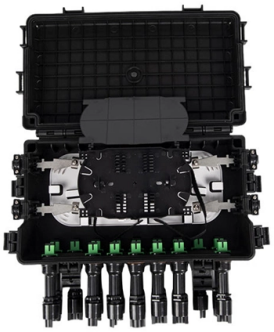
# Protection requirements for bridge piers and cable trays



## Overview

Use Pier Protection Barrier (PPB) when bridge piers require protection. Example Layouts for PPB are shown in Index 521-002. For determination of PPB applicability, see the Pier Protection Selection Flowchart in FDM. The purpose of this Engineering Directive is to introduce updated MassDOT guidelines for the protection of bridge piers and abutments. The guidelines on the following pages supersede the corresponding guidelines contained in Part I of the 2013 MassDOT LRFD Bridge Manual. Cables tha are laid close to the surface are vulnerable to damage from the passage of heavy traffic. The first line of defense is to position bridge piers on land or in shallow water, if possible, to avoid having ships be able to reach the bridge piers. Figure 2: Cable-stayed. This standard requires the inclusion of standard BPPS-2B in the set of plans. below ground line to top of 2'-0” x 2'-0”. This report provides proposed load and resistance factor design (LRFD) bridge design pier protection specifications and proposed occupant protection guidelines to update the AASHTO LRFD Bridge Design Specifications and AASHTO Roadside Design Guide, respectively.

## Article Content

Grounding Requirements for Electrical Cables, Cable Trays, and

Guidelines for grounding electrical cables, busbars, and cable trays in wiring projects, ensuring safety and compliance with industry standards.

Index 521-002 Pier Protection Barrier

Use Pier Protection Barrier (PPB) when bridge piers require protection. See FDM 215 and SDG, Chapter 2, for PPB requirements and options. Example Layouts for PPB are shown in Index 521-002. For

Bridge Armor & Protection Systems

Customizable bridge protection systems to harden and protect critical structural elements for bridge support cables, pylons, and piers.

FactSheet

Electrical Safety Hazards of Overloading Cable Trays According to the 2005 National Electrical Code® (NEC), a cable tray system is “ unit or assembly of units or sections and associated fittings forming

Bridge Pier Protection Guidelines

The policy provides guidelines for pier protection of new bridges based on risk of vehicle collision. It specifies design requirements such as barrier protection,

Guidelines for Shielding Bridge Piers | The National

TRB''s National Cooperative Highway Research Program (NCHRP) Research Report 892: Guidelines for Shielding Bridge Piers provides proposed load and

Piers, and Wharves NFPA 307 Protection of Marine Terminals ...

Origin and Development of NFPA 307 This document originated in 1980 from the combination of the 1967 edition of NFPA 307, Recommendations for the Operation of Marine Terminals, and the 1975

Bridge Pier Protection Guidelines

This document summarizes MnDOT''s bridge office substructure protection policy. It outlines that AASHTO provisions for substructure protection are overly

Essential Cable Tray Standards: Your Guide to Compliance & Safety

In this guide, we will explore essential cable tray standards and offer insights into compliance and safety measures. Significance of Compliance Compliance with cable tray standards is not just about

Guide to cable support systems

The material of a cable support system is normally steel or stainless steel. Various galvanisation surfaces can be applied to improve corrosion protection. A cable support system consists of cable

Fixing America''s Surface Transportation Act Tech Bri

CATEGORY: Design ISSUE: Because bridge piers or columns are oftentimes the most significant fixed object along a particular section of roadway, it is usually necessary to shield them with appropriate

Protection of bridge piers against ship collision

Download Citation | Protection of bridge piers against ship collision | This article outlines the development of pier protection against ship collision

Transportation Research Board

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

Engineering Recommendation C98 Issue 1 2013 Physical Protection

This document provides recommendations for suitable physical protection of cable circuits crossing bridges and their effect on cable ratings for different cable installation scenarios together with

Protection of Bridge Piers and Abutments

Protection of Bridge Piers and Abutments The purpose of this Engineering Directive is to introduce updated MassDOT guidelines for the protection of bridge piers and abutments. The

Firestopping Requirements for Cable Trays and

Where cables pass through shafts, walls, slabs, or enter electrical panels or cabinets, openings shall be tightly sealed with firestopping materials in

Performance-based optimum seismic design of cable tray system

The seismic performance levels of cable tray systems are presented according to current seismic design codes. A performance-based optimum seismic design procedure for cable tray

Fireproof Cable Trays Acceptance: Standards for

Ensure safety and durability with this comprehensive guide to fireproof cable trays acceptance. Learn coating processes, inspection

Guidelines for Shielding Bridge Piers

This report provides proposed load and resistance factor design (LRFD) bridge design pier protection specifications and proposed occupant protection guidelines to update the AASHTO LRFD Bridge

Bridge protection systems

Bridge protection systems prevent ship collision damage to a bridge by either deflecting an aberrant ship from striking the piers of a bridge, or sustaining and absorbing the impact.

RECOMMENDED SPECIFICATIONS OF JUNCTION BOX AND CABLE TRAY

Basic requirements for some aspects of the E& I components (e.g., cable tray and junction box) can be found in the ABS Rules for Building and Classing Mobile Offshore Drilling Units (MODU Rules), as

Protection of Bridge Piers and Abutments

These guidelines are based on NCHRP Report 892, Guidelines for Shielding Bridge Piers, which updates the pier protection requirements found in the AASHTO LRFD Bridge Design Specifications.

TxDOT Research Library

"TRB''s National Cooperative Highway Research Program (NCHRP) Research Report 892: Guidelines for Shielding Bridge Piers provides proposed load and resistance factor design (LRFD) bridge design

Freyssinet stay cable system

Discover our specific stay cable protection systems to better control risks such as fire, lightning, explosion or ice formation on cables.

Bridge Pier Protections

The first line of defense is to position bridge piers on land or in shallow water, if possible, to avoid having ships be able to reach the bridge piers.

100+ Essential Questions Answered About Cable

Cable trays, as an important component of modern building electrical systems, play a crucial role in supporting and protecting cable lines,

Bridge Pier | Types of Bridge Piers | Requirements of a

Substructure consists of bridge pier, abutments, wing walls, piles etc. while the superstructure consists of deck, girders or any part on which the

Cable Tray Technical Guide A practical guide to product selection and ...

This guide for engineers and installers has been developed by ABB as a practical reference regarding cable tray characteristics, installation, and requirements.

## Contact Us

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