



FACILITIES DEVELOPMENT MANUAL

Wisconsin Department of Transportation

TABLE OF CONTENTS

Chapter 17: Railroad Coordination

Section 17-1 Overview

- 17-1-1 General
 - 1.1 Originator
 - 1.2 Introduction
 - 1.3 Policy Interpretation
 - 1.4 Goal of Railroad Coordination
- Attachment 1.1 Terms and Abbreviations
- 17-1-5 The WisDOT/Railroad Partnership
- 17-1-10 The WisDOT/OCR Partnership
 - 10.1 Introduction
 - 10.2 OCR Powers

Section 17-5 Background

- 17-5-1 Sources and Types of Railroad Projects
 - 1.1 Improvement Projects
 - 1.2 Other Projects
 - 1.3 Railroad Status Report
- Attachment 1.1 Railroad-Highway Projects, Status Report Flow Chart
- 17-5-5 Relevant Statutes
 - 5.1 Introduction
 - 5.2 Legislation
 - 5.3 OCR Regulatory Activities
- 17-5-10 Negotiating Guidelines
- 17-5-15 Manuals and Textbooks
 - 15.1 Manuals
 - 15.2 Textbooks
- 17-5-20 Data Sources
 - 20.1 Introduction
 - 20.2 Background
 - 20.3 WisDOT Railroad Data File

Section 17-10 Agency Responsibilities

- 17-10-1 Role of the Region Railroad Coordinator
 - 1.1 Position Summary
- 17-10-5 Role of Project Managers
 - 5.1 Overview
- 17-10-7 Role of Local Program Management Consultant
 - 7.1 Introduction
 - 7.2 Pre-Design Contract Activities
 - 7.3 Design Contract Activities
 - 7.4 Post Design Activities
- 17-10-10 WisDOT
 - 10.1 Railroads and Harbors Section
 - 10.2 Transportation Regions
 - 10.3 Engineering Consultants
 - 10.4 Local Officials
 - 10.5 Summary Note
- Attachment 10.1 Principal Offices Involved with Railroad-Highway Projects
- 17-10-15 Office of the Commissioner of Railroads

- 15.1.....Background
 - 15.2.....Office of the Commissioner of Railroads (OCR)
 - 15.3.....WisDOT Role
 - 15.4.....OCR Hearings
 - Attachment 15.1....Preparation for Hearings
 - Attachment 15.2....Example Testimony
- 17-10-20Railroads
 - 20.1.....Personnel
 - 20.2.....Maps
 - 20.3.....Background
 - 20.4.....Work Arrangements
 - 20.5.....Maintenance
 - Attachment 20.1....Legal Names of Railroad Companies Operating in Wisconsin
- 17-10-25Federal Agencies
 - 25.1.....FHWA (Federal Highway Administration)
 - 25.2.....FRA (Federal Railroad Administration)
 - 25.3.....STB (Surface Transportation Board)
 - 25.4.....NTSB (National Transportation Safety Board)
- 17-10-30Local Government
 - 30.1.....Introduction
 - 30.2.....Negotiations and Agreements
 - 30.3.....Local Costs

Section 17-15 Types of Programs

- 17-15-1General Overview
 - 1.1.....Highway Improvement Program
 - 1.2.....WisDOT Safety Program
 - 1.3.....OCR Safety Program
 - 1.4.....STH Surface Repair
 - 1.5.....Signal Maintenance

Section 17-20 Implementing Projects

- 17-20-1General
 - 1.1.....Early Notification
 - 1.2.....The 86:13 Letter/Notification
 - Attachment 1.1.....Process that is followed for a Highway Improvement Project with a Railroad Crossing but No Railroad Work is Anticipated
 - Attachment 1.2.....Sample 86.13 Letter
- 17-20-5Project Scheduling
 - 5.1.....Introduction
 - 5.2.....The Master Contract Schedule
 - 5.3.....The Railroad Status Report
 - 5.4.....Scheduling Criteria
 - Attachment 5.1.....Estimated Minimum Lead Times for Railroad Projects
- 17-20-10The Agreement
 - 10.1.....Introduction
 - 10.2.....Overview
 - 10.3.....Railroad Project Submittal Package
 - 10.4.....OCR Petition
 - 10.5.....The Proposal Letter
 - 10.6.....The Agreement
 - 10.7.....Contents of the Agreement
 - 10.8.....Distribution of the Agreement
- 17-20-15Letter Agreements
 - Attachment 15.1....Sample of Letter Agreement with Railroad (Lump Sum)
 - Attachment 15.2....Sample of Letter Agreement with Railroad (Design Approval)
 - Attachment 15.3....Sample of Letter Seeking Railroad Approval of Contractor Work
 - Attachment 15.4....Sample of Letter Proposing WisDOT Work in Track Zone in Exchange for Railroad

Providing Flagging Protection

- Attachment 15.5.....Sample of Letter Proposing WisDOT Remove and Restore a Little-Used Track Crossing
- 17-20-20Detours and Haul Roads
 - 20.1.....General
 - 20.2.....Detour Options
 - 20.3.....Isolated Crossings on Safety Projects
 - 20.4.....Highway Improvement Projects

Section 17-25 Active Warning Device Projects

- 17-25-1General
 - 1.1.....Background
 - 1.2.....General
 - 1.3.....Process
 - 1.4.....Lead Times
 - Attachment 1.1.....Sample Agreement for Highway-Railroad Grade Crossing Warning Devices
 - Attachment 1.2.....Railroad Crossing Report Form, DT 1589
- 17-25-5Highway Improvement Projects
 - 5.1.....Introduction
 - 5.2.....Lead Times
 - 5.3.....Process
 - Attachment 5.1.....Process that is followed for a Highway Improvement Project with an At Grade Railroad Component
- 17-25-10WisDOT Safety Projects
 - 10.1.....Introduction
 - 10.2.....General
 - 10.3.....OCR Involvement
 - Attachment 10.1.....Process that is followed for a WisDOT Railroad Safety Project (RR Force Work Component)
- 17-25-15OCR Safety Projects
 - 15.1.....Introduction
 - 15.2.....General
 - 15.3.....WisDOT Assistance
 - Attachment 15.1.....Process that is followed for an OCR Railroad Safety Project (RR Force Work Component)

Section 17-30 Crossing Surface Projects

- 17-30-1General - Criteria
 - 1.1.....Background
 - 1.2.....Maintenance / Repair / Refurbishing
 - 1.3.....Replacement
 - 1.4.....Improvement or Upgrade
 - 1.5.....Alteration of a Crossing
 - 1.6.....Roadway Improvement (Reconstruction and 3R) Projects
 - 1.7.....Roadway Maintenance (SHRM and Federal Preventive Maintenance) Projects
 - 1.8.....Safety Projects
- 17-30-5Highway Improvement Programs
 - 5.1.....General
 - 5.2.....Unique Agreement Provisions
 - Attachment 5.1.....Sample Agreement for Highway-Railroad Grade Crossing Surface - Highway Improvement Program
- 17-30-10WisDOT Safety Project
 - 10.1.....Background
 - Attachment 10.1.....Sample Agreement for Highway-Railroad Grade Crossing Surface - WisDOT Safety Project
- 17-30-15STH Surface Repair Program
 - 15.1.....Introduction
 - 15.2.....Process
 - 15.3.....Limits of Cost Participation
 - 15.4.....Charging Costs
 - Attachment 15.1.....Process for a Crossing Repair Fund Project (No Federal Funds)

Attachment 15.2.....Sample Agreement for a Railroad Crossing Repair Fund Project

Section 17-35 Crossing Closure and Consolidation

17-35-1Overview

1.1.....Background

1.2.....Guidance

1.3.....Options

1.4.....Incentives

1.5.....Process

1.6.....Payment

Attachment 1.1.....Crossing Closure Incentive Payment Project Process

Section 17-40 Separation Projects

17-40-1Overview

1.1.....General

1.2.....Lead Times

1.3.....Submittals for Railroad Coordination

Attachment 1.1.....Process When the Railroad is Willing to Sign the Stipulation

Attachment 1.2.....Process When the Railroad is Unwilling to Sign the Stipulation

Attachment 1.3.....Process For <23' Vertical Clearance

Attachment 1.4.....Separated Grade Railroad Project Submittal Package

17-40-5Structure Criteria/Justification

5.1.....Options

5.2.....General Criteria

5.3.....Other Criteria

5.4.....Railroad Participation in Costs

5.5.....Analysis of Alternatives

5.6.....Selected Alternative.

17-40-10Alternatives to Structures

10.1.....General

10.2.....Create an At-Grade Crossing

10.3.....Highway Relocation

10.4.....Railroad Relocation

10.5.....Crossing Closure

17-40-15Bridge Replacement Program

17-40-20Structure Agreements

20.1.....General

20.2.....Stipulation Process

20.3.....Agreement for Railroad Force Work

20.4.....Structures on The Local System

17-40-25Costs/Cost Sharing

25.1.....Background

25.2.....Railroad Participation

25.3.....Projects on the Local System

25.4.....Current Practice in Cost Sharing

25.5.....5 – Options-Grade Separations

25.6.....Summary

25.7.....Conclusions

17-40-30Structure on Local System

30.1.....General

30.2.....Interim Design Memo

30.3.....Alternative Selection

17-40-35Underpass Structures

35.1.....General

35.2.....Underpass Structures

35.3.....Maintaining Railroad Traffic During Underpass Construction

35.4.....False Work Bridge

Attachment 35.1.....General Shoo-Fly Case

- 17-40-40Miscellaneous Structure Provisions
 - 40.1.....Excessive Clearances
 - 40.2.....Additional Track Space
 - 40.3.....Crash Protection

Section 17-45 Other Safety Funded Projects

- 17-45-1Railroad Stopping Lanes
- 17-45-5Roadway Treatments at Closures
- 17-45-10Humpback and Sag Crossings
- 17-45-15Track Removals and Modifications
- 17-45-20Enhancement Projects
 - 20.1.....Historical Preservation
 - 20.2.....Bike and Pedestrian Crossings
- 17-45-25Exempt Crossings
 - 25.1.....Background
 - 25.2.....Criteria for Selection
 - 25.3.....Summary
 - 25.4.....Exempt Signing
- Attachment 25.1....Exempt Railroad Crossing Process

Section 17-50 Contract Administration

- 17-50-1General
 - 1.1.....Introduction
 - 1.2.....Cost Principles
- 17-50-5Railroad Protective Liability Insurance
 - 5.1.....Background
 - 5.2.....When to Provide Insurance
 - 5.3.....Leased Lines
 - 5.4.....Operating Rights
 - 5.5.....Special Provisions

Section 17-55 Property

- 17-55-1General
 - 1.1.....Background
 - 1.2.....Entering Railroad Lands
 - 1.3.....Indemnification
- 17-55-5Acquisitions
 - 5.1.....Background
- 17-55-10Responsibilities for Acquisitions
 - 10.1.....Acquisition
 - 10.2.....Responsibility for Property Negotiations
 - 10.3.....What's Needed
- 17-55-15Determining Compensation
 - 15.1.....Classification of Railroad Right of Way and Lands
 - 15.2.....Procedure for Determining Compensation
 - 15.3.....Easement Valuation
 - 15.4.....Administrative Revisions

Section 17-60 Design Considerations

- 17-60-1Locating New Highway - Railroad Grade Crossings
 - 1.1.....Introduction
 - 1.2.....Location Considerations
 - 1.3.....Roadways Paralleling Railroads
 - 1.4.....Roadways Near Railroads
- 17-60-5Grade Crossing Design
 - 5.1.....Surveys and Plans
 - 5.2.....Visibility and Sight Distances
 - 5.3.....Profile
 - 5.4.....Track Raises
 - 5.5.....Approaches
 - 5.6.....Welded Rails
 - 5.7.....Drainage and Crossing Stability
- Attachment 5.1.....Examples of Allowable Roadway Grade Variation
- Attachment 5.2.....Runout Distance D on Approach to Track
- 17-60-10Railroad Design Considerations

- 10.1.....General
- 10.2.....Clearance Considerations
- 10.3.....Statutory Clearances
- 10.4.....Clearances Desired by Railroad
- 10.5.....Temporary Clearances
- 17-60-15Signing at Crossings
 - 15.1.....Introduction
 - 15.2.....Railroad Crossing Signs
 - 15.3.....Pavement Markings
 - 15.4.....Stop Signs and Yield Signs
 - 15.5.....“Tracks Out of Service” Signs
 - 15.6....."Exempt" Signs
- 17-60-20Warning Devices and Systems
 - 20.1.....Introduction:
 - 20.2.....Train Activated Signals
 - 20.3.....Control Equipment
 - 20.4.....Placement of Signs and Signals
 - 20.5.....Protection of Signals
 - Attachment 20.1....Flashing Light Signals, Side of Road - Rural and Urban Roadway
- 17-60-25Pre-emption/Interconnects
 - 25.1.....Preemption/Interconnection of Traffic Control Signals
- 17-60-30Crossing Surface Types
 - 30.1.....General
 - 30.2.....Current Standard Crossing Surface
 - 30.3.....Selecting A Crossing Surface
- 17-60-35Miscellaneous
 - 35.1.....Controlled Train Movements
 - 35.2.....Lighting Crossings
 - 35.3.....Other Safety Devices
- 17-60-40High-Speed Passenger Rail
 - Attachment 40.1....Midwest Regional Rail Initiative, Wisconsin's Portion
- 17-60-45Transverse Facility Crossings
 - 45.1.....General
 - 45.2.....Public Utilities vs. Highway Appurtenances
 - 45.3.....State vs Private Railroad Corridors
 - 45.4.....Installation
 - 45.5.....References
 - Attachment 45.1....Transverse Facility Decision Process Flow Chart
 - Attachment 45.2....Sample Railroad Notification Letter