the northernmost or easternmost station. The graphics will highlight the station in which the sign is located, and, depending on where the sign is located, indicate a typical direction of travel by highlighting the stations down the line in the direction of travel. Stations that offer transfers to other rail service will be indicated with the additional rail service available.

Digital art for sign type TR-4 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required route schematic and location-specific graphics using existing TR-4 signs as precedents for layout. Basic route information, digital template files for the TR-4 graphics, and base art files for the header graphics shall be provided by the RTA. Digital art for new TR-4 signs shall be prepared using Adobe Illustrator. All new TR-4 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

Sign type TR-4 is mounted directly to walls or other surfaces using high strength hook and loop fastener tape, double-face tape, or other appropriate adhesive. Verify the conditions at each installation location and determine the appropriate adhesive and/or tape.
APPENDIX E2
Legacy Sign Types

Train Route Diagram - 31"
Used with Sign Cabinet
Sign Type TR-5

Elevation - Sign Type TR-5
Scale: 1" = 1'-0"

Associated Sign Cabinet / Frame Information:
New Location and Installation:
Sign type TR-5 is typically mounted using a CWN-3.2 sign cabinet with sign type TT-5.
Sign type TR-5 can also be mounted using a CWS-1 snap frame when printed with sign type TT-5.
For information on CWS-1, see Section B2. For information on CWN-3.2, see Section E2.

Description

General
Sign type TR-5 provides Metra train route information. Sign type TR-5 contents will vary with location. Sign type TR-5 typically appears in conjunction with sign type TT-5.

Train Route Graphic
Sign type TR-5 shall be digitally printed at high resolution using UV resistant inks directly onto a substrate specified by the RTA.

The graphic shown is for reference only. Sign type TR-5 is a Metra route schematic. Sign type TR-5 is the typical sign type for the display of Metra route diagrams in CWN-3.2 sign cabinets and CWS-1 snap frames when a Train Times product is also specified. The route information for each of the Metra Rail Lines is different and each line is identified by a unique color. Each TR-5 sign along a particular line shall show the entire line, but the graphics will vary depending on where the sign is located.

The route schematic will list all the stations along the line, in order. When TR-5 is used on a platform, the stations shall be listed to reflect the typical direction of travel for trains boarded from the platform. When not used on a platform, the diagram shall start with the line’s northernmost and westernmost stations on the left. The graphics will highlight the station in which the sign is located, and, depending on where the sign is located, indicate a typical direction of travel by highlighting the stations down the line in the direction of travel. Stations that offer transfers to other rail service will be indicated with the additional rail service available.

Digital art for sign type TR-5 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required route schematic and location-specific graphics using existing TR-5 signs as precedents for layout. Basic route information, digital template files for the TR-5 graphics, and base art files for the header graphics shall be provided by the RTA. Digital art for new TR-5 signs shall be prepared using Adobe Illustrator. All new TR-5 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) size shown applies when sign type TR-5 appears in a CWN sign cabinet or CWS snap frame. The print size may need to be adjusted to coordinate with CWS snap frames or to respond to specific conditions at each installation location.

Coordinate the TR-5 graphic and the overall panel size with the mounting conditions and hardware at each installation location.
APPENDIX E2
Legacy Sign Types

Train Route Diagram - 40"
Used with Sign Cabinet
Sign Type TR-6

Description

General
Sign type TR-6 provides Metra train route information. Sign type TR-6 contents will vary with location. Sign type TR-6 typically appears in conjunction with sign type TT-3.

Train Route Graphic
Sign type TR-6 shall be digitally printed at high resolution using UV resistant inks directly onto a substrate specified by the RTA.

The graphic shown is for reference only. Sign type TR-6 is a Metra route schematic. Sign type TR-6 is the typical sign type for the display of Metra route diagrams in CWN-7 sign cabinets and CWS-7 snap frames. The route information for each of the Metra Rail Lines is different and each line is identified by a unique color. Each TR-6 sign along a particular line shall show the entire line, but the graphics will vary depending on where the sign is located.

The route schematic will list all the stations along the line, in order. When TR-6 is used on a platform, the stations shall be listed to reflect the line’s actual orientation. When not used on a platform, the diagram shall start with the line’s northernmost and westernmost stations on the left. The graphics will highlight the station in which the sign is located, and, depending on where the sign is located, indicate a typical direction of travel by highlighting the stations down the line in the direction of travel. Stations that offer transfers to other rail service will be indicated with the additional rail service available.

Digital art for sign type TR-6 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required route schematic and location-specific graphics using existing TR-6 signs as precedents for layout. Basic route information, digital template files for the TR-6 graphics, and base art files for the header graphics shall be provided by the RTA. Digital art for new TR-6 signs shall be prepared using Adobe Illustrator. All new TR-6 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) size shown applies when sign type TR-6 appears in a CWN sign cabinet or CWS snap frame. The print size may need to be adjusted to coordinate with CWS snap frames or to respond to specific conditions at each installation location.

Coordinate the TR-6 graphic and the overall panel size with the mounting conditions and hardware at each installation location.
**Appendix E2**

### Legacy Sign Types

#### Station-Specific Train Times - Metra

**Sign Type TT-2**

**Description**

**General**

Sign type TT-2 provides Metra schedule information. Sign type TT-2 content will vary with location. Sign type TT-2 shall be used at locations where Station-Specific Timetables are allowed.

Each sign type TT-2 may include separate file components that are linked into a single, master product file using Adobe InDesign software.

When developing art for TT signs, schedule information shall be provided by the RTA. Import the schedule information into formatted InDesign template files provided by the RTA.

**Station-Specific Train Times Graphic**

Sign type TT-2 shall be digitally printed at high resolution using UV resistant inks directly onto a substrate specified by the RTA.

The graphic shown is for reference only. Sign type TT-2 is a Metra train schedule. The schedule information for each of the Metra Rail Lines is different and each line is identified by a unique color. Each sign type TT-2 shall provide schedule information based on the station in which the sign is located. For each station, train times to the appropriate terminal stations will be listed separately and the times will start at the station in which the TT-2 is located. Digital art for sign type TT-2 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required line-specific graphics using existing TT-2 signs as precedents for layout. The schedule information to be presented, digital template files for the TT-2 graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new TT-2 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) size shown applies when sign type TT-2 appears in a CWN sign cabinet or CWS snap frame. The print size may need to be adjusted to coordinate with CWS snap frames or to respond to specific conditions at each installation location.

Coordinate the TT-2 graphic and the overall panel size with the mounting conditions and hardware at each installation location.
APPENDIX E2
Legacy Sign Types

Train Times - Metra
Sign Type TT-3

Metra Train Times
Union Pacific/North Line

For Reference Only

1 Elevation - Sign Type TT-3

Scale: 1" = 1'-0"

Associated Sign Cabinet / Frame Information:

New Location and Installation:
Sign type TT-3 is typically mounted using a CWN-7 sign cabinet or a CWS-7 snap frame with sign type TR-6.
For information on CWN-7 and CWS-7, see Section E2.

Existing Cabinet Installation:
When installed within an existing Metra schedule cabinet, sign type TT-3 is mounted using the existing Metra cabinet hardware.
Coordinate print size with existing cabinet.

Description

General
Sign type TT-3 provides Metra schedule information. Sign type TT-3 content will vary with location. Sign type TT-3 typically appears in conjunction with sign type TR-6.

Each sign type TT-3 may include separate file components that are linked into a single, master product file using Adobe InDesign software.

When developing art for TT signs, schedule information shall be provided by the RTA. Import the schedule information into formatted InDesign template files provided by the RTA.

1 Train Times Graphic
Sign type TT-3 shall be digitally printed at high resolution using UV resistant inks directly onto a substrate specified by the RTA.

The graphic shown is for reference only. Sign type TT-3 is a Metra train schedule. Sign type TT-3 is used for Metra Rail Lines with full schedules that have a large number of trains and stops. The schedule information for each of the Metra Rail Lines is different, but all of the TT-3 locations along a particular line shall have the same schedule information. Each line is identified by a unique color. Digital art for sign type TT-3 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required line-specific graphics using existing TT-3 signs as precedents for layout. Schedule information to be presented, digital template files for the TT-3 graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new TT-3 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) size shown applies when sign type TT-3 appears in a CWN sign cabinet or CWS snap frame. The print size may need to be adjusted to coordinate with CWS snap frames or to respond to specific conditions at each installation location.

Coordinate the TT-3 graphic and the overall panel size with the mounting conditions and hardware at each installation location.

3'-4" V.O. (3'-5" Print Size – Verify print size with CWS snap frame)
APPENDIX E2
Legacy Sign Types

Train Times - Metra Sign Type TT-4

Elevation - Sign Type TT-4

Scale: 1" = 1'-0"

Associated Sign Cabinet / Frame Information:
New Location and Installation:
Sign type TT-4 is typically mounted using a CWN-6 sign cabinet or a CWS-6 snap frame. For information on CWN-6 and CWS-6, See Section E2.

Existing Cabinet Installation:
When installed within an existing Metra schedule cabinet, sign type TT-4 is mounted using the existing Metra cabinet hardware. Coordinate print size with existing cabinet.

Description

General
Sign type TT-4 provides Metra schedule information. Sign type TT-4 content will vary with location.

Each sign type TT-4 may include separate file components that are linked into a single, master product file using Adobe InDesign software.

When developing art for TT signs, schedule information shall be provided by the RTA. Import the schedule information into formatted InDesign template files provided by the RTA.

Train Times Graphic
Sign type TT-4 shall be digitally printed at high resolution using UV resistant inks directly onto a substrate specified by the RTA.

The graphic shown is for reference only. Sign type TT-4 is a Metra train schedule. Sign type TT-4 is used for Metra Rail Lines with full schedules that have a large number of trains and stops. Sign type TT-4 is typically used independent of other ITPID graphics. The schedule information for each of the Metra Rail Lines is different, but all of the TT-4 locations along a particular line shall have the same schedule information. Each line is identified by a unique color. Digital art for sign type TT-4 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required line-specific graphics using existing TT-4 signs as precedents for layout. Schedule information to be presented, digital template files for the TT-4 graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new TT-4 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) size shown applies when sign type TT-4 appears in a CWN sign cabinet or CWS snap frame. The print size may need to be adjusted to coordinate with CWS snap frames or to respond to specific conditions at each installation location.

Coordinate the TT-4 graphic and the overall panel size with the mounting conditions and hardware at each installation location.
**Legacy Sign Types**

**Train Times - Metra**

**Sign Type TT-5**

**Description**

**General**

Sign type TT-5 provides Metra schedule information. Sign type TT-5 content will vary with location. Sign type TT-5 typically appears in conjunction with sign type TR-5.

Each sign type TT-5 may include separate file components that are linked into a single, master product file using Adobe InDesign software.

When developing art for TT signs, schedule information shall be provided by the RTA. Import the schedule information into formatted InDesign template files provided by the RTA.

**Train Times Graphic**

Sign type TT-5 shall be digitally printed at high resolution using UV resistant inks directly onto a substrate specified by the RTA.

The graphic shown is for reference only. Sign type TT-5 is a Metra train schedule. Sign type TT-5 is used for Metra Rail Lines with limited schedules that do not have a large number of trains and stops. The schedule information for each of the Metra Rail Lines is different, but all of the TT-5 locations along a particular line shall have the same schedule information. Each line is identified by a unique color. Digital art for sign type TT-5 may be provided by the RTA. When directed to do so by the RTA, determine the final content and develop the final art for the required line-specific graphics using existing TT-5 signs as precedents for layout. Schedule information to be presented, digital template files for the TT-5 graphics, and base art files for the header and footer graphics shall be provided by the RTA. All new TT-5 graphics must be reviewed and accepted by the RTA prior to production of the final signs.

The typical visual opening (V.O.) size shown applies when sign type TT-5 appears in a CWN sign cabinet or CWS snap frame. The print size may need to be adjusted to coordinate with CWS snap frames or to respond to specific conditions at each installation location.

Coordinate the TT-5 graphic and the overall panel size with the mounting conditions and hardware at each installation location.
APPENDIX E2
Legacy Sign Types

Sign Cabinet Introduction

Description

General
Section B2 general reference.
**APPENDIX E2**

**Legacy Sign Types**

**Sign Cabinet Overview**

**CWN Series Sign Cabinet**

**Single Graphic Display**

The cabinet will hold non-illuminated Information Graphics.

The graphics are described in Sections B1 and E2.

The cabinet can be mounted onto a freestanding structure or a wall structure.

**CWN Series Sign Cabinet**

**Double Graphic Display**

The cabinet will hold non-illuminated TT-4 Train Times / Metra Schedule and non-illuminated TR-5 Train Route Diagram.

The graphics are described in Section E2.

The cabinet can be mounted onto a freestanding structure or a wall structure.

**CWN Series Sign Cabinet**

**Single Graphic Display - Metra Schedule**

The cabinet will hold non-illuminated TT-4 Train Times / Metra Schedule.

The graphics are described in Section E2.

The cabinet can be mounted onto a freestanding structure or a wall structure.

**CWN Series Sign Cabinet**

**Double Graphic Display - Metra Schedule**

The cabinet will hold non-illuminated TT-3 Train Times / Metra Schedule and non-illuminated TR-6 Train Route Diagram.

The graphics are described in Section E2.

The cabinet can be mounted onto a freestanding structure or a wall structure.
APPENDIX E2
Legacy Sign Types

Sign Cabinet Size Summary

CWN-3.1
Sign Cabinet for Single Graphic Display

CWN-3.2
Sign Cabinet for Double Graphic Display - TT-5 Train Times / Metra Schedule and TR-5 Train Route Diagram

CWN-6
Sign Cabinet for Single Graphic Display - TT-4 Train Times / Metra Schedule

CWN-7
Sign Cabinet for Double Graphic Display - TT-3 Train Times / Metra Schedule and TR-6 Train Route Diagram

In sign cabinets were two information products are displayed, each product is printed on a separate substrate.

Sign cabinet and frame fabrication and mounting as outlined in this Manual may need to be revised in order to coordinate with site conditions and maintain design intent.

See the Technical Specifications for additional information and requirements.
APPENDIX E2
Legacy Sign Types

CWN-3.1 Cabinet
Front Elevation

Front Elevation - CWN-3.1 Cabinet

Scale: 1/2" = 1'-0"

1. Stainless Steel Sign Cabinet
   The CWN sign cabinet shall be fabricated from stainless steel. Visible surfaces shall have a brushed finish, horizontal grain. The face of the cabinet shall be hinged to provide access to the cabinet interior and the graphics mounted inside the cabinet, behind the polycarbonate window. Provide internal framing and bracing as needed to keep the face smooth and flat and to properly and securely support the sign types that are mounted within the sign cabinet. No hardware shall be visible on the CWN face. Provide weep holes as required.

2. Opening in the CWN Face
   Provide a precisely cut opening in the face of the CWN cabinet. The opening shall be backed up by a clear polycarbonate panel.

3. Polycarbonate Window
   Provide a clear scratch-resistant polycarbonate window behind the opening in the face of the CWN cabinet. The polycarbonate shall be mounted flush to the back of the face. The mounting for the polycarbonate shall allow the polycarbonate to be removed and replaced for maintenance.

Associated Printed Graphics:
The following information graphics are used with the CWN-3.1 sign cabinet:
- Sign Type BC-6 - See Section B1
- Sign Type ID-6 - See Section B1
- Sign Type MD-6 - See Section B1
- Sign Type MN-6 - See Section B1
- Sign Type TC-6 - See Section B1
- Sign Type TR-6 - See Section B1

Associated Sign Structures:
The CWN-3.1 sign cabinet can be mounted to the following sign structures:
- Sign Type SFM - See Section B3
- Sign Type SPY - See Section B3
- Sign Type SWM - See Section B4

Description

General
The CWN-3.1 sign cabinet is custom fabricated from stainless steel and displays a single graphic panel.

The CWN-3.1 cabinet is used to display sign type BC-6, ID-6, MD-6, MN-6, TC-6, and TR-6 panels.

The CWN sign cabinets mount to the SWM, SFM, or SPY sign structures.

(V.O. = Visual Opening)
**CWN-3.1 Cabinet**

Section View: CWN-3.1 Cabinet

Scale: N.T.S.

**Description**

**General**

The CWN-3.1 sign cabinet is custom fabricated from stainless steel and displays a single graphic panel.

The CWN-3.1 cabinet is used to display sign type BC-6, ID-6, MD-6, MN-6, TC-6, and TR-6 panels.

The CWN sign cabinets mount to the SWM, SFM, or SPY sign structures.
CWN-3.1 Cabinet

Inside Elevation

**Description**

**General**

The CWN-3.1 sign cabinet is custom fabricated from stainless steel and displays a single graphic panel.

The CWN-3.1 cabinet is used to display sign type BC-6, ID-6, MD-6, MN-6, TC-6, and TR-6 panels.

The CWN sign cabinets mount to the SWM, SFM, or SPY sign structures.
APPENDIX E2
Legacy Sign Types

CWN-3.2 Cabinet
Front Elevation

Associated Printed Graphics:
The following information graphics are used with the CWN-3.2 sign cabinet:
Sign Type TT-5 - See Section E2
Sign Type TR-5 - See Section E2

Associated Sign Structures:
The CWN-3.2 sign cabinet can be mounted to the following sign structures:
Sign Type SFM - See Section B3
Sign Type SPY - See Section B3
Sign Type SWM - See Section B4

Description

General
The CWN-3.2 sign cabinet is custom fabricated from stainless steel and displays two graphic panels.
The CWN-3.2 cabinet is used to display sign type TT-5 and TR-5 panels.
The CWN sign cabinets mount to the SWM, SFM, or SPY sign structures.

(V.O. = Visual Opening)

1 Stainless Steel Sign Cabinet
The CWN sign cabinet shall be fabricated from stainless steel. Visible surfaces shall have a brushed finish, horizontal grain. The face of the cabinet shall be hinged to provide access to the cabinet interior and the graphics mounted inside the cabinet, behind the polycarbonate window. Provide internal framing and bracing as needed to keep the face smooth and flat and to properly, safely, and securely support the sign types that are mounted within the sign cabinet. No hardware shall be visible on the CWN face. Provide weep holes as required.

2 Opening in the CWN Face
Provide a precisely cut opening in the face of the CWN cabinet. The opening shall be backed up by a clear polycarbonate panel.

3 Polycarbonate Window
Provide a clear scratch-resistant polycarbonate window behind the opening in the face of the CWN cabinet. The polycarbonate shall be mounted flush to the back of the face. The mounting for the polycarbonate shall allow the polycarbonate to be removed and replaced for maintenance.
APPENDIX E2
Legacy Sign Types

CWN-3.2 & CWN-7 Cabinet Section

Section View: CWN-3.2, CWN-7 Cabinets
Scale: N.T.S.

Description

General
The CWN-3.2 & CWN-7 sign cabinets are custom fabricated from stainless steel and display two graphic panels.

The CWN-3.2 cabinet is used to display sign type TT-5 and TR-5 panels.

The CWN-7 cabinet is used to display sign type TT-3 and TR-6 panels.

The CWN sign cabinets mount to the SWM, SFM, or SPY sign structures.
**Description**

**General**

The CWN-3.2 sign cabinet is custom fabricated from stainless steel and displays two graphic panels.

The CWN-3.2 cabinet is used to display sign types TT-5 and TR-5 panels.

The CWN sign cabinets mount to the SWM, SFM, or SPY sign structures.
APPENDIX E2
Legacy Sign Types

CWN-6 Cabinet
Outside Elevation

E2.26

Description

Associated Printed Graphics:
The following information graphics are used with the CWN-6 sign cabinet:
Sign Type TT-4 - See Section E2

Associated Sign Structures:
The CWN-6 sign cabinet can be mounted to the following sign structures:
Sign Type SFM - See Section B3
Sign Type SPY - See Section B3
Sign Type SWM - See Section B4

General
The CWN-6 sign cabinet is custom fabricated from stainless steel and displays a single graphic panel.

The CWN-6 cabinet is used to display sign type TT-4 panels.

Sign type CWN sign cabinets mount to SWM, SFM, and SPY sign structures.

(V.O. = Visual Opening)

1 Stainless Steel Sign Cabinet
The CWN sign cabinet shall be fabricated stainless steel. Visible surfaces shall have a brushed finish, horizontal grain. The face of the cabinet shall be hinged to provide access to the cabinet interior and the graphics mounted inside the cabinet, behind the polycarbonate window. Provide internal framing and bracing as needed to keep the face smooth and flat and to properly, safely, and securely support the sign types that are mounted within the sign cabinet. No hardware shall be visible on the CWN face. Provide weep holes as required.

2 Opening in the CWN Face
Provide a precisely cut opening in the face of the CWN cabinet. The opening shall be backed up by a clear polycarbonate panel.

3 Polycarbonate Window
Provide a clear scratch-resistant polycarbonate window behind the opening in the face of the CWN cabinet. The polycarbonate shall be mounted flush to the back of the face. The mounting for the polycarbonate shall allow the polycarbonate to be removed and replaced for maintenance.
**APPENDIX E2**

**Legacy Sign Types**

**CWN-6 Cabinet Section**

Section View: CWN-6 Cabinet

Scale: N.T.S.

**Description**

**General**

The CWN-6 sign cabinet is custom fabricated from stainless steel and displays a single graphic panel.

The CWN-6 cabinet is used to display sign type TT-4 panels.

The CWN sign cabinets mount to the SWM, SFM, or SPY sign structures.
APPENDIX E2
Legacy Sign Types

CWN-6 Cabinet
Inside Elevation

Information Graphics
Panel TT-4

Inside Elevation: CWN-6 Cabinet  (Cabinet shown with door removed)
Scale: 1" = 1'–0"

Description

General
The CWN-6 sign cabinet is custom fabricated from stainless steel and displays a single graphic panel.

The CWN-6 cabinet is used to display sign type TT-4 panels.

The CWN sign cabinets mount to the SWM, SFM, or SPY sign structures.
# Legacy Sign Types

## CWN-7 Cabinet

### Outside Elevation

---

**Description**

#### General

The CWN-7 sign cabinet is custom fabricated from stainless steel and displays two graphic panels.

The CWN-7 cabinet is used to display sign type TT-3 and TR-6 panels.

The CWN sign cabinets mount to the SWM, SFM, or SPY sign structures.

(V.O. = Visual Opening)

#### Stainless Steel Sign Cabinet

The CWN sign cabinet shall be fabricated from stainless steel. Visible surfaces shall have a brushed finish, horizontal grain. The face of the cabinet shall be hinged to provide access to the cabinet interior and the graphics mounted inside the cabinet, behind the polycarbonate window. Provide internal framing and bracing as needed to keep the face smooth and flat and to properly, safely, and securely support the sign types that are mounted within the sign cabinet. No hardware shall be visible on the CWN face. Provide weep holes as required.

#### Opening in the CWN Face

Provide a precisely cut opening in the face of the CWN cabinet. The opening shall be backed up by a clear polycarbonate panel.

#### Polycarbonate Window

Provide a clear scratch-resistant polycarbonate window behind the opening in the face of the CWN cabinet. The polycarbonate shall be mounted flush to the back of the face. The mounting for the polycarbonate shall allow the polycarbonate to be removed and replaced for maintenance.
**APPENDIX E2**

**Legacy Sign Types**

### CWN-7 Cabinet

**Inside Elevation**

1. **Inside Elevation: CWN-7 Cabinet** *(Cabinet shown with door removed)*
   
   Scale: 1" = 1'-0"

---

**Description**

**General**

The CWN-7 series sign cabinet is custom fabricated from stainless steel and displays two graphic panels.

The CWN-7 cabinet is used to display sign type TT-3 and TR-6 panels.

The CWN sign cabinets mount to the SWM, SFM, or SPY sign structures.
APPENDIX E2
Legacy Sign Types

Snap Frame Size Summary

**CWS-7**
Snap Frame for Double Graphic Display - TT-3 Train Times / Metra Schedule and TR-6 Train Route Diagram

**CWS-6**
Snap Frame for Single Graphic Display - TT-4 Train Times / Metra Schedule

Overall frame sizes are based on the Alpina Security FlipUp snap frame.

(V.O. = Visual Opening)

In snap frames where two information products are displayed, both products are printed on a single substrate.

Frame fabrication and mounting as outlined in this Manual may need to be revised in order to coordinate with site conditions and maintain design intent.

See the Technical Specifications for additional information and requirements.
APPENDIX E2
Legacy Sign Types

CWS-6 Snap Frame
Outside Elevation

1 Front Elevation - CWS-6 Snap Frame
Scale: 1/2" = 1'-0"

Associated Printed Graphics:
The following information graphics are used with the CWS-6 snap frame:
Sign Type TT-4 - See Section E2

Associated Sign Structures:
The CWS-6 snap frame can be mounted to the following sign structures:
Sign Type SFM - See Section B3
Sign Type SPY - See Section B3
Sign Type SWM - See Section B4

Description

General
The CWS-6 frame is a custom snap frame fabricated from aluminum and displays a single graphic panel.

The CWS-6 snap frame is used to display sign type TT-4 panels.

The CWS snap frames mount to the SWM, SFM, or SPY sign structures.

(V.O. = Visual Opening)

1 Snap Frame
CWS-6 shall be a custom-sized Alpina “FlipUp” “Deep Bottom” FF-RP snap frame cabinet with 1.75” round / security edge profile, or an equivalent vandal-resistant aluminum snap frame accepted by the RTA. Frame is fabricated using single faced opening; four hinged, round profile, vandal-resistant security frame extrusions, 1/8” clear polycarbonate overlay window, and 0.040” black styrene backer sheet. An ABS spatula, or similar tool, required to open the vandal-resistant frame, shall be provided with each frame. Frame shall have a silver, exterior-grade, vandal-resistant, anodized aluminum finish.

2 Security Screws
Frame shall have tamper-resistant, stainless steel, 10-24 pin-in hex drive security locking screws.
APPENDIX E2
Legacy Sign Types

CWS-7 Snap Frame
Outside Elevation

1 Front Elevation - CWS-7 Snap Frame
Scale: 1/2" = 1'-0"

Associated Printed Graphics:
The following information graphics are used with the CWS-7 snap frame:
- Sign Type TR-6 - See Section E2
- Sign Type TT-3 - See Section E2

Associated Sign Structures:
The CWS-7 snap frame can be mounted to the following sign structures:
- Sign Type SFM - See Section B3
- Sign Type SPY - See Section B3
- Sign Type SWM - See Section B4

Description

General
The CWS-7 frame is a custom snap frame fabricated from aluminum and displays a single graphic panel.

The CWS-7 snap frame is used to display sign type TR-6 / TT-3 panels (when displayed in the CWS-7 frame, TT-3 and TR-6 graphics are printed on a single substrate).

The CWS snap frames mount to the SWM, SFM, or SPY sign structures.
(VO = Visual Opening)

1 Snap Frame
CWS-7 shall be a custom-sized Alpina “FlipUp” “Deep Bottom” FF-RP snap frame cabinet with 1.75” round / security edge profile, or an equivalent vandal-resistant aluminum snap frame accepted by the RTA. Frame is fabricated using single faced opening; four hinged, round profile, vandal-resistant security frame extrusions, 1/8” clear polycarbonate overlay window, and 0.040” black styrene backer sheet. An ABS spatula, or similar tool, required to open the vandal-resistant frame, shall be provided with each frame. Frame shall have a silver, exterior-grade, vandal-resistant, anodized aluminum finish.

2 Security Screws
Frame shall have tamper-resistant, stainless steel, 10-24 pin-in hex drive security locking screws.
APPENDIX E2
Legacy Sign Types

CTA Case Build-Out Overview

Information Graphics in Existing CTA Cabinets

Sign Type CCP
This is an internal support structure installed within existing CTA cabinets to hold graphic display panels closer to the glass front.

Sign Type CCH
This is a header panel which mounts to the existing CTA cabinets.

All are custom sized to respond to the existing CTA cabinet sizes.
Cabinet interior dimensions vary.
Verify actual dimensions on site at each location.

APPENDIX E2
Legacy Sign Types

CCP-1 CTA Case
Build-Out
Front Elevation

Description

General
Sign type CCP-1 is a custom sign support structure installed within existing CTA Transit Information cabinets.

Information graphic sign types are mounted to the face of sign type CCP-1.

Existing CTA Transit Info Cabinet
Verify on site the conditions, dimensions, and materials used in the existing CTA Transit Information Cabinet (CTA sign type P-18 or similar) at each location. Remove any existing graphics from the cabinet and clean and prepare the cabinet interior to receive the CCP sign structure.

New Cabinet Interior Back Wall
Provide a new cabinet back wall. Position the new back wall so the faces of the mounted information graphic panels are as close to the existing glass doors as possible without interfering with the operation of the doors.

The new back wall shall be vandal-resistant and permanently mounted in position. The new back wall shall be smooth and precisely fitted to the interior of the existing sign cabinet. If possible, the new back wall shall not have seams. If seams are needed, use the minimum number possible and position them to be hidden as much as possible. Hardware shall not be visible on the face of the new back wall when the other sign types are mounted to it. The new back wall shall be painted aluminum.
Section - CCP-1 Sign Structure

General
Sign type CCP-1 is a custom sign support structure installed within existing CTA Transit Information cabinets. Information graphics are mounted to the face of sign type CCP.

1 Existing CTA Transit Info Cabinet
Verify on site the conditions, dimensions, and materials used in the existing CTA Transit Information Cabinet (CTA sign type P-18 or similar) at each location. Remove any existing graphics from the cabinet and clean and prepare the cabinet interior to receive the CCP sign structure.

2 New Cabinet Interior Back Wall
Provide a new cabinet back wall. Position the new back wall so the faces of the mounted information graphic panels are as close to the existing glass doors as possible without interfering with the operation of the doors. The new back wall shall be vandal-resistant and permanently mounted in position. The new back wall shall be smooth and precisely fitted to the interior of the existing sign cabinet. If possible, the new back wall shall not have seams. If seams are needed, use the minimum number possible and position them to be hidden as much as possible. Hardware shall not be visible on the face of the new back wall when the other sign types are mounted to it. The new back wall shall be painted aluminum.

3 Internal Framing
Provide concealed internal framing and bracing as needed for the CCP sign structure to be rigid and structurally sound, to be properly positioned, and to properly, safely, and securely support the sign types mounted to the CCP face.

4 Information Graphic Panels
Sign types like TC, BC, and MN shall be mounted to the CCP face using high strength hook and loop tape (Velcro). See the Message Schedule for the exact sign types to be included at each CCP location.

5 High Strength Hook & Loop Tape
Provide high strength hook and loop tape to securely adhere sign panels to the new back wall.

6 Mounting Hardware
Provide mounting hardware as required to properly, safely, and securely mount the CCP sign structure within the existing display case.
E2.37

Panel width to match existing cabinet width. Verify actual dimensions on site at each location.

The new sign panel is to align flush with the top of the cabinet and flush with the top of the cabinet opening. Verify actual dimensions on site at each location.

Panel width to match existing cabinet width. Verify actual dimensions on site at each location.

1 Elevation - Sign Type CCH-2
Scale: 1" = 1'-0"

Description

General
Sign type CCH-2 is a custom fabricated brushed stainless steel panel with cut out acrylic letters and a milled acrylic symbol panel with a stainless steel insert. The panel shall be mounted to the front of an existing CTA Transit Information display case to act as the header panel when new interagency information graphics are installed within the case.

1 Sign Panel
The sign panel shall be 1/8" thick stainless steel with a brushed finish, horizontal grain. The panel shall be properly, safely, securely and permanently mounted to the face of an existing CTA Transit Information case (CTA sign type P-18 or similar). The top and sides of the panels shall align exactly with the top and sides of the cabinet. The bottom edge of the panel shall align with the top of the openings in the cabinets.

2 Cut-out Letters
1/4" thick water-jet cut out acrylic letters shall be permanently mounted flush to the face of the sign panel. The letters shall have a painted finish.

3 Milled Acrylic Symbol Panel With Stainless Steel Insert
1/4" thick milled acrylic symbol panel with 1/8" thick raised symbol and border. The acrylic panel shall have painted finish (all surfaces) and shall be permanently pin mounted to the sign structure. Symbol background shall be a cut-out 16 gauge stainless steel insert with a horizontal brushed finish. Stainless steel shall be precisely cut-out to fit within the acrylic panel and around the raised symbol.

4 Openings for Existing Locks
Provide openings in the panels as required to permit access to existing cabinet locks. The openings shall be precisely sized and located so that they align exactly with the locks.

5 Existing CTA Transit Info Cabinet
Coordinate the panel dimensions and fabrication with existing conditions and dimensions. Prior to fabrication, verify on site the conditions, dimensions, and materials of the existing cabinets at each location where a sign type CCH is to be installed. Verify if there are existing locks or other existing features that will need to be coordinated with the sign fabrication and/or installation.
### APPENDIX E2

#### Legacy Sign Types

#### CCH-2 Cabinet Section

**Description**

**General**
Sign type CCH-2 is a custom fabricated brushed stainless steel sign panel with painted cut out acrylic letters and a milled acrylic symbol panel with a stainless steel insert mounted to an existing CTA Transit Information display case.

**1. Sign Cabinet/Wall**
Verify the materials and construction used at each existing location where new letters, symbol, and sign panel are to be pin mounted.

**2. Stainless Steel Mounting Pins**
Provide threaded stainless steel mounting pins as needed to properly, safely, and securely mount the cut out letters, symbol, and sign panel. Coordinate the quantity, size, and length of the pins with the size and weight of the letters, symbol, and sign panel and with the materials and conditions at each of the locations where the letters, symbol, and sign panel shall be mounted. Properly and permanently secure the mounting pins to the backs of the letters, symbol, and sign panel. Provide the appropriate high strength, exterior grade, permanent adhesive to permanently secure the mounting pins. Determine the correct adhesive for each location where the letters, symbol, and sign panel are to be pin mounted. All mounting materials and adhesives shall be suitable for use in exterior locations.

**3. VHB Tape and Silicone Adhesive**
Cut out letters, symbol, and sign panel shall be adhered in position using high strength VHB tape and silicone adhesive. Carefully apply the tape and adhesive to the backs of the letters, symbol, and sign panel. Tape and adhesive shall not be visible when the letters, symbol, and sign panel are in position. Coordinate the tape and adhesive as needed with the materials that the letters, symbol, and sign panel are to be mounted to at each location. Use tape and adhesive suitable for exterior locations.

**4. Cut-out Acrylic Letters**
Water jet cut out letters from acrylic. Letters shall have a painted finish on the faces and returns. See pages B3.13 and B3.14 in Section B3 for additional information.

**5. Stainless Steel Sign Panel**
The sign panel shall be 1/8" stainless steel with a brushed finish, horizontal grain. See Page E2.37 for additional information.
The following abbreviations have been established for interagency locations that have received signage, or where signage is planned. These abbreviations are for use with the sign location numbers as well as document labeling. For future interagency locations, choose abbreviations that will not conflict with the existing abbreviations.

95th and Western: WT
Aurora: AU
Blue Island: BI
Chicago Union Station: CU
Davis: DS
Elgin: EL
Harvey: HA
Irving Park: IP
Jefferson Park: JP
Joliet: JS
Lake-Cook: LC
LaSalle Street: LS
Lisle: LI
Main Street, Evanston: MN
Mayfair-Montrose: MA
Millennium Station: MS
Museum Campus 11th Street: MC
Naperville: NA
Oak Park Transportation Center: OP
Ogilvie Transportation Center: OT
Van Buren: VB
Waukegan: WK
Wheaton: WH
CTA Sign Mounting Bracket
CTA Item No. 2100361

Drawing shown for reference only.

Not to scale.

<table>
<thead>
<tr>
<th>MATERIAL</th>
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<tr>
<td>CAST ALUMINUM, ANSI H33.1 ALLOY 7130</td>
</tr>
<tr>
<td>TEMPER: TS</td>
</tr>
<tr>
<td>WEIGHT: 5 OUNCES (APPROX.)</td>
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<table>
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<tr>
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<tbody>
<tr>
<td>CATODIC ACRYLIC ELECTROCOAT (UV CORRECTED)</td>
</tr>
<tr>
<td>COLOR: BLACK</td>
</tr>
<tr>
<td>THICKNESS: 0.6-0.8 ML</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>NOTES</th>
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</thead>
<tbody>
<tr>
<td>1) 1/32 X 45° CHAMFER ON ALL HOLES.</td>
</tr>
<tr>
<td>THR HOLE: CHAMFER BOTH SIDES.</td>
</tr>
<tr>
<td>2) REMOVE ALL BURRS AND SHARP EDGES.</td>
</tr>
<tr>
<td>3) 1/16&quot; CASTING RADIUS UNLESS OTHERWISE SPECIFIED.</td>
</tr>
<tr>
<td>4) MAXIMUM CASTING DRAFTS 3° UNLESS OTHERWISE SPECIFIED.</td>
</tr>
<tr>
<td>5) WORK TO DIMENSIONS. DO NOT SCALE DRAWING.</td>
</tr>
</tbody>
</table>

REV: 1 REDRAWN ON CAD W/ CHANGES ON 6/18/03
BY: JDC
SUPERCEDES DIG "A-534"

REV: 2 REDRAWN ON CAD W/ CHANGES ON 2/15/06
BY: AGS/PFE
APPENDIX E4

CTA Cast Sign Base
CTA Item No. 2100007

Drawing shown for reference only.

Not to scale.
APPENDIX E4

Details of installation of CWS snap frames on SFM, SPY, and SWM sign structures

Drawing shown for reference only.

Not to scale.

SNAP FRAME ATTACHMENT

(Snap frame shall be Alpha flip-up deep bottom 7/8"x1 1/2")

NOTES:

1. Locate rivets to miss corner plates and components of the Snap Frame.
2. Dimensions shown are per RTA Information Design Standard Manual.
3. Coordinate screw or rivet locations with centers of SFM and SWM channel legs.
4. For Snap Frame, use 8-32 self-drving screws per face plate details in section A-A.
5. For direct mount of frame to concrete wall, use 3/8"x1 5/8"x8 channel head concrete screws with manufacturer's minimum embedment depth and 1 1/2" minimum concrete edge distance.

Sections A-A and B-B
APPENDIX E5
Examples of Interagency Signage Installations

The following photographs show examples of various types of interagency signage that have been installed at several interagency locations.

CWS snap frames on SFM support structure, installed with SMAB mounting on concrete sidewalk
Location: Lake Cook Road

CWS snap frame on SWM support structure
Location: Harvey

DSO sign installed with SON support structure
Location: Naperville
APPENDIX E5
Examples of Interagency Signage Installations

The following photographs show examples of various types of interagency signage that have been installed at several interagency locations.

Two DSS-4 sign panels installed on a CTA elevated structure column with CMCC mounting brackets.
Location: LaSalle Street

Two DSS-4 sign panels installed on a light pole with CMFS mounting brackets.
Location: 95th and Western

DSO sign installed with SOS support structure
Location: Van Buren
The following photographs show examples of various types of interagency signage that have been installed at several interagency locations.

DSS-1 sign panel installed on a light pole with CMCS mounting brackets.  
*Location: LaSalle Street*

DSW sign installed with SWD support structure  
*Location: Joliet*
The following photographs show examples of various types of interagency signage that have been installed at several interagency locations.

- BB and BS sign panels installed on SRSP post with CMFB mounting brackets
- BA and BT products installed in CPN cabinets with CMBP mounting bracket
- SRSP post installed with SMCB base on concrete sidewalk

Location: Lake Cook Road