FINAL ENVIRONMENTAL IMPACT STATEMENT

Finance Docket No. 33388

"PROPOSED CONRAIL ACQUISITION"

CSX Corporation and CSX Transportation, Inc.
Norfolk Southern Corporation and
Norfolk Southern Railway Company

Control and Operating Leases/Agreements

Conrail, Inc. and Consolidated Rail Corporation

VOLUME 7

Addendum

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"PROPOSED CONRAIL ACQUISITION" FINAL ENVIRONMENTAL IMPACT STATEMENT VOLUME 7 ADDENDUM

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AD.1 INTRODUCTION AND BACKGROUND

The Surface Transportation Board, Section of Environmental Analysis prepared this Final Environmental Impact Statement to identify and evaluate the potential environmental impacts of the CSX and NS proposal to acquire Conrail.[1] SEA has recommended a number of mitigation measures to address these potential environmental impacts. The Board will fully consider the Draft EIS and Final EIS, all public comments, and other relevant environmental information in deciding whether to approve as proposed, approve with conditions, or disapprove the proposed Conrail Acquisition.

CSX, NS, and Conrail filed a joint application (Primary Application) with the Board on June 23, 1997. In their Application, they jointly seek authority for CSX and NS to acquire Conrail, and for the subsequent division of most of Conrail's assets and the joint operation of other Conrail assets (Surface Transportation Board, Finance Docket No. 33388). The Board will issue its final written decision on the proposed Conrail Acquisition on July 23, 1998.

The major conclusion of this Final EIS is that on a system-wide basis, SEA identified several environmental benefits, but no potential significant adverse environmental impacts that would result from the proposed Conrail Acquisition. On both a regional basis and a local or site-specific basis, SEA identified environmental benefits and potential significant adverse environmental impacts. For most potential significant adverse environmental impacts, SEA recommends mitigation measures that the Board could require of CSX and NS as conditions of approval.

SEA has prepared this Addendum to the Final EIS to address the following issues, which, because of their development late in the environmental review process, the various chapters of the Final EIS did not fully address:

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1 The "Surface Transportation Board" is hereinafter referred to as "the Board"; "Section of Environmental Analysis" is hereinafter referred to as "SEA"; and the "Final Environmental Impact Statement" is hereinafter referred to as the "Final EIS"; "Conrail" stands for "Conrail, Inc. and Consolidated Rail Corporation"; "CSX" stands for "CSX Corporation and CSX Transportation, Inc."; and "NS" stands for "Norfolk Southern Railway Company and Norfolk Southern Corporation."

- NS proposed rerouting in the Greater Cleveland Area.[2]
- Alexandria, Indiana rail connection.
- Addendum to comments filed by Congressman Dennis J. Kucinich.
- Comments filed on SEA's additional hazardous materials and noise analysis.

In this Addendum, SEA identified and evaluated the potential environmental impacts of the train traffic rerouting proposed by NS and submitted on April 16, 1998, as mitigation for the Greater Cleveland Area. During preparation of this Final EIS, SEA requested that NS prepare a Supplemental Environmental Report discussing the potential environmental impacts of its proposed train traffic rerouting in the Greater Cleveland Area. In reviewing the Supplemental Environmental Report, SEA requested that NS provide additional information related to highway/rail at-grade crossing safety and delay related to these operational changes. NS provided this additional information in a letter dated April 27, 1998. SEA then independently evaluated and verified the findings NS presented in its Supplemental Environmental Report. SEA presents the analysis results in this Addendum. The results aided in SEA's assessment of routing alternatives through the Greater Cleveland Area, as presented in Appendix N, "Community Evaluations," of this Final EIS.

Parties affected by the traffic increases that would result from NS proposed train traffic rerouting for the Greater Cleveland Area have the opportunity to comment on the new NS routing information, SEA's environmental analysis of the proposed rerouting, and SEA's recommended mitigation. In order for the Board to consider any additional comments prior to the Board's final written decision on July 23, 1998, SEA requests that affected parties file comments with the Board by June 28, 1998. Parties affected by this new train traffic information will also have the opportunity to bring their concerns to the Board's attention through the administrative appeal process. See Chapter 1, Section 1.4.2, "Role of the Board in Reviewing Railroad Mergers and Acquisitions," of this Final EIS for more information on the Board's administrative appeal process.

This addendum includes additional analysis of the Alexandria Connection resulting from proposed operating plan information NS submitted on May 6, 1998. SEA conducted additional analysis since the new information was not compatible with data SEA assumed previously.

This addendum also includes additional analysis of noise effects on homes along the northwest side of Abbyshire Drive, located on the Berea-to-Greenwich rail line segment. SEA conducted

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[2] NS submitted its proposal for rerouting in the Greater Cleveland Area in its report titled "Revised Mitigation Proposal for Train Frequencies in Greater Cleveland and Vicinity", hereinafter referred to as the "Revised Mitigation Proposal." This Final EIS refers to the Greater Cleveland Area, however, for the purposes of the Final EIS and the area does not differ from "Greater Cleveland and Vicinity." The Greater Cleveland Area consists of the Counties of Cuyahoga, Lorain, eastern Erie, and western Lake.

additional analysis based upon new information about Abbyshire Drive in the City of Berea, Ohio submitted by Congressman Kucinich.

This Addendum also addresses the five comments received during a limited additional comment period that ended on April 15, 1998. The additional comment period allowed the public to review and comment on rail operations information that was not available when SEA issued the Draft EIS on December 12, 1997. This Addendum includes summaries of each of the comments and SEA's responses to them.

Except as noted, this Final EIS fully adopts and incorporates the Draft EIS, including the errata documents and supplemental notice that SEA issued to the public to clarify information in the Draft EIS. SEA intends that these documents be used together to provide complete documentation of SEA's environmental review process.

AD.2 NEGOTIATED AGREEMENTS

SEA received copies of 18 Negotiated Agreements that CSX and NS provided either under seal or for the public record. For the purposes of this Final EIS, a Negotiated Agreement is an agreement between CSX, NS, or both and one or more communities or governmental units (including passenger service organizations); that agreement is directed at mitigating the potential effects of the proposed Conrail Acquisition, with specific duties and responsibilities assigned to each party. In previous proceedings, the Board has required applicants to comply with the terms of these agreements as a condition of approval. Chapter 4, "Summary of Environmental Review," of the Final EIS lists agreements submitted before May 11, 1998. The following list identifies the parties that have entered into Negotiated Agreements between May 11 and May 15, 1998, with CSX, NS, Conrail, or a combination of the Applicants:

- **CSX, NS, and Conrail:** National Passenger Railroad Corporation (Amtrak), dated May 14, 1998, "Principles of Cooperation Concerning the Northeast Corridor."
- **CSX:** Amtrak, dated May 14, 1998, "Memorandum of Understanding."
- **NS:** Amtrak, dated May 14, 1998, "Principles of Cooperation Between Amtrak and CSX Transportation (CSX) Associated with the Conrail Acquisition."

AD.3 ADDITIONAL ANALYSIS AND EVALUATION

AD.3.1 Introduction

The purpose of this section is to report additional analysis and evaluation SEA conducted for this Final EIS. Because of time constraints and the specific nature of the evaluation, this information did not appear in other volumes of this Final EIS. The additional analysis and evaluation cover the following:

- NS Mitigation Proposal for Train Frequencies in the Greater Cleveland Area.
- NS Rail Connection in Alexandria, Indiana.

This section also identifies additional recommended mitigation not identified in Chapter 4, "Summary of Environmental Review," of this Final EIS, but that appears in Chapter 7, "Final Recommended Conditions."

AD.3.2 NS Revised Mitigation Proposal for Train Frequencies in the Greater Cleveland Area

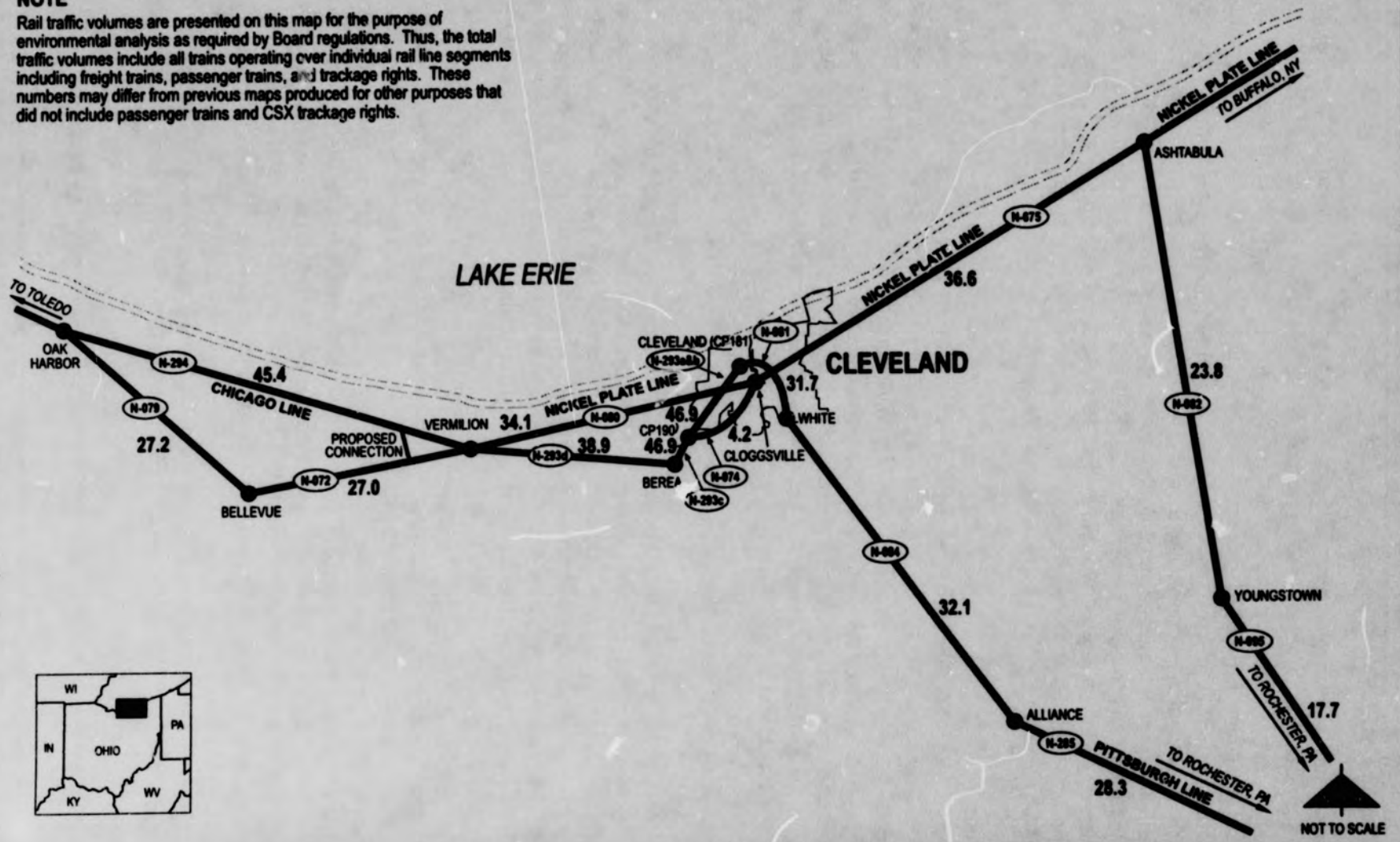
Comments and Concerns in the Greater Cleveland Area

Currently, only Conrail and NS have a major presence in the Greater Cleveland Area. Under the Operating Plans the Applicants submitted in June 1997, CSX and NS would acquire Conrail's existing assets in the Greater Cleveland Area. Overall, the Operating Plans indicate that rail traffic would increase in the area and rail traffic patterns would change substantially, with a projected increase in rail traffic for the combined CSX and NS systems in Cleveland of approximately 17 trains per day. Figure AD-1 shows the projected total number of trains by segment in the Greater Cleveland Area under the NS Operating Plan proposed originally. However, because of shifts in train traffic routes, some locations in Cleveland would experience an increase of up to 40 trains per day on a given rail line segment. In addition, some locations in the Greater Cleveland Area where CSX and NS rail lines parallel or are in close proximity to each other would experience combined traffic volume increases of up to 81 trains per day.

During the environmental review process, the Board received numerous public comments from Greater Cleveland Area elected officials and individuals who expressed environmental concerns related to the CSX and NS proposed Operating Plans. These comments addressed numerous and wide-ranging environmental concerns regarding noise, hazardous materials transport, delays in emergency response services, air quality, land use, environmental justice, and safety and traffic delay at highway/rail at-grade crossings. SEA conducted a public outreach program in the Greater Cleveland Area, including environmental justice populations, using fact sheets, media announcements, a toll-free phone line, and an Internet web site. SEA encouraged the Applicants to meet with the potentially affected communities and develop possible solutions. SEA carefully considered all the comments it received during the course of its environmental review.

NOTE

Rail traffic volumes are presented on this map for the purpose of environmental analysis as required by Board regulations. Thus, the total traffic volumes include all trains operating over individual rail line segments including freight trains, passenger trains, and trackage rights. These numbers may differ from previous maps produced for other purposes that did not include passenger trains and CSX trackage rights.



ADDENDUM FIGURE AD-1

NORFOLK SOUTHERN ORIGINAL OPERATING PLAN

NORFOLK SOUTHERN MITIGATION PROPOSAL FOR TRAIN FREQUENCIES IN GREATER CLEVELAND AND VICINITY

After consultation with affected communities in the Greater Cleveland Area, on November 25, 1997, NS submitted an alternative routing proposal primarily to address concerns of Cleveland's West Shore suburbs[3]; however, the proposal does not mitigate every concern. The proposal. referred to in the Final EIS as the NS Cloggsville Connection, involves the Cloggsville junction point in the City of Cleveland where the NS and Conrail rail line segments meet. NS would acquire the Conrail rail line segment and thus have the operational flexibility to route train traffic through the Cloggsville junction and onto the current Conrail rail line segment (N-074). For SEA's analysis of this proposal, see Appendix S, "Railroad Mitigation Plans," in the Draft EIS and Chapter 4, "Summary of Environmental Review," and Appendix N, "Community Evaluations," in this Final EIS where SEA presents an analysis of routing alternatives in the Greater Cleveland Area. SEA designates the NS Cloggsville Connection as Alternative 2 in its analysis.

On April 16, 1998, NS submitted to SEA the Revised Mitigation Proposal, which expands on the NS November 25, 1997, Cloggsville Connection alternative routing proposal. Along with the proposal, NS also submitted a Supplemental Environmental Report dated April 15, 1998, that is provided as Attachment A to this Addendum. In response to SEA's April 27, 1998, request for information, NS submitted a letter dated May 5, 1998, with additional analysis relating to highway/rail at-grade crossing safety and traffic delay. The NS supplement is included with this Addendum as Attachment B.

Relationship of the Revised Mitigation Proposal to the Final EIS

The NS Revised Mitigation Proposal expands on the NS-proposed Cloggsville Alternative by modifying the routing and train frequencies of NS traffic in the rail corridor from Rochester, Pennsylvania to Vermilion, Ohio. The purpose of this section is to evaluate and report on the potential environmental impacts associated with the modifications to rail traffic routing and train frequencies in the area affected by the Revised Mitigation Proposal, especially as it relates to areas outside of the Greater Cleveland Area, such as Ashtabula, Youngstown, and Vermilion, Ohio.

The Revised Mitigation Proposal includes all of the connections and improvements required as part of the Cloggsville Alternative. Specifically, the Revised Mitigation Proposal includes constructing the double connection at Vermilion, Ohio, and upgrading the Cloggsville connection and the Cleveland (Cloggsville)-to-CP 190 rail line segment (N-074) in the Greater Cleveland Area. SEA evaluated these physical changes and constructions, also described in the attached Supplemental Environmental Report; in the Draft EIS and in Appendix N, "Community Evaluations;" and in Chapter 4, "Summary of Environmental Review," of this Final EIS.

To identify and evaluate the potential environmental impacts of possible routing alternatives in the Greater Cleveland Area, SEA studied the routing plans that CSX and NS submitted in their

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3 The West Shore suburbs consist of Bay Village, Rocky River, Lakewood, and Westlake.

Operating Plans and the Cloggsville Alternative that NS submitted on November 25, 1997. SEA's evaluation also addressed alternatives that the City of Cleveland submitted with its comments on the Draft EIS and additional information that the City of Cleveland filed. SEA also identified possible additional alternatives to address the public's concerns, especially those regarding high train traffic volumes in the City of East Cleveland and on the east side of the City of Cleveland. Chapter 4, Section 4.19, "Community Evaluations," and the detailed analysis of these alternatives in Appendix N, "Community Evaluations," of this Final EIS describe these alternatives.

In addition to studying these routing alternatives, SEA developed comprehensive mitigation measures to address potential significant adverse environmental impacts of the alternative routes. SEA developed these potential mitigation measures based on the environmental analysis it conducted for the Draft EIS and the Final EIS, review of the public comments, and consideration of information SEA collected during more than 40 site visits to the Greater Cleveland Area and other communities potentially affected by the Revised Mitigation Proposal.

SEA's analysis of the potential environmental impacts of the Revised Mitigation Proposal is discussed in this Addendum. SEA has concluded that the Revised Mitigation Proposal substantially addresses concerns expressed by the Cities of Cleveland, East Cleveland, Ashtabula, and the communities west of Cleveland. Therefore, as discussed in Chapter 7, "Recommended Environmental Conditions," of this Final EIS, SEA recommends that if the Board approves the proposed Conrail Acquisition, it should include as a condition a requirement that NS implement its Revised Mitigation Proposal.

Revised Mitigation Proposal Description

Under the original NS Operating Plan, rail traffic would increase on the Ashtabula-to-Cleveland (Cloggsville) (N-075) and Cleveland (Cloggsville)-to-Vermilion (N-080) rail line segments of the NS Nickel Plate Line. Rail traffic would also increase on the Rochester, Pennsylvania-to-Youngstown, Ohio (N-095) and the Youngstown-to-Ashtabula(N-082) rail line segments. Table AD-1 at the end of this section indicates the projected numbers of total trains by segment under the Operating Plan and the Revised Mitigation Plan, as well as the changes. Figure AD-2 shows rail traffic for the Revised Mitigation Proposal and shows the main NS east-west route through the Greater Cleveland Area.

Under the Revised Mitigation Proposal, NS determined that with the alternative routings and connections afforded by the Cloggsville Connection (including the addition of a second rail connection at Vermilion), NS would be able to reroute 10.6 trains per day from the Nickel Plate Line east of Cleveland to a route composed of lines currently controlled by Conrail but operated by NS following the proposed Conrail Acquisition. Thus, instead of being routed from Rochester, Pennsylvania through Youngstown, Ohio to Ashtabula, Ohio and then to Cleveland on the Nickel Plate Line, these 10.6 trains would be routed from Rochester, Pennsylvania to Alliance, Ohio; to Cleveland on the Pittsburgh Line, which is currently controlled by Conrail;

TABLE AD-1
NS REVISED MITIGATION PROPOSAL CHANGES AND IMPACTS

Rail Line Segment				Number of Freight Trains						Change in Environmental Impacts							
					Original NS Operating Plan		Revised Mitigation Proposal		Differences Between Original NS Operating Plan and NS Revised Mitigation Proposal	Safety				Transportation			
ID Number	From	To	At-grade Crossings	Pre-Acq.	Post Acq.	Change	Post Acq.	Change		At-grade Crossing	Hazardous Materials Transport	Freight Rail	Pass. Rail	Passenger Rail	At-grade Crossing Delay	Air Quality	Noise
N-072	Vermilion	Bellevue	20	15.6	27.0	11.4	26	10.4	-1.0	None	None	None	N/A	N/A	None	None	None
N-074	Cleveland (Cloggsville)	Cleveland (CP 190)	0	2	4.2	2.2	13.8	11.8	9.6	N/A	New Key and Major Key	None	N/A	N/A	N/A	None	20 Add. Receptors
N-075	Ashtabula	Cleveland (Cloggsville)	61	13	36.6	23.6	26	13	-10.6	None	None	None	N/A	N/A	N/A	None	None
N-079	Oak Harbor	Bellevue	49	7 7	27.2	19.5	26.2	18.5	-1.0	None	New Major Key Route	None	N/A	N/A	None	None	2 Fewer Receptors
N-080	Cleveland (Cloggsville)	Vermilion	64	13.5	34.1	20.6	13.9	0.4	-20.2	None	No Longer Key/Major	N/A	N/A	N/A	N/A	N/A	N/A
N-081	White	Cleveland (CP 181) [b]	3	12.5	29.7	17.2	40.3	27.8	10.6	None	None	None	None	None	N/A	None	None
N-082	Youngstown	Ashtabula	39	11.7	23.8	12.1	13.2	1.5	-10.6	None	No Longer Key Route	N/A	N/A	N/A	N/A	N/A	N/A
N-084	Alliance	White	30	26.4	30.1	3.7	40.7	14.3	10.6	None	None	None	None	None	None	None	None
N-095	Rochester	Youngstown	10	12.6	17 7	5.1	7.1	-5.5	-10.6	N/A	No Longer Key Route	N/A	N/A	N/A	N/A	N/A	N/A
N-285	Rochester	Alliance	44	37.9	26.3	-11.6	36.9	-1	10.6	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A
N-293 a&b [a]	Cleveland (CP 181) [b]	Cleveland (CP 190)	0	48.4	42.9	-5.5	53.5	5.1	10.6	N/A	None	N/A	None	None	N/A	None	N/A
N-293c [a]	Cleveland (CP 190)	Berea	3	48.4	42.9	-5.5	63.1	14.7	20.2	None	None	Safety Impact	None	None	None	None	None

TABLE AD-1
NS REVISED MITIGATION PROPOSAL CHANGES AND IMPACTS

Rail Line Segment				Number of Freight Trains						Change in Environmental Impacts							
					Original NS Operating Plan		Revised Mitigation Proposal		Differences Between Original NS Operating Plan and NS Revised Mitigation Proposal	Safety				Transportation			
ID Number	From	To	At-grade Crossings	Pre-Acq.	Post Acq.	Change	Post Acq.	Change		At-grade Crossing	Hazardous Materials Transport	Freight Rail	Pass. Rail	Passenger Rail	At-grade Crossing Delay	Air Quality	Noise
N-293d[a]	Berea	Vermilion	30	48.4	34.9	-13.5	55.1	6.7	20.2	N/A	None	N/A	None	None	None	None	N/A
N-294	Vermilion	Oak Harbor	30	48.3	41.4	-6.9	42.4	-5.9	1.0	N/A	None	N/A	N/A	N/A	N/A	N/A	N/A

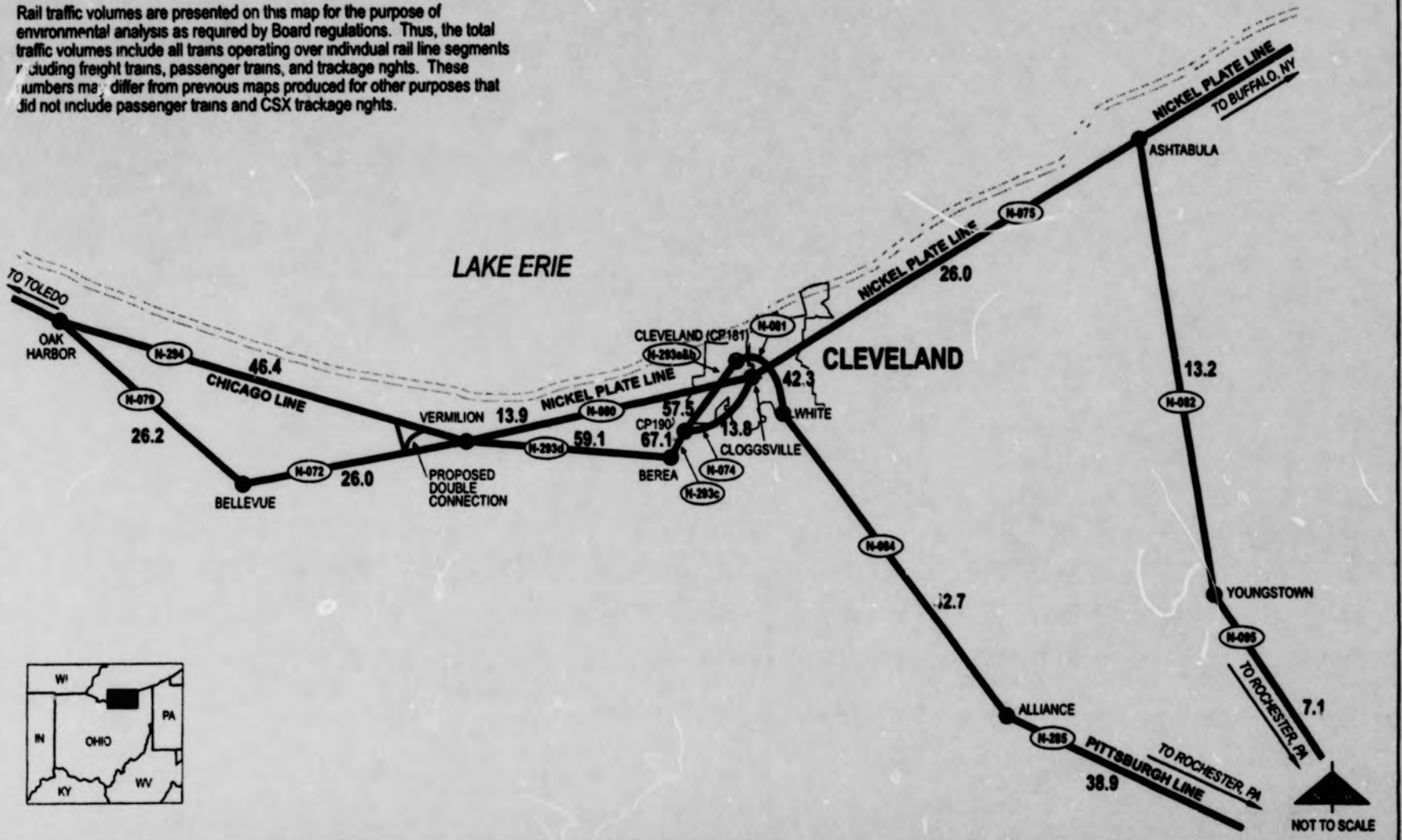
[a] Train traffic includes CSX trackage rights.

[b] CP 181 is referred to as CP Draw in the Final EIS.

N/A=not applicable; rail line segment does not meet or exceed the Board's thresholds for environmental analysis.

NOTE

Rail traffic volumes are presented on this map for the purpose of environmental analysis as required by Board regulations. Thus, the total traffic volumes include all trains operating over individual rail line segments including freight trains, passenger trains, and trackage rights. These numbers may differ from previous maps produced for other purposes that did not include passenger trains and CSX trackage rights.



ADDENDUM FIGURE AD-2

NORFOLK SOUTHERN REVISED MITIGATION PROPOSAL

NORFOLK SOUTHERN MITIGATION PROPOSAL FOR TRAIN FREQUENCIES IN GREATER CLEVELAND AND VICINITY

they would then go, via Berea, over the Cleveland-to-Vermilion rail line segment (N-293). With this rerouting over the Pittsburgh Line, NS would be able to reduce the number of trains running on the Nickel Plate Line between Ashtabula and Cleveland (Cloggsville) from the 36.6 trains per day proposed in the NS Operating Plan to 26.0 trains per day under the Revised Mitigation Proposal.

Additionally, the NS Revised Mitigation Proposal would further reduce the number of trains running on the Nickel Plate Line on the Cleveland (Cloggsville)-to-Vermilion rail line segment (N-080) through the Cleveland West Shore suburbs from 34.1 trains per day as proposed in the NS Operating Plan to 13.9 trains per day. This revised level would be 0.4 train per day higher than the Applicants' 1995 level (13.5) for the Cleveland (Cloggsville)-to-Vermilion rail line segment (N-080).

The alternative route between Rochester, Pennsylvania and Vermilion, Ohio (see Figure AD-2) would include the following rail line segments:

- Rochester, Pennsylvania-to-Alliance, Ohio (N-285).
- Alliance-to-White, Ohio (N-084).
- White-to-Cleveland (CP 181), Ohio (N-081).
- Cleveland (CP 181)-to-Cleveland (CP 190), Ohio (N-293a&b).[4]
- Cleveland (CP 190)-to-Berea, Ohio (N-293c).
- Berea-to-Vermilion, Ohio (N-293d).

The alternative route would also include the Cleveland (Cloggsville)-to-Cleveland(CP 190) rail line segment (N-074), which would be used to divert additional traffic from the Nickel Plate Line to the Conrail Main Line.

Table AD-1 presents the changes in freight train traffic and the resulting potential change in environmental impact, by rail line segment for the following conditions:

- Pre-Acquisition (1995 base number of freight trains, including CSX trackage rights but not passenger trains.)
- Original NS Operating Plan.
- Revised Mitigation Proposal.

[4] CP 181 is referenced as "CP Draw" in the discussions of the NS rerouting in Appendix N, "Community Evaluations," and Chapter 4, "Summary of Environmental Review" of this Final EIS. These are two interchangeable connecting endpoints, about 5,000 feet apart, in the downtown Cleveland area.

TABLE AD-2
REVISED MITIGATION PROPOSAL AFFECTED COMMUNITIES

SEGMENT ID	FROM	TO	COUNTY, STATE	COMMUNITY
N-072	Vermilion, OH	Bellevue, OH	Erie, OH	Vermilion
			Huron, OH	Bellevue
N-074	Cleveland (Cloggsville), OH	Cleveland (CP 190), OH	Cuyahoga, OH	Cleveland, Brooklyn, Linndale
N-075	Ashtabula, OH	Cleveland (Cloggsville), OH	Ashtabula, OH	Ashtabula, Geneva
			Cuyahoga, OH	Cleveland, Cleveland Heights, East Cleveland, Euclid
			Lake, OH	Willowick, Wickcliffe, Willoughby, Eastlake, Mentor, Painesville, Perry
N-079	Oak Harbor, OH	Bellevue, OH	Huron, OH	Bellevue
			Ottawa, OH	Oak Harbor
			Sandusky, OH	Fremont, Ballville, Clyde, Bellevue
N-080	Cleveland (Cloggsville), OH	Vermilion, OH	Cuyahoga, OH	Cleveland, Bay Village, Lakewood, Rocky River, Westlake
			Erie, OH	Vermilion
			Lorain, OH	Avon Lake, Avon, Sheffield Lake, Lorain, Amherst, Sheffield, Vermilion
N-081	CP White, OH	Cleveland (CP 181), OH	Cuyahoga, OH	Cleveland
N-082	Youngstown, OH	Ashtabula, OH	Mahoning, OH	Youngstown
			Ashtabula, OH	Ashtabula
			Trumbull, OH	Hubbard

TABLE AD-2
REVISED MITIGATION PROPOSAL AFFECTED COMMUNITIES

SEGMENT ID	FROM	TO	COUNTY, STATE	COMMUNITY
N-084	Alliance, OH	CP White, OH	Cuyahoga, OH	Cleveland, Bedford, Garfield Heights, Maple Heights, Oakwood, Walton Hills
			Portage, OH	Streetsboro, Ravenna
			Stark, OH	Alliance
			Summit, OH	Macedonia, Northfield, Hudson
N-095	Rochester, PA	Youngstown, OH	Mahoning, OH	Youngstown, Campbell, Struthers, Lowellville
			Beaver, PA	Koppel, Big Beaver, West Mayfield, Patterson Heights, Beaver Falls, New Brighton, Fallston, Rochester, Bridgewater, Monaca
			Lawrence, PA	New Castle, New Beaver, Wampum
N-285	Rochester, PA	Alliance, OH	Beaver, PA	Rochester, Beaver, Bridgewater, New Brighton, Fallston, West Mayfield, Darlington Township, Darlington
			Columbiana, OH	Unity, East Palestine, New Waterford, Fairfield, Columbiana, Salem, Leetonia, Franklin Square, Salem Heights, Butler
			Mahoning, OH	Perry, Goshen, Yankee Crossing, Beloit, Sebring, Maple Ridge, East Alliance
			Stark, OH	Alliance
N-293a&b	Cleveland (CP 181), OH	Cleveland (CP 190), OH	Cuyahoga, OH	Cleveland, Lakewood
N-293c	Cleveland (CP 190) OH	Berea, OH	Cuyahoga, OH	Cleveland, Berea City, Brook Park

TABLE AD-2
REVISED MITIGATION PROPOSAL AFFECTED COMMUNITIES

SEGMENT ID	FROM	TO	COUNTY, STATE	COMMUNITY
N-293d	Berea, OH	Vermilion, OH	Cuyahoga, OH	Berea, Olmsted Falls, Unincorporated Area
			Lorain, OH	Amherst, Vermilion, Elyria, North Ridgeville
			Erie, OH	Vermilion
N-294	Vermilion, OH	Oak Harbor, OH	Erie, OH	Vermilion, Volunteer Bay, Mitiwanga, Berlin, Ceylon, Huron, Perkins, Sandusky
			Ottawa, OH	Portage, Danbury, Gypsum, Port Clinton, Lacarne, Oak Harbor

* SEA identified subsections a through d of rail line segment 293 only for the purposes of this Final EIS.

NS described the improvements and new construction needed to implement the Cloggsville Alternative routing in its November 1997 proposal. These include:

- Upgrading the track on the Cleveland (Cloggsville)-to-Cleveland (CP 190) rail line segment (N-074) to NS mainline standards and adding a second main track on this rail line segment.
- Rehabilitating or replacing a bridge over West 65th Street, constructing an additional span over West 150th Street, and constructing a new bridge over Train Avenue in Cleveland.
- Constructing a new ramp at Cloggsville to reduce the maximum grade and improve horizontal alignment of track.
- Constructing a new interchange with the Flats Industrial Railroad near Cloggsville.
- Installing power switches and crossovers to fully signalize the rail line segment on the Cleveland (Cloggsville) -to- Cleveland (CP 190) rail line segment (N-074).
- Constructing a new double track route around the Rockport Yard in Cleveland.
- Reconfiguring existing trackage at Cleveland (CP 190), each end of the Rockport Yard, CP Short, and the Ford Assembly Yard.

- Constructing a second rail connection at Vermilion (to be accomplished by constructing a double connection instead of the single connection proposed in the original NS Operating Plan).

In addition to the improvements listed above, NS described other improvements associated with the Revised Mitigation Proposal that include:

- Constructing two-lane grade separations at Front Street in Berea on the CP 190-to-Berea rail line segment (N-293c) in conjunction with the adjacent CSX Short-to-Berea rail line segment (C-074), and at Fitch Road in Olmsted Falls on the Berea-to-Vermilion rail line segment (N-293d).

- Upgrading highway/rail at-grade crossing protection for the Nickel Plate Line on the Cleveland (Cloggsville)-to-Vermilion rail line segment (N-080).

The proposed grade separations in Berea and Olmsted Falls are voluntary, stand-alone projects to mitigate communities' concerns with highway/rail at-grade crossing safety and traffic delay. Neither grade separation is essential to the Revised Mitigation Proposal. Under the original NS Operating Plan, these crossings would not be grade-separated.

The Revised Mitigation Proposal also addresses highway/rail at-grade crossing safety for the Edgewater-Cudell neighborhood in Cleveland and West Shore suburbs of Lakewood, Rocky River, and Bay Village on the Cleveland (Cloggsville)-to-Vermilion rail line segment (N-080). These communities have raised particular concerns about this issue. Train traffic through these communities would increase by only 0.4 train per day from 1995 levels. NS proposed to support the upgrade of highway/rail at-grade crossing protection at 17 highway/rail at-grade crossings in those communities (consistent with state approval and the availability of public funding).

Potential Changes of the Revised Mitigation Proposal

The potential changes of the Revised Mitigation Proposal would affect the rail traffic routes and frequencies described in the original Operating Plan to reduce adverse environmental impacts on several communities in the Greater Cleveland Area. The Revised Mitigation Plan includes the following decreases in rail traffic:

- Traffic on the Nickel Plate Line on the Cleveland (Cloggsville)-to-Vermilion rail line segment (N-080) would decrease by 20.2 trains per day from the 34.1 trains per day, as originally proposed in NS's Operating Plan, affecting such communities as the Edgewater-Cudell and Detroit Shoreway neighborhoods in Cleveland and the West Shore suburbs of Bay Village, Rocky River, and Lakewood. Under the Revised Mitigation Proposal, traffic on this rail line segment would be 13.9 trains per day, or 0.4 train above the 1995 NS Operating Plan levels and 2.5 trains per day below NS's reported 1997 levels of 16.4 trains per day.

- Traffic on the Nickel Plate Line on the Ashtabula-to-Cleveland (Cloggsville) rail line segment (N-075) would decrease by 10.6 trains per day from the 36.6 trains per day, as originally proposed in the NS Operating Plan, and affect the University Circle, Little Italy, Fairfax, and Nottingham neighborhoods in Cleveland and the communities of East Cleveland, Ashtabula, and Euclid.

- Traffic on the Youngstown-to-Ashtabula rail line segment (N-082) would decrease by 10.6 trains per day from the 23.8 trains per day, as originally proposed in the NS Operating Plan, and affect both of the end-point cities.

SEA's Evaluation of the NS Revised Mitigation Proposal and Supplemental Environmental Report

At SEA's request, NS conducted analyses of potential environmental impacts for the Revised Mitigation Proposal. The Supplemental Environmental Report (Attachment A) presents the results of NS's analyses. SEA reviewed the Supplemental Environmental Report to determine whether the methodologies NS used for assessment of potential environmental impacts were consistent with the methodologies SEA used for this Final EIS. For selected issues, SEA conducted additional analyses to address discrepancies in the NS analyses or to verify the analyses according to the methodology established for this Final EIS. SEA reviewed and evaluated the analyses and findings presented in the Supplemental Environmental Report and presents the results of that evaluation and those additional analyses in this section. SEA also used information in the evaluation of routing alternatives in the Greater Cleveland Area as presented in Appendix N, "Community Evaluations," of this Final EIS.

SEA's analysis of the potential environmental effects of the Revised Mitigation Proposal is discussed in this Addendum. SEA has concluded that the Revised Mitigation Proposal substantially addresses concerns expressed by the Cities of Cleveland, East Cleveland, Ashtabula, and the communities west of Cleveland. Therefore, as discussed in Chapter 7, "Recommended Environmental Conditions," of this Final EIS, SEA recommends that if the Board approves the proposed Conrail Acquisition, it should include as a condition a requirement that NS implement its Revised Mitigation Proposal.

Two components of the Revised Mitigation Proposal contain rail line construction activities. These two construction projects are the Cloggsville Connection, which consists of construction of a new connector around Rockport Yard, and the Vermilion Double Connection, which involves construction of a double connector between two existing rail line segments. No new construction activities outside of the Greater Cleveland Area are associated with the Revised Mitigation Proposal. The following discussion of SEA's evaluation and additional analyses focuses on changes to rail traffic routing and frequencies described in the Revised Mitigation Proposal. Because Appendix N, "Community Evaluations," and Chapter 4, "Summary of Environmental Review," of this Final EIS evaluate and analyze the construction projects associated with the Revised Mitigation Proposal, this Addendum limits the discussion of

construction impacts to evaluating NS conclusions of impacts associated with constructions, verifying NS findings, and identifying discrepancies with SEA's analyses for this Final EIS.

Safety: Highway/Rail At-grade Crossings

SEA's evaluation indicates that NS conducted an analysis for the Supplemental Environmental Report in accordance with the methodology established for the Draft EIS and the Final EIS. In the Supplemental Environmental Report, NS did not identify highway/rail at-grade crossings that would meet or exceed the Board's criteria for significance for analysis of highway/rail at-grade crossing safety and traffic delay or warrant mitigation as a result of the changes to rail traffic routing and frequencies described in the Revised Mitigation Proposal. However, NS did provide this information in its May 5, 1998 letter, attached to this Addendum as Attachment B. NS determined that 16 rail line segments would experience changes in trains per day, and included accident data for crossings on those rail line segments.

SEA reviewed the FRA database for rail line segments in the NS report to determine whether any warning device had been upgraded between 1991 and 1995, the 5-year period of accident history considered in the EIS, or whether any warning devices had been upgraded after 1995. Based on this review, SEA determined that several crossings that appear to warrant mitigation in the NS report have, in fact, had warning device upgrades since 1995 and therefore do not require additional mitigation. Chapter 7, "Recommended Environmental Conditions," of the Final EIS presents the list of highway/rail at-grade crossings warranting mitigation.

SEA determined that four locations exceed the criteria of significance for highway/rail at-grade crossing safety. This Final EIS and the Revised Mitigation Proposal identify three of the four crossings warranting mitigation. They are:

- Rail line segment N-079, Sandusky County, CR292 (FRA ID #473673T).
- Rail line segment N-079, Sandusky County, Kilbourne Road (FRA ID #473668W).
- Rail line segment N-079, Sandusky County, Fangboner Road (FRA ID #476726P).

Chapter 7, "Recommended Environmental Conditions," discusses the specific mitigation recommended for these crossings. The fourth location is a new crossing not identified in the Final EIS but that would warrant mitigation.

- Rail line segment N-084, Stark County, Greenbower Road in Alliance (FRA ID # 503019H).

SEA visited this highway/rail at-grade crossing and observed that the recommended warning device upgrade is already in place. Therefore, SEA does not recommend additional mitigation.

Safety: Hazardous Materials Transport

Based on the changes to rail traffic routing and frequencies described in the Revised Mitigation Proposal and the analysis provided in the Supplemental Environmental Report, SEA has determined that the number of rail line segments that would meet SEA's criteria of significance for hazardous materials transport safety in the Final EIS would change, as presented in Table AD-1 of this Addendum. SEA determined that a potential change in the volume of hazardous materials transported would be significant and warrant mitigation if it satisfied either of the following criteria:

- **A rail line segment would become a key route.** For the purposes of this EIS, SEA defines a key route as a rail line segment that carries at least 10,000 carloads of hazardous materials per year.

- **A rail line segment would become a major key route.** For the purposes of this EIS, SEA defines a major key route as a rail line segment that would carry a projected annual increase of at least twice the volume of hazardous materials currently transported on the rail line segment and also would exceed 20,000 hazardous materials carloads per year.

Table AD-3 shows which rail line segments would be affected as a result of the changes to rail traffic routing and frequencies proposed by NS. The Cleveland (Cloggsville)-to-CP190 rail line segment (N-074) would become a new key route and a major key route, and the Oak Harbor-to-Bellevue rail line segment (N-079) would become a major key route. The Rochester, Pennsylvania-to-Youngstown, Ohio (N-095); Youngstown-to-Ashtabula (N-082); and Cleveland-to-Vermilion (N-080) rail line segments would no longer qualify as key routes or major key routes. SEA has modified its recommended mitigation for these routes in Chapter 7, "Recommended Environmental Conditions," of this Final EIS.

TABLE AD-3
HAZARDOUS MATERIALS TRANSPORT ON RAIL LINE SEGMENTS AFFECTED BY THE NS REVISED MITIGATION PROPOSAL

Rail Line Segment Number	From	To	Hazardous Materials Rail Cars Transported per Year			Change in Safety From Original Operating Plan to Revised Mitigation Proposal
			Pre-Acquisition	Post-Acquisition		
				Original NS Operating Plan	NS Revised Mitigation Proposal	
N-072	Vermilion, OH	Bellevue, OH	9,000	15,000	14,000	None
N-074	Cleveland, OH (Cloggsville)	Cleveland, OH (CP 190)	0	6,000	22,000	New Key Route/Major Key Route
N-075	Ashtabula, OH	Cleveland, OH (Cloggsville)	7,000	37,000	27,000	None

TABLE AD-3
HAZARDOUS MATERIALS TRANSPORT ON RAIL LINE SEGMENTS AFFECTED BY THE NS REVISED MITIGATION PROPOSAL

Rail Line Segment Number	From	To	Hazardous Materials Rail Cars Transported per Year			Change in Safety From Original Operating Plan to Revised Mitigation Proposal
			Pre-Acquisition	Post-Acquisition		
				Original NS Operating Plan	NS Revised Mitigation Proposal	
N-079	Oak Harbor, OH	Bellevue, OH	3,000	18,000	24,000	Major Key Route
N-080	Cleveland, OH	Vermilion, OH	9,000	32,000	6,000	No Longer a New Key Route/Major Key Route
N-081	White, OH	Cleveland, OH (CP 181)	12,000	34,000	44,000	None
N-082	Youngstown, OH	Ashtabula, OH	2,000	11,000	1,000	No Longer a New Key Route
N-084	Alliance, OH	White, OH	29,000	33,000	43,000	None
N-095	Rochester, PA	Youngstown, OH	2,000	11,000	1,000	No Longer a New Key Route
N-285	Rochester, PA	Alliance, OH	70,000	35,000	45,000	None
N-293 a&b [a]	Cleveland, OH (CP 181)	Cleveland, OH (CP 190)	84,000	46,000	56,000	None
N-293c [a]	Cleveland, OH (CP 190)	Berea, OH	84,000	46,000	72,000	None
N-293d	Berea, OH	Vermilion, OH	84,000	40,000	66,000	None
N-294	Vermilion, OH	Oak Harbor, OH	82,000	58,000	59,000	None

[a] Train traffic includes CSX trackage rights

Safety: Freight Rail Operations

The NS Supplemental Environmental Report does not specifically address freight rail safety issues. SEA conducted its own analysis of the changes to rail traffic routing and frequencies described in the Revised Mitigation Proposal. Based on this analysis, SEA identified one additional rail line segment, Cleveland (CP 190)-to-Berea (N-293c), that would exceed SEA's criteria of significance and warrant mitigation because it is a rail line segment that will experience an increase in traffic of 8 trains per day or greater and an accident rate interval of less than 100 years. Attachment C of this Addendum presents the results of SEA's analysis.

Safety: Passenger Rail Operations

NS's Supplemental Environmental Report does not specifically address passenger rail safety issues. SEA conducted its own analysis of the changes to rail traffic routing and frequencies described in the Revised Mitigation Proposal. SEA concluded that no change would occur in passenger rail service based on the information provided in the Supplemental Environmental Report. The results of the analysis appear in Attachment C of this Addendum.

Transportation: Passenger Rail Service

SEA reviewed changes to rail traffic routing and frequencies described in the Revised Mitigation Proposal. SEA concluded that no change would occur in passenger rail service based on the information provided in the Supplemental Environmental Report.

Transportation: Highway/Rail At-grade Crossing Delay

For the Supplemental Environmental Report, NS performed analyses of vehicle delay using two methods. One method (see Table 4 of Attachment B of this Addendum) was in general accordance with the methodology established for the Draft and the Final EIS. The second method (see Table 3 of Attachment B of this Addendum) was not adopted by SEA but does provide a useful comparison to SEA's methodology. However, SEA has not adopted the results because NS used train speeds that SEA determined did not reflect typical operating speeds through the crossings. The train speeds that NS used were generally higher than the train speeds that SEA used in the analyses for this Final EIS. As a result, NS did not identify crossings that would experience a significant increase in vehicle delay as a result of changes to rail traffic routing and frequencies described in the Revised Mitigation Proposal.

SEA conducted its own independent analysis and determined that one location would exceed the criteria of significance for vehicle delay at highway/rail at-grade crossings. This crossing—rail line segment N-079, Sandusky County, Kilbourne Road (FRA ID #473668W)—is also identified in this Final EIS.

SEA notes that the Revised Mitigation Proposal, when compared to the Operating Plan, would result in an increase of 1.0 train per day on the Oak Harbor-to-Bellevue rail line segment (N-079) (i.e., an increase of 18.5 trains per day versus 19.5 under the NS original Operating Plan.) Even though the train volumes over the highway/rail at-grade crossing slightly increased, this change has only a negligible effect on the delay analysis on Kilbourne Road. SEA notes that NS has executed a Negotiated Agreement with the City of Bellevue, Ohio, regarding local impacts of the proposed Conrail Acquisition. Therefore, SEA recommends that the Board require NS to abide by the terms of that agreement.

Emergency Vehicle Response Delay

NS's Supplemental Environmental Report does not specifically address emergency response vehicle delay. SEA analyzed the effects of the changes to rail traffic routing and frequencies described in the Revised Mitigation Proposal on emergency response services and reassessed the need for mitigation. The Revised Mitigation Proposal would change the impacts on emergency services in some communities.

Because the proposed rerouting would reduce train traffic in some communities where SEA recommended the Applicants provide, install, and maintain real-time train location monitoring systems, SEA analyzed the revised train traffic to determine the effects on potential emergency vehicle delay. The analysis indicated that because of the rerouting, two of the communities would no longer warrant the monitoring systems.

The City of Lakewood commented that an Acquisition-related increase in train traffic on the Vermilion-to-Clevelandrail line segment (N-080) would increase delays to emergency vehicles at highway/rail at-grade crossings with local streets. SEA initially concluded in this Final EIS that a real-time train location monitoring system would be warranted. With the rerouting, the increase in train traffic on the Vermilion-to-Cleveland rail line segment (N-080) would be only 0.4 trains per day and would not have a significant effect on emergency services. Therefore, SEA concluded that mitigation for emergency services in the City of Lakewood would not be warranted.

In Vermilion, Ohio, the Vermilion-to-Cleveland rail line segment (N-080) affects emergency services, as the southern portion of the community is on the opposite side of the tracks from most of the emergency service facilities. SEA's analysis indicated that impacts there warranted mitigation; but with the rerouting, the increase in train traffic on the Vermilion-to-Clevelandrail line segment (N-080) would not meet the Board's thresholds for environmental analysis. SEA concluded the rerouting would also reduce the increase on the Vermilion-to-Bellevue rail line segment (N-072), but it has less impact on emergency services because it does not run through the community. SEA found the rerouting would add to the increase in train traffic on the Vermilion-to-Berea rail line segment (N-293d), which runs through downtown Vermilion; but the addition would not meet or exceed the Board's thresholds for environmental analysis. In addition, several grade-separated crossings exist on the Berea-to-Vermilion (N-293d) rail line segment. SEA concluded that, as a result of these changes, rail line segments associated with Vermilion no longer warrant mitigation for emergency services.

Although the rerouting would change the impacts on emergency services in Ashtabula, Ohio, the change would not be sufficient to alter SEA's recommendation for a real-time train location monitoring system. Three NS rail line segments in Ashtabula—Youngstown-to-Ashtabula (N-082), Ashtabula-to-Cleveland(Cloggsville) (N-075), and Ashtabula-to-Buffalo (N-070)— met the Board's threshold for environmental analysis. The rerouting would reduce the Acquisition-related increase in train traffic on the NS Youngstown-to-Ashtabula rail line segment (N-082) so that it does not meet the Board's threshold for environmental analysis. The rerouting would

reduce the Acquisition-related increase on the NS Ashtabula-to-Cleveland (Cloggsville) rail line segment (N-075) so that the emergency vehicle delay would be less than described in this Final EIS, but it would not change the increase on the NS Ashtabula-to-Buffalo rail line segment (N-070). Because the latter two rail line segments have a greater effect on emergency services, SEA concluded that Ashtabula would continue to warrant mitigation for emergency services.

In this Final EIS, SEA recommended mitigation for emergency services in Berea and Oak Harbor, Ohio. The rerouting would affect train traffic in both communities. In Berea, the rerouting would create a larger Acquisition-related increase on the Cleveland (CP 190)-to-Berea (N-293c) and Berea-to-Vermilion (N-293d) rail line segments. In Oak Harbor, the rerouting would reduce the Acquisition-related increase in train traffic only slightly. SEA continues to recommend mitigation for emergency services in Berea and Oak Harbor.

Transportation: Roadway Systems

NS's Supplemental Environmental Report does not specifically address roadway system effects. SEA reviewed the Revised Mitigation Proposal to evaluate the effects of proposed changes to rail traffic routing and frequencies on roadway systems. SEA determined that all local shippers would retain access to rail service, although some shippers who are currently on mainline routes would be on secondary routes. Because rail access to passenger or freight traffic would not decrease, SEA has determined that no impact would occur on local, regional, or national transportation systems. As a result, SEA concluded that no mitigation is warranted.

Transportation: Navigation

The Supplemental Environmental Report does not specifically address navigation. SEA determined that higher levels of train traffic on these river-crossing rail line segments could create operational problems for the railroad if a river crossing became a "bottleneck" for rail traffic because NS must give full preference to river navigation and not cause water craft to queue near bridges when railroad crossings occur. SEA concluded that the proposed increase of 5.1 trains per day at the drawbridge over the Cuyahoga River on the Cleveland (CP 181)-to-Cleveland (CP 190) rail line segment (N-293a&b) would not cause additional constraints for river traffic.

Energy

After reviewing NS's Supplemental Environmental Report, SEA does not expect the quantities of energy resources or recyclable commodities transported to change substantially as a result of the NS Revised Mitigation Proposal for train traffic in the Greater Cleveland Area. Therefore, SEA did not find potential significant environmental impacts and does not recommend mitigation.

Air Quality

SEA reviewed the air quality information contained in NS's Supplemental Environmental Report. Table AD-4 shows SEA's estimated nitrogen oxides (NO_x) emissions increases above the 1995 baseline, by affected county, for NS's original Operating Plan and for NS's Revised Mitigation Proposal. SEA determined that Trumbull County would not exceed the Board's thresholds for environmental analysis under the Revised Mitigation Proposal, but it is included here to provide a comparison of emissions over equal geographic areas.

As shown in the table, NO_x emissions in Ashtabula, Lake, and Trumbull Counties would be approximately 200 to 330 tons per year lower under the Revised Mitigation Proposal than under the original Operating Plan. SEA's estimates indicate that NO_x emissions in Cuyahoga and Lorain counties would be approximately 290 and 150 tons per year higher, respectively, under the Revised Mitigation Proposal than under the original Operating Plan. SEA determined that NO_x emissions associated with other counties would vary slightly.

SEA's calculations indicate that the total NO_x emissions under the Revised Mitigation Proposal would be slightly lower than the total NO_x emissions increases under NS's original Operating Plan. Previously, SEA found that NO_x emissions primarily pose concern on a regional basis because NO_x is a precursor pollutant that can enhance ozone formation. Thus, SEA determined that the total emissions change over the region (northeastern Ohio) is more relevant than the local county-by-county changes.

However, under either the original Operating Plan or the Revised Mitigation Proposal, SEA concludes that the NO_x emissions increases would represent relatively small percentages in the affected region and that the increases would be too small to significantly affect attainment of the ozone National Ambient Air Quality Standards (NAAQS). Also, SEA determined that the local NO_x increases associated with the proposed Conrail Acquisition would be more than offset by the NO_x emission decreases associated with EPA's recent rule to establish emissions standards for new and rebuilt locomotives. Therefore, SEA concludes that the potential air quality impacts of both the original Operating Plan and the Revised Mitigation Proposal are insignificant in all affected areas..

TABLE AD-4
SUMMARY TABLE OF PROJECTED NO_X EMISSIONS INCREASES

County	Projected NO_x Emissions Increase (ton per year)	
	NS Original Operating Plan	NS' Revised Mitigation Proposal
Trumbull *	213.31	5.54
Ashtabula	601.89	270.06
Lake	556.53	322.71

TABLE AD-4
SUMMARY TABLE OF PROJECTED NO_x EMISSIONS INCREASES

County	Projected NO_x Emissions Increase (ton per year)	
	NS Original Operating Plan	NS' Revised Mitigation Proposal
Cuyahoga	787.45	1074.43
Lorain	648.01	792.59
Erie	-78.56	-65.62
Huron	762.53	760.50
Sandusky	210.77	185.26
Ottawa	-7.17	5.62
TOTAL	**3694.76**	**3351.09**

a NS's Revised Mitigation Proposal does not include a detailed analysis for Trumbull County because the Youngstown-to-Ashtabula rail line segment (N-082) would no longer meet or exceed the Board's thresholds for air quality analysis.

Noise

SEA reviewed and confirmed the noise information in the Supplemental Environmental Report and confirmed the findings, with the exception of the information for the Cleveland (Cloggsville)-to-Cleveland (CP190) rail line segment (N-074). NS's Supplemental Environmental Report states that the L_{dn} values for rail line segment N-074 would increase by 8.4 dBA, and the 70 dBA L_{dn} contour would be 65 feet from the rail line segment. Based on the revised number of trains per day data provided in the Supplemental Environmental Report, SEA's calculations confirm the 8.4 dBA increase, but SEA disagrees with the 65-foot distance. Apparently, NS used a Sound Exposure Level (SEL) value of approximately 98.4 dBA to calculate the 65-foot distance. SEA disagrees with the use of this SEL value and used an SEL value of 100 dBA to be consistent with the CSX noise modeling in the Draft EIS and the Final EIS. (The rationale for the use of the 100 dBA SEL value is presented in Appendix J, "Noise Analysis," of this Final EIS.) Using the 100 dBA SEL value, SEA calculated an 80-foot distance to the 70 dBA L_{dn} noise contour for the Cleveland (Cloggsville)-to-Cleveland (CP190) rail line segment (N-074) following the proposed Conrail Acquisition. The Supplemental Environmental Report states that no sensitive noise receptors are within 65 feet of the rail line segment, but SEA identified 20 receptors within 80 feet (that is, within the 70 dBA L_{dn} noise contour).

Using the revised train traffic data provided in the Supplemental Environmental Report, SEA calculated the distance of 119 feet to the 70 dBA L_{dn} noise contour for the Oak Harbor-to-Bellevue rail line segment (N-079). SEA used a value of 27.2 trains per day for the Final EIS noise analysis and 26.2 trains per day for the revised noise analysis for post-Acquisition conditions. SEA counted 68 receptors within 119 feet of the tracks (that is, the 70 dBA L_{dn}

contour). SEA had previously counted 70 receptors within 122 feet of the tracks (that is, the 70 dBA L_{dn} contour) for this Final EIS noise analysis.

In summary, SEA concluded that the number of receptors requiring mitigation decreased by 2 for the Oak Harbor-to-Bellevuerail line segment (N-079) but increased by 20 for the Cleveland (Cloggsville)-to-Cleveland (CP 190) rail line segment (N-074) as a result of the revised train frequency data. As a result, SEA recommends noise mitigation for the Cleveland (Cloggsville)-to-Cleveland (CP 190) rail line segment (N-074). The revised data did not change the noise mitigation requirements outside of the Greater Cleveland Area. The locations of receptors that would exceed 70 dBA L_{dn} and experience an increase of at least 5 dBA L_{dn} for rail line segments N-074 and N-079 are listed in Attachment D and shown in Attachment E of this addendum.

Cultural Resources

Chapter 4, Section 4.19, "Community Evaluations," and Appendix N, "Community Evaluations," of this Final EIS present detailed discussions of analysis results, impacts, and recommended mitigation for cultural resources. No additional construction activities outside of the Greater Cleveland Area are associated with the Revised Mitigation Proposal.

Cloggsville Connection Construction. The Supplemental Environmental Report identifies no cultural resources within the Area of Potential Effects of the Cloggsville Connection construction that are listed in or eligible for the National Register of Historic Places (NRHP). This is consistent with SEA's findings presented in Appendix N, "Community Evaluations," of the Final EIS.

Vermilion Double Connection Construction. The Supplemental Environmental Report states that no cultural resources associated with the originally proposed single Vermilion Connection are listed in or eligible for the NRHP. This is consistent with the findings presented by SEA in Appendix N, "Community Evaluations," of the Final EIS. On December 24, 1997, SEA received a letter from the Ohio State Historic Preservation Office (SHPO) concurring with SEA's conclusion that no historic properties exist on the site of the original single connection. Because access onto private property within the Area of Potential Effects for the newly proposed second connection is restricted, the NS cultural resource consultants were not able to complete a cultural resource assessment survey. However, on May 12-14, 1998, SEA conducted a cultural resources survey in the remaining Area of Potential Effects and identified no cultural resources that are listed in or eligible for the National Register of Historic Places (NHRP). Chapter 4, Section 4.19, "Community Evaluations," of this Final EIS provides a detailed description of the cultural resources evaluation for the Vermilion Double Connection. SEA determined that no additional construction or abandonment projects are associated with the Revised Mitigation Proposal, and impacts from changes to rail traffic routes or frequencies do not affect cultural resources.

Hazardous Waste Sites

Chapter 4, Section 4.19, "Community Evaluations," and Appendix N, "Community Evaluations," of this Final EIS present detailed discussions of analysis results, impacts, and recommended mitigation for hazardous waste sites. No additional construction activities outside of the Greater Cleveland Area are associated with the Revised Mitigation Proposal.

Cloggsville Connection Construction. The Supplemental Environmental Report presented the results of an Environmental Database Resources (EDR) database report and a Phase I environmental site assessment for the proposed Cloggsville Connection construction. These reports identified and included four Transportation, Storage, and Disposal Facilities; one Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) site; one Solid Waste Transfer Facility; seven Ohio hazardous waste sites; and five Resource Conservation and Recovery Act (RCRA) Corrective Action sites located within 1 mile of the proposed construction and realignment corridor. The EDR report identified 22 sites that could not be located on maps because the address information was inadequate. NS could not locate these sites. NS' Supplemental Environmental Report states that if any hazardous waste sites are identified during the proposed construction, they would be addressed in accordance with applicable Federal and state regulations.

During its site visit, SEA identified an aboveground storage tank on the eastern side of the Rockport Yard within the proposed area of construction for the Cloggsville Connection. However, SEA did not identify, nor did the reports reveal, any hazardous waste sites within the area of construction that would warrant specific mitigation. Therefore, SEA recommends the Board require no additional mitigation because existing Federal, state, and local regulations and NS's standard construction practices should adequately address the above ground storage tank removal as well as the assessment and remediation of any contaminated areas discovered during the construction.

Vermilion Double Connection Construction. NS conducted an EDR database search and a site survey for the proposed Vermilion Double Connection construction. The results of the search indicated that four sites are within 1 mile of the proposed construction; they could not be located on maps because the address information is inadequate. However, the site survey revealed that none of the four sites are within a ½-mile radius of the proposed construction. The Supplemental Environmental Report stated that the proposed Conrail Acquisition construction would not affect any hazardous waste sites. Therefore, SEA recommends the Board require no additional mitigation because existing Federal, state, and local regulations and NS standard construction practices should adequately address the assessment and remediation of any contaminated areas discovered during the construction.

Natural Resources

Chapter 4, Section 4.19, "Community Evaluations," and Appendix N, "Community Evaluations," of this Final EIS present detailed discussions of analysis results, impacts, and

recommended mitigation for natural resources. No additional construction activities outside of the Greater Cleveland Area are associated with the Revised Mitigation Proposal.

Cloggsville Connection Construction. Based on a review of the Supplemental Environmental Report, SEA determined that the methodology NS described was consistent with this Final EIS. SEA also reviewed the potential environmental impacts NS described and concurred with all of NS's conclusions except the discussion of surface water resources located within the project area at the NS Rockport Yard. NS stated that no surface water resources are located within the Rockport Yard vicinity. During its site visit, SEA determined that two perennial streams converge within the construction area and, prior to construction, NS must obtain appropriate permits for the stream crossings.

Vermilion Double Connection Construction. SEA reviewed the Supplemental Environmental Report and determined that the NS methodology was consistent with the natural resource analysis methods SEA used for the Final EIS. SEA verified the analysis of the Vermilion Double Connection and found the NS impact analysis to be consistent with its own. However, this area potentially contains habitat for the Federally listed endangered Indiana bat. Due to the presence of potential habitat, SEA recommends that NS coordinate with the U S Fish and Wildlife Service (USFWS) and the Ohio Department of Natural Resources to determine the potential presence of the endangered Indiana bat. See Chapter 7, "Recommended Environmental Conditions," of this Final EIS for final recommended mitigation for natural resources.

Land Use and Socioeconomics

Chapter 4, Section 4.19, "Community Evaluations," and Appendix N, "Community Evaluations," of this Final EIS present detailed discussions of analysis results, impacts, and recommended mitigation for land use and socioeconomics. No additional construction activities outside of the Greater Cleveland Area are associated with the Revised Mitigation Proposal.

Cloggsville Connection Construction. SEA has not determined whether this construction project is consistent with local land use plans. However, because this construction would only serve to enhance transportation activity along an existing corridor, SEA does not anticipate any inconsistencies with local land use plans.

Vermilion Double Connection Construction. The area of proposed construction is currently zoned light industrial and rural residential. The proposed activity is not within a designated coastal zone. SEA has determined that the proposed Vermilion Double Connection construction would not affect land use and socioeconomics.

Environmental Justice

SEA evaluated the NS Revised Mitigation Proposal that would likely address the environmental justice concerns in the cities of Cleveland, East Cleveland, Ashtabula, Berea, and Euclid, as well as West Shore suburbs of Cleveland. SEA conducted an environmental justice analysis for the

Revised Mitigation Proposal to determine whether, in the absence of mitigation, disproportionately high and adverse environmental impacts on minority and low-income populations would occur within the Areas of Potential Effect adjacent to the affected rail line segments. SEA used the refined methodology described in Chapter 4, "Summary of Environmental Analysis," and Appendix M, "Environmental Justice Methodology," of this Final EIS to address comments on the Draft EIS that generally stated that increased train traffic under the proposed Conrail Acquisition could affect low-income and minority populations disproportionately.

SEA determined that the Revised Mitigation Proposal would not have disproportionate effects on low-income and minority populations with respect to noise, highway/rail at-grade crossing safety, and traffic delay in the Greater Cleveland Area. However, SEA determined that the Revised Mitigation Proposal would have disproportionate hazardous materials transport effects in the Greater Cleveland Area. SEA concurs with NS's findings that the area surrounding the proposed rerouting contains a lower percentage of minority and low-income populations than does the Nickel Plate line from Cleveland (Cloggsville) to Vermilion (N-080). Census block groups in Cleveland with affected minority and low-income populations are located on the White-to-Cleveland(CP 181)(N-081) rail line segment. Census block groups in East Cleveland and Euclid with affected minority and low-income populations are located on the Nickel Plate Line, Ashtabula- to-Cleveland (Cloggsville)(N-075) rail line segment. The rail line segments outside of Cleveland that include disproportionate effects related to hazardous materials transport would remain (absent further mitigation) because the segments involved in the Revised Mitigation Proposal in those areas would experience only modest reductions in train traffic and hazardous materials transport.

SEA estimated that without mitigation approximately 95,000 minority and low-income persons would be disproportionately exposed to hazardous materials transport under the Revised Mitigation Proposal, compared with approximately 98,800 minority and low-income persons that would be disproportionately affected under the original NS Operating Plan.

SEA concluded that the Revised Mitigation Proposal provides modest reductions in the adverse impacts to the minority and low-income populations that would be disproportionately affected by hazardous materials transport impacts absent further mitigation.

Conclusion

NS prepared its Revised Mitigation Proposal, in part, based on comments submitted by the communities of the Greater Cleveland Area. SEA reviewed and verified the NS Supplemental Environmental Report and conducted additional analysis as needed. SEA determined that the Revised Mitigation Proposal would cause different environmental effects compared with the NS proposed Operating Plan, such as:

- Fewer rail line segments for which SEA recommends new key route or major key route mitigation.

- No emergency response mitigation in Lakewood and Vermilion, Ohio.
- Eighteen noise-sensitive receptors that warrant mitigation.
- One new rail line segment for which SEA recommends freight rail safety mitigation.
- A slightly smaller estimated environmental justice population (95,000 instead of 98,800) in Cuyahoga County, Ohio, potentially affected by the proposed Conrail Acquisition.

While the NS Revised Mitigation Proposal does not represent substantial changes (either positive or negative) from the NS proposed Operating Plan in the corridor from Rochester, Pennsylvania to Oak Harbor, Ohio, SEA noted a number of qualitative benefits to the proposal. For instance, SEA notes that the Revised Mitigation Proposal would reduce the number of exposed highway/rail at-grade crossings and improve overall safety. Under the original NS Operating Plan, traffic on six rail line segments with 236 highway/rail at-grade crossings would increase by 8 or more freight trains per day in the corridor from Rochester, Pennsylvania to Oak Harbor, Ohio. Under the Revised Mitigation Proposal, traffic on six rail line segments would increase by 8 or more freight trains per day, potentially affecting 105 highway/rail at-grade crossings that exist on these six rail line segments.

In addition, the Revised Mitigation Proposal addresses concerns from the Cities of Cleveland, East Cleveland, Ashtabula, and the communities west of Cleveland. For example, the Revised Mitigation Proposal reduces overall freight train traffic through Ashtabula and in the University Circle area of Cleveland by a projected 10.6 trains per day compared to the proposed number of trains in the NS Operating Plan. Similarly, the Revised Mitigation Proposal increased the proposed number of freight trains through the Cleveland suburbs of Lakewood, Bay Village, and Rocky River by 0.4 train per day compared to an increase of 20.6 trains per day as in the NS Operating Plan.

SEA recognizes that the overall freight train traffic through the Greater Cleveland Area remains high and that the Revised Mitigation Proposal would cause significant adverse environmental impacts for which SEA has recommended mitigation. However, SEA notes that the Revised Mitigation Proposal also represents a reasonable and feasible proposal by NS to address many of the concerns the Greater Cleveland Area raised. Therefore, as discussed in Chapter 7, "Recommended Environmental Conditions," of this Final EIS, SEA recommends that if the Board approves the proposed Conrail Acquisition, it should include as a condition a requirement that NS implement the Revised Mitigation Proposal.

AD.3.3 Alexandria, Indiana Rail Connection

This section describes additional analysis pertaining to the operational aspects of the Alexandria Connection, which is one of the Seven Separate Connections that the Board approved for construction in November 1997. Specifically, this section describes the new information about

operational changes, additional analysis, and potential significant adverse environmental impacts to highway/rail at-grade crossing delay associated with the Alexandria Connection.

Relationship to the Final EIS

On May 2, 1997, CSX and NS petitioned the Board for a waiver to allow the Applicants to file separate applications for early construction of seven rail connections (the Seven Separate Connections), prior to the Board's decision on the proposed Conrail Acquisition. After considering the railroads' waiver requests and the comments submitted by other interested parties, the Board granted the waiver petitions in Decision No. 9 in this proceeding on June 11, 1997. (See Appendix R, "All Relevant Board Decisions.") CSX and NS assumed the risk that the Application might be denied or they would not be able to operate over one or more of the new rail connections.

The Board ensured that there would be a full environmental review of each of the Seven Separate Connections. In a November 25, 1997 decision, the Board gave final approval, subject to certain environmental mitigation conditions, for physical construction of these seven projects. (See Decision for Sub. Nos. 1-7, November 25, 1997, in Appendix R, "All Relevant Board Decisions.") As noted, the Applicants may not begin rail line operations over the Seven Separate Connections until SEA completes its EIS process for the proposed Conrail Acquisition and the Board approves the proposed Conrail Acquisition with or without conditions, which may affect the referenced operations. The Alexandria Connection is one of the Seven Separate Connections for which the Board approved early construction.

SEA evaluated the potential environmental impacts of railroad operations over the Seven Separate Connections as a part of the analysis of rail line segments in this Final EIS. The analysis and potential impacts are described in Chapter 4, "Summary of Environmental Review," and Chapter 5, "Summary of Comments and Responses," of this Final EIS, and in Chapter 5 of the Draft EIS (sections vary by location of the rail connections).

Overview of the Proposed Rail Connection

The Alexandria Connection involves the construction, operation, and maintenance of a new rail connection between the intersection of the existing Conrail and NS rail lines (see Figure AD-3). Conrail currently owns and operates the north/south line that extends between Goshen and Anderson, Indiana—the Goshen-to-Alexandria (N-305) and Alexandria-to-Anderson (N-306) rail line segments—while NS owns and operates the east/west line that extends between Muncie and Lafayette, Indiana—the Alexandria-to-Muncie (N-040) and Lafayette Junction-to-Alexandria rail line segments (N-489). If the Board approves the proposed Conrail Acquisition, NS would acquire the Conrail rail lines through Alexandria. Table AD-5 presents information on the affected rail line segments.

TABLE AD-5
RAIL LINE SEGMENTS AFFECTED BY THE ALEXANDRIA CONNECTION

Segment ID	Segment Location	Owner		Trains per day[a]	
		Pre-Acq.	Post-Acq.	Pre-Acq.	Post-Acq.
N-305	Goshen to Alexandria	CR	NS	4.7	6.8
N-306	Alexandria to Anderson	CR	NS	4.3	0.0
N-040	Alexandria to Muncie	NS	NS	2.6	11.8
N-489	Lafayette Junction to Alexandria	NS	NS	3.0	4.8
NX04	Alexandria Connection	n/a	NS	n/a	6.8

[a] Slight variations in the total trains per day result from the methodology used to calculate train volume.

The NS Operating Plan indicates that this rail connection is necessary in the northeast quadrant of the intersection in order to develop a more efficient rail network if the Board approves the proposed Conrail Acquisition. NS intends to operate this rail connection immediately upon approval of the proposed Conrail Acquisition.

The number of trains on the Alexandria-to-Muncie rail line segment (N-040) would increase from 2.6 trains per day to 11.8 trains per day following the proposed Conrail Acquisition. This represents an increase of 9.2 trains per day, which exceeds the Board's threshold for environmental analysis. Accordingly, in the Draft EIS, SEA analyzed the highway/rail at-grade crossings on the Alexandria-to-Muncie rail line segment that have average daily traffic (ADT) volumes of 5,000 vehicles or more. Harrison Street and State Route 9 (SR9) in Madison County meet this criteria. Of the 11.8 trains per day on the Alexandria-to-Muncie rail line segment (N-040), 6.8 trains per day would use the new rail connection between the Alexandria-to-Muncie (N-040) and the Goshen-to-Alexandria (N-305) rail line segments.

For the analysis in the Draft EIS, SEA assumed that the new switch at the rail connection would be remote controlled. In its Environmental Assessment of October 1997, SEA calculated train speeds following the proposed Conrail Acquisition to be 10 mph for the 6.8 daily trains that would use the Alexandria Connection and 40 mph for the 4.8 daily trains that would travel east/west through the rail connection on the Alexandria-to-Muncie (N-040) and the Lafayette Junction-to-Alexandria (N-489) rail line segments. Prorating these values would result in an average overall speed of 20 mph over Harrison Street and SR9. Based on these train speeds, SEA determined that vehicles stopped at the Harrison Street and SR9 highway/rail at-grade crossings would experience an average increased delay per stopped vehicle of 30 seconds or more, thereby meeting SEA's criteria for significance. Accordingly, SEA recommended in the Draft EIS that NS consult with Alexandria to agree upon a plan to address this delay.

Changes Since the Board's Approval of the Alexandria Connection

In SEA's analysis of the Alexandria Connection, SEA assumed that the rail connection would be controlled remotely. This assumption was reasonable and consistent with other rail connection operations. On May 6, 1998, NS informed SEA that the switch at the rail connection would be manually operated instead. NS also informed SEA that their plans for voluntary mitigation include aligning the manual switching mechanism at the rail connection so that NS trains traveling from Goshen to Muncie over the proposed Alexandria Connection would have the right-of-way and would not have to stop to operate the switch manually. This would facilitate east/west to north/south train movement along the Alexandria Connection, but it would force through trains[5] traveling east/west from Lafayette to Muncie to slow and likely stop in order to manually operate the switch.

Since nearly all trains are operated without staffed cabooses, it would be necessary for crews on trains traveling from Muncie to Lafayette on the Alexandria-to-Muncie (N-040) and the Lafayette Junction-to-Alexandria (N-489) rail line segments to walk the length of the train and board the locomotive after operating the manual switch. Each train would be stopped for approximately 20 to 30 minutes, depending on train length, and potentially block the highway/rail at-grade crossings.

Consequently, severe vehicle delays would occur at the highway/rail at-grade crossings because east/west trains would stop to allow the train crew to perform the switching operation before and after the train passed through the rail connection. Although SEA assumed that NS would not block the highway/rail at-grade crossings at SR9 or Berry Street, trains stopping would still potentially block other crossings at Clark Avenue, Indiana Avenue, Washington Street, and Virginia Avenue, which have less traffic.

NS also informed SEA that trains using the Alexandria Connection would travel at 20 mph, an increase of 10 mph over the speeds analyzed in the Draft EIS. SEA evaluated the NS information and, based on switch operation, the rail connection radius and the rail connection design, SEA assumed a 20 mph speed for trains using the rail connection. SEA averaged the connecting train speed with its assumed speed for through trains of 10 mph (while they are moving) in this area to reach an average speed of 15 mph. The resultant average speed of 15 mph, which is slower than the speed used in the Draft EIS, would continue to cause a significant increase in delay per stopped vehicle.

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5 For the purposes of this analysis, a through train is one that does not use the connection.

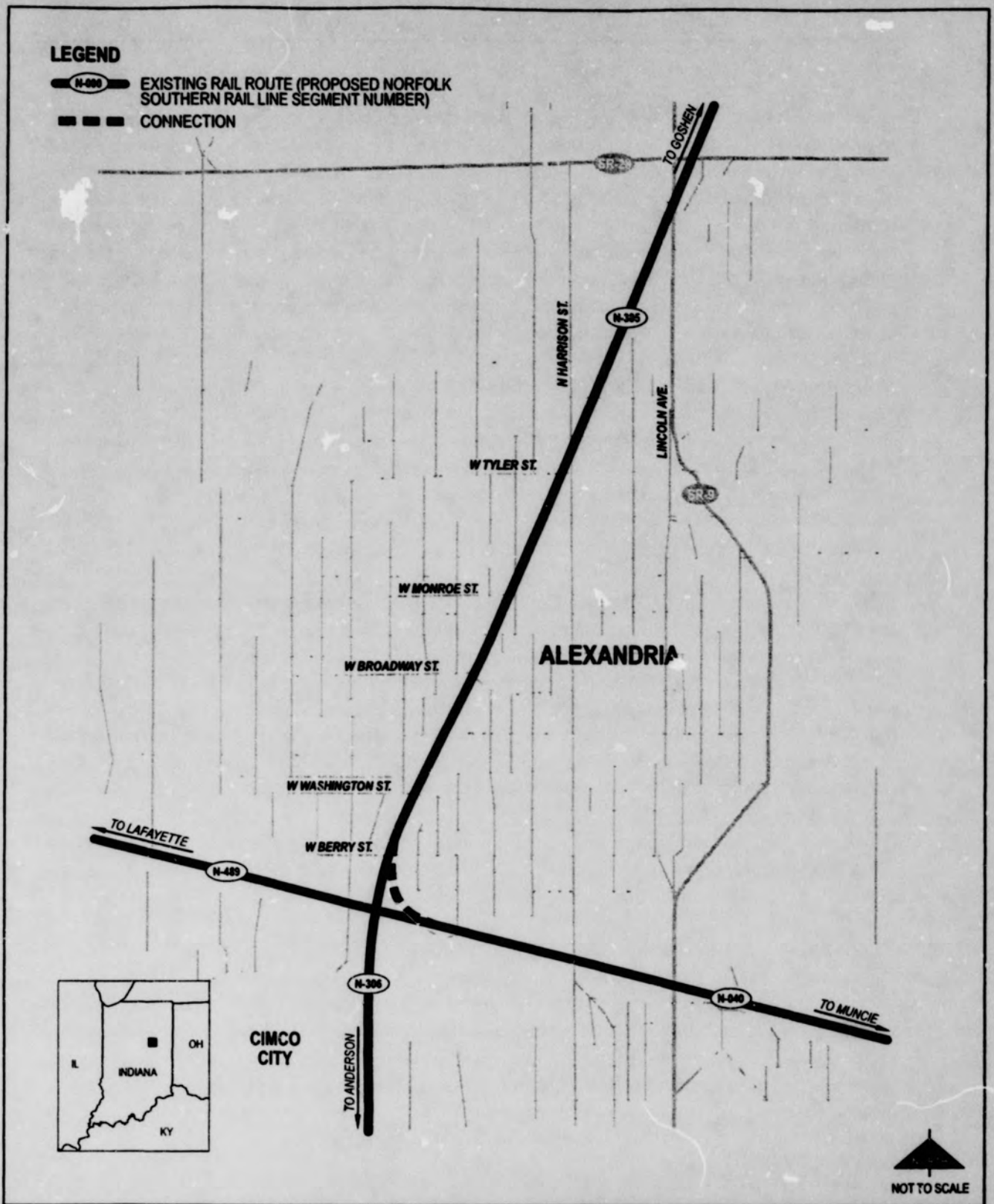

FIGURE AD-3
ALEXANDRIA AREA

Increasing speeds to 20 mph for trains using the rail connection would potentially affect the design requirements of the highway/rail at-grade crossing on the Goshen-to-Alexandria rail line segment (N-305) at Berry Street in Alexandria because the proposed higher train speed would require an increase in superelevation. Superelevation is the difference in the relative elevation of one rail compared to the other in order to accommodate the intended train speed along a restrictive curve. For a straight track, the superelevation is zero. For curves such as the one used to connect the two rail line segments in Alexandria, it would be necessary to raise one rail 3.5 inches above the other. This differential could affect the difference in elevation between the roadway surface and the track at the highway/rail at-grade crossing at the Berry Street rail connection to create a new "high profile" crossing.

Mitigation Strategy for Alexandria, Indiana

SEA evaluated the operation over the Alexandria Connection under two different scenarios: using a manual switch as NS proposed and using a remote-controlled switch. A remote-controlled switch at the rail connection would permit a 40 mph speed for the 4.8 trains per day that would travel east-west through the rail connection and a 20 mph speed for the 6.8 trains per day that would use the Alexandria Connection, for an overall average speed of 30 mph.

SEA calculated delay at the Harrison Street and SR9 highway/rail at-grade crossings based on the average train speeds of 15 mph with the manual switch and 30 mph with the SEA-recommended remotely controlled switch. SEA's analysis indicates that using the remotely controlled switch with the increased speed would mitigate the potential significant adverse impact for the traffic delay resulting from the proposed Conrail Acquisition. SEA determined that the increase in highway/rail at-grade crossing delay per stopped vehicle at both Harrison Street and SR9 following the proposed Conrail Acquisition would be less than 30 seconds compared with vehicle delay before the proposed Conrail Acquisition.

Attachment F of this Addendum shows the summary of the delay analyses results at these two crossings comparing manual switch operation and the remote-controlled switch at the rail connection.

SEA's Recommended Mitigation

Based on the additional delay that would result from use of a manual switch, SEA recommends that the Board require NS to install a remote-controlled switch at the Alexandria, Indiana, rail connection. The remote-controlled switch would accommodate train speeds of 20 mph for the trains using the rail connection as well as the maximum authorized speed, which is presumably 40 mph for trains traveling east/west through the rail connection. These increased speeds would mitigate potential impacts of vehicle delays for highway/rail at-grade crossings at Harrison Street and SR9.

To mitigate potential impacts on the highway/rail at-grade crossing at Berry Street as a result of differences in elevation differences, SEA recommends that NS work with the City of Alexandria

to create a design that accommodates the speed required by NS to minimize crossing delay and provide a smooth transition for vehicles onto Berry Street. (Chapter 7, "Final Recommended Conditions," of this Final EIS also includes these conditions SEA recommends.)

AD.4 ADDENDUM TO COMMENTS FILED BY CONGRESSMAN DENNIS J. KUCINICH

On April 24, 1998, Congressman Dennis J. Kucinich, representing the 10th Congressional District of Ohio, filed an addendum to his earlier comments on the Draft EIS. The purpose of the addendum, according to Congressman Kucinich, is to relay to SEA newly acquired information about Abbyshire Drive in the City of Berea, Ohio. Houses on Abbyshire Drive are located adjacent to the Berea-to-Greenwich rail line segment (C-061), as well as in proximity to the Bagley Road highway/rail at-grade crossing of that rail line segment. Congressman Kucinich requests that SEA investigate the effects that the proposed Acquisition would have on Abbyshire Drive including the effects of a highway/rail grade separation at that location.

SEA has analyzed the Berea-to-Greenwich rail line segment and has found that, following the proposed Conrail Acquisition, noise effects on homes along the northwest side of Abbyshire Drive would warrant noise mitigation at that location. That conclusion is included in the Final EIS and in Condition No. 11 of Chapter 7, "Recommended Environmental Conditions." SEA did not determine, however, that the Bagley Road highway/rail at-grade crossing warrants mitigation based on levels of traffic and predicted vehicular delay. Consequently, SEA did not analyze the potential impacts on neighboring communities of constructing a highway/rail grade separation at that location nor potential mitigation of impacts. If the Applicants and local and state authorities were to negotiate an agreement calling for a highway/rail grade separation at the Bagley Road crossing of rail line segment C-061, the involved parties would then analyze the potential environmental impacts and needed mitigation for the proposed project.

AD.5 SUMMARY OF COMMENTS AND RESPONSES

AD.5.1 Introduction

After issuance of the Draft EIS, SEA identified additional potential environmental impacts of the proposed Conrail Acquisition with respect to hazardous materials transportation safety, noise, and highway/rail at-grade crossing safety and traffic delay. SEA determined these additional impacts based in part on updated data that SEA received after it had issued the Draft EIS. Specifically:

- On November 24, 1997, CSX advised SEA that it would revise its calculation of hazardous materials transport because of an error in its methodology. On December 23, 1997 and February 20, 1998, CSX provided SEA with revised hazardous materials transport safety data.

- SEA identified sensitive receptors within noise contours using aerial photographs and more precise analytical tools, such as geographic information systems, that were previously not available.

SEA identified four rail line segments associated with potential significant hazardous materials transport safety impacts and eight rail line segments associated with potential significant noise impacts. As a result of its refined analysis, SEA also concluded that operations on 12 additional rail line segments could result in disproportionately high and adverse effects for certain minority and low-income communities as a result of hazardous materials transport safety, noise, and/or highway/rail at-grade crossing safety and traffic delay. See Attachment G of this Addendum for the full text of the Board's decision regarding these rail line segments and a list of the rail line segments.

Because SEA identified these rail line segments after it had issued the Draft EIS, SEA provided an additional 45-day comment period to allow potentially affected persons to review and respond to the new information. Board Decision No. 69 documented this decision and required that written comments be submitted to SEA by April 15, 1998.

SEA received and considered five comments in response to the new information documented in Board Decision No. 69. The section below includes the comment summaries and SEA's responses. Because SEA received only five comment documents on the new information by April 15, 1998, this section is organized by comment document rather than by environmental issue category (See Chapter 5 of this Final EIS, "Summary of Comments and Responses," for comments SEA received on the Draft EIS.) For reproductions of the comment letters in their entirety, see Attachment H to this Addendum.

In addition to these five comment letters, the Board received approximately 5,800 comment postcards as of May 11, 1998. The postcards express support for the alternate routing plan suggested by the City of Cleveland. These comments are part of the overall record of public comments that the Board will consider while making its final decision on the proposed Conrail Acquisition.

AD.5.2 Summary of Comments and Responses

New York

Summary of Comments. The New York State Department of Transportation (Department) and the Mayor of Dunkirk identified the Board's need to follow the implementing regulations of the National Environmental Policy Act of 1969 (NEPA), especially as they pertain to evaluating alternatives to the proposed action. The Department stated, "Neither SEA nor the Applicants have considered alternatives to certain planned, post-acquisition activities that threaten substantial harm to Dunkirk citizens." The commentors cited "the substantial projected increase in traffic" on the NS Buffalo-to-Ashtabula rail line segment (N-070) that runs through the City of Dunkirk as an issue of "grave concern."

The commentors noted potential effects related to the "safety of Dunkirk residents, by increasing risks to schoolchildren at railroad crossings; interfering with emergency vehicle response efforts; and increasing the risks of train-related hazardous materials accidents." The Mayor's Verified Statement indicated that "Each of these effects, in addition, will have a particular impact upon Dunkirk's minority and low-income populations." The Mayor provided specific examples of potential impacts to minority and low-income populations.

The Mayor's Verified Statement indicated that, "NS plans to add 13.2 trains per day—up from 12 trains per day—to its freight train traffic already traveling through the southern part of the City." The commentors are worried that "this added train traffic will compromise the safety of Dunkirk's schoolchildren" who frequently cross the railroad tracks and "daily rely on the open at-grade crossings to safely cross the railroad line." The Mayor provided some background information on a recent school closing in the area near the railroad tracks and explained the travel patterns of the many schoolchildren who must cross the tracks to get to school.

The commentors stated that "NS's increased freight train traffic will gravely impair the ability of emergency response vehicles to reach Dunkirk residents in need of help. More traffic on NS's at-grade line means more frequent blockage of Dunkirk's city streets while trains pass through 25 times each day. Such increased blockage translates into a greater likelihood that police, fire trucks, and ambulances will encounter trains en route to emergency situations or hospitals, and lose precious time waiting for the tracks to clear."

The Mayor's Verified Statement indicated that NS intends to increase hazardous materials transportation from 8,000 carloads per year to 26,000 carloads per year on the rail line segment through Dunkirk. The Mayor stated, "This dramatic increase creates a hazard for Dunkirk residents living near the NS line, in the form of increased risks of exposure to toxic substances emitted or spilled from the trains."

The Mayor pointed out that "NS seeks to close six at-grade crossings in the area....Dunkirk strongly opposes NS's proposed crossing closings in light of the diminished level of protection such closings will portend for children walking to school across the tracks...." He also said that "NS's plan to close a number of crossings along its line will further impede and critically compromise Dunkirk's emergency response operations."

As a potential method of eliminating the effects of the proposed train traffic increases, the Mayor of Dunkirk recommended an alternative. "Either voluntarily or by Board Order, the Applicants must modify their present Operating Plans, and move some or all current and prospective traffic from NS's at-grade line onto the existing, grade-separated Conrail track through downtown Dunkirk." The Mayor also explained the benefits of his alternative and requested that "the Board adopt the re-routing measure" as part of their mitigation. The Department supported the Mayor's requested rerouting measure.

Response. In the Dunkirk, New York area, SEA conducted additional analysis on the Conrail Buffalo-to-Ashtabula (C-690) and the Buffalo-to-Ashtabula (N-070) rail line segments. The two rail line segments run parallel south of Dunkirk, diverge through town, swing back near each other, then run parallel north of Dunkirk to Buffalo. The Conrail corridor has two mainline tracks, one north and one siding track through Dunkirk. Conrail currently operates over the Buffalo-to-Ashtabula rail line segment (C-690), which has many highway/rail grade separations. This rail line segment would convert to CSX ownership if the Board approves the proposed Conrail Acquisition. NS operates a single-track rail corridor, the Buffalo-to-Ashtabularail line segment (N-070), which has several highway/rail at-grade crossings. If the Board approves the proposed Conrail Acquisition, the Conrail Buffalo-to-Ashtabula rail line segment (C-690) would experience a decrease of 0.5 train per day to 49.6 trains per day, and the NS segment would experience an increase of 12.1 trains per day to 25.1 trains per day.

The Draft EIS noted nine highway/rail at-grade crossings with gated protection for the NS rail line segment through Dunkirk. A site visit by SEA confirmed that all NS highway/rail at-grade crossings on this rail line segment have gated protection. SEA's safety analysis indicated that the potential Acquisition-related increase in accident risk would be below the criteria of significance and would not warrant mitigation. In addition, SEA did not identify a significant effect on highway/rail at-grade crossing delay.

SEA determined that the blocked-crossing time caused by a train on the Buffalo-to-Ashtabula rail line segment (N-070), currently 1.9 minutes, would not change as a result of the proposed Conrail Acquisition. The average delay affecting emergency vehicles would be half this blocked crossing time—slightly less than 1 minute. The average number of trains on the NS rail line segment would increase from 13 to 25.1 trains per day as a result of the proposed Conrail Acquisition and increase the total blocked-crossing time from 24.5 minutes to 48.2 minutes per day.

In Dunkirk, fire stations are in the northern part of the community north of the Conrail rail line segment, in the southern part of the community south of the Buffalo-to-Ashtabula rail line segment (N-070), and between the NS and Conrail rail line segments. Each fire station provides fire and paramedic services. Ambulance service operates from a location between the two sets of tracks. The paramedic service provides initial response to medical emergencies, and the ambulance service primarily transports patients. The highway/rail crossings of the NS rail line segment N-070 at Brigham Road and Central Avenue are grade-separated.

Because of the location of emergency services both north and south of the Buffalo-to-Ashtabula rail line segment (N-070) and the presence of grade-separated highway/rail at-grade crossings, SEA concluded that mitigation for emergency services in Dunkirk would not be warranted.

In response to comments on the Draft EIS, SEA evaluated the construction of a NS bypass route through Dunkirk on the Conrail/CSX corridor. SEA evaluated locations for providing connections between the two existing rail line segments that would allow NS to relocate its operations adjacent to the existing Conrail/CSX corridor and eliminate at least nine highway/rail at-grade crossings. Although a connection appears feasible through an abandoned rail yard at Hyde Creek, significant issues relating to right-of-way and construction costs remain unresolved. Therefore, SEA does not recommend mitigation related to rerouting in Dunkirk.

SEA recognizes the commentors' concerns regarding the potential for NS to close some of the highway/rail at-grade crossings and the possible effects on highway/rail at-grade crossing safety—especially for schoolchildren—and emergency response vehicle operations. However, to SEA's knowledge, NS has not made plans to apply for any highway/rail at-grade crossing closures in Dunkirk. Additionally, the Department and the local highway agencies have jurisdiction and therefore are responsible for determining highway/rail at-grade crossing closures. Thus, if Dunkirk opposes any proposed crossing closures, the City has the authority to deny the proposed closure. The local schoolchildren would continue to have access to the existing protected highway/rail at-grade crossings.

NS has offered the following terms as voluntary mitigation for highway/rail at-grade crossing safety in Dunkirk: (1) NS will make Operation Lifesaver, a program designed to prevent accidents and save lives by educating school children and others, presentations available to Dunkirk schools and community organizations; (2) NS will continue to implement in the City of Dunkirk the NS Trespasser Abatement Program to reduce trespassing along the NS right-of-way. This program consists of a concentrated effort to inform and solicit the cooperation of public law enforcement, prosecutors, judges, and the media, as well as inform and educate the general public on the dangers of trespassing and of local trespassing laws. These efforts are then followed by enforcement by NS agents and public police counterparts.

The Buffalo-to-Ashtabularail line segment (N-070), which traverses the City of Dunkirk, did not meet the criteria for the presence of minority and low-income populations for SEA's environmental justice analysis for the Draft EIS. Appendix K, Section K.3, "Environmental Justice," of the Draft EIS presents the method used to determine the percentage of minority and low-income populations within the Area of Potential Effect.[6]

SEA conducted a refined environmental justice analysis for the Final EIS and determined that populations in the Area of Potential Effect in Chataugua County did not meet the criteria for disproportionality. Therefore, SEA determined that the proposed Conrail

6 The Area of Potential Effect is the geographic area surrounding a rail activity where an individual (or resource) or group of individuals (or resources) could likely experience adverse environmental effects

Acquisition would cause no environmental justice effects in the Dunkirk area. (See Appendix M, "Environmental Justice," of this Final EIS.)

This Final EIS confirms that NS plans to increase hazardous materials transport from 8,000 carloads per year to 26,000 carloads per year on the Buffalo-to-Ashtabula rail line segment (N-070) through Dunkirk. SEA used a value of 10,000 carloads per year for key route designation as a criterion of significance. If the increase before the proposed Conrail Acquisition were to exceed 20,000 carloads per year and result in a doubling of totals, then the route would be designated a major key route. Based on this criterion, SEA recommends that the Board require NS to implement new key route and major key route mitigation measures on the Buffalo-to-Ashtabula rail line segment (N-070) if the Board approves the proposed Conrail Acquisition. NS would then be required to adhere to American Association of Railroads (AAR) key route guidelines. Chapter 7, "Recommended Environmental Conditions," of this Final EIS, describes these guidelines. NS has committed to implement a hazardous materials safety program, as described herein under General Voluntary Mitigation, along key routes and/or routes where traffic will double and exceed 20,000 carloads per year.

North Carolina

Summary of Comments. A citizen of Madison County, North Carolina, posed three concerns: train accidents have occurred more frequently than SEA's estimated accident rate of one accident in 125 years; hazardous materials transported and spilled along the French Broad River could present cleanup problems and damage the drinking water supply; and accident-prone areas are inaccessible to emergency response equipment.

Response. SEA recognizes the commentor's concerns regarding hazardous materials transport, the potential for an accidental release to affect the drinking water supply, and emergency response resources and accessibility. The Asheville, North Carolina-to-Leadvale, Tennessee rail line segment (N-361) traverses Madison County, North Carolina. The NS Operating Plan projects a slight decrease in train traffic for this rail line segment, even though the number of hazardous materials carloads would increase. Because of the projected decrease in train traffic, SEA did not analyze the potential freight rail safety effects of the proposed Conrail Acquisition on this rail line segment.

SEA did evaluate hazardous materials transport, however, and determined that the Asheville, North Carolina-to-Leadvale, Tennessee rail line segment (N-361) would become a new key route because hazardous materials transport would increase from 8,000 to 11,000 carloads per year following the proposed Conrail Acquisition. SEA recommends that the Board require NS to implement key route mitigation measures as explained in Chapter 7, "Recommended Environmental Conditions," of this Final EIS. Further, SEA understands the commentor's concern regarding the potential effect of a hazardous materials release to water bodies that are used for potable water. SEA has evaluated this issue and presents a detailed discussion in Appendix L, "Natural

Resources Analysis," of this Final EIS. SEA believes the existing regulatory framework and recommended mitigation measures would minimize the risk of potential accidents resulting in a hazardous materials release. In addition, SEA encourages local communities to work with the Applicants to address concerns related to emergency response planning.

Ohio

Summary of Comments. ASHTA Chemicals, Inc. (ASHTA), of Ashtabula, Ohio, submitted comments concerning hazardous materials transport from Ashtabula, Ohio to Buffalo, New York, where shipments could then be switched and rerouted back through Ashtabula to destinations west. The commentor stated that "the mere identification of this route as having potentially significant environmental impacts requires heightened scrutiny by the Surface Transportation Board (the 'Board') relative to ASHTA's concerns and its request for relief."

Specifically, ASHTA requested the Board to "condition approval of the present transaction on the Applicants' implementation of an existing switch in the West Yard area of Ashtabula, Ohio, so that ASHTA and any other captive shippers of chemical product in the Ashtabula, Ohio area may ship their products more directly and hence more safely to ultimate southern and western destinations." ASHTA continued to say that "the Board should mitigate against the environmental impacts along the Ashtabula-to-Buffalorail line segment (N-070) by conditioning approval of the proposed transaction upon the implementation of a reciprocal switching arrangement or other competitive access remedy in the West Yard." It stated that switching would presumably allow captive shippers in the area to route hazardous materials product more directly to its southern and western destinations. This, in turn, will reduce the risk of hazardous material incidents.

ASHTA continued, "Since a decrease in the volume and density of hazardous material transport on N-070 will reduce the risk of hazardous material incidents, and reciprocal switching in the West Yard will allow direct routing of more than ⅓ of the hazardous material product shipped annually by ASHTA out of Ashtabula, the Board should be compelled to implement reciprocal switching as an [sic] mitigation measure." ASHTA added, "More importantly, direct routing has not been identified as a possible mitigation strategy in the portions of their [the Applicants'] Safety Integration Plans relating to hazardous materials."

ASHTA also objected to the deadline for comments on the additional analysis. ASHTA stated, "Comments on the Additional Environmental Information set forth in Decision No. 69 are due April 15, 1998, with the Board scheduled to issue the Final EIS on May 1, 1998. Three (3) weeks does not give the Board adequate time to review, analyze and ameliorate the environmental effects."

Response. SEA carefully considered all comments received from ASHTA Chemical, Inc , of Ashtabula, Ohio. However, many of ASHTA's concerns regard the merits of the proposed Conrail Acquisition. It is SEA's position that the appropriate means of addressing comments on the merits of the proposed Conrail Acquisition is the Board's review of the Application's economic and competitive merits. The Board will consider the economic and competitive issues collectively with SEA's environmental analysis before making its decision. SEA understands ASHTA's concern about the potential impacts of hazardous materials transport. Based on the Board's policy, SEA did not recommend mitigation of existing conditions, but it recommended mitigation in those cases where SEA determined, through its analysis, that SEA's significance criteria would be exceeded by proposed increases in hazardous materials transport resulting from the proposed Conrail Acquisition.

After the proposed Conrail Acquisition, CSX would own and operate the West Yard area of Ashtabula, and carloads of hazardous material products from ASHTA would be routed on CSX rail line segments. As proposed, the primary CSX rail line segment between Ashtabula, Ohio and Buffalo, New York would be rail line segment C-690, and between Ashtabula, Ohio and Cleveland, Ohio, the primary CSX rail line segment would be rail line segment C-060.

Following the proposed Conrail Acquisition, hazardous materials transport on the CSX Buffalo-to-Ashtabula rail line segment (C-690) would increase from 40,000 to 44,000 carloads per year, and hazardous materials transport on the Ashtabula-to-Cleveland rail line segment (C-060) would increase from 39,000 to 45,000 carloads per year, both of which already account for the ASHTA carloads. However, SEA notes that hazardous materials transport on NS's Ashtabula, Ohio-to-Buffalo, New York rail line segment (N-070) would increase from 8,000 to 26,000 carloads of per year, and transport on NS's Ashtabula-to-Clevelandrail line segment (N-075) would increase from 7,000 to 37,000 carloads per year. As a result of these increases, CSX rail line segments C-060 and C-690, which are already key routes, would not warrant key route mitigation; and the NS rail line segments N-070 and N-075 would become new key routes and major key routes. Chapter 7, " Recommended Environmental Conditions," of this Final EIS discusses mitigation measures for key routes and major key routes. SEA concludes that these mitigation measures would adequately address the potential safety risks associated with increased hazardous materials transport through these areas.

SEA's analysis indicates that hazardous materials transport would increase by 10 percent per year on the CSX Ashtabula-to-Cleveland rail line segment (C-690) and would increase by 225 percent per year on the NS Buffalo-to-Ashtabula rail line segment (N-070) as a result of the proposed Conrail Acquisition. SEA understands that ASHTA has requested that the Board, as a condition of approval, require the Applicants to establish "a reciprocal switching arrangement or other competitive access remedy at the West Yard in Ashtabula, Ohio." SEA notes that ASHTA has taken the position that, "Reciprocal switching predicated on mitigating environmental impacts should be ordered by this

Board given the findings of SEA." SEA understands that it would be physically possible to use the Ashtabula West Yard switch to transfer carloads of hazardous materials from ASHTA Chemical Company to NS following the proposed Conrail Acquisition. However, the use of this particular switch would require a reciprocal switching arrangement or an Industrial Interchange Agreement between NS and CSX. Since this is a merits issue, which the Board will consider separately, and since SEA's recommended mitigation would address the impacts of hazardous materials transport, SEA did not analyze the effects of a reciprocal switching agreement.

Finally, the issuance of the Final EIS is scheduled for late May 1998, not May 1, 1998 as ASHTA stated. Thus, SEA has had sufficient time to consider the comments received and "review, analyze and ameliorate the environmental effects."

Summary of Comments. The City of Conneaut, Ohio, expressed concern about the proposed increase in train traffic along NS's Ashtabula-to-Buffalorail line segment (N-070) and increased activities at NS Conneaut Yard. The City stated that the increased train traffic and additional rail car handling at the yard would disrupt and delay vehicular and pedestrian traffic and increase pollution and noise. In addition, the City stated that crossing delays would "impact deliveries, employee access, and the response of emergency vehicles to this industrial area" (near Conneaut Yard). Specifically, the City commented on rail crossings at Buffalo, Sandusky, Mill, and Chestnut Streets and noted their proximity to an elementary school and a high school.

The City stated that 70 percent of the population in the neighboring area has low or moderate income. The City feels that increased train traffic would "potentially diminish property values with substantial increase in pollution, noise and general distributions Noise Sensitive Receptors in this area which exceeds 65 dBA L_{dn} will increase by over 100% in areas around the Conneaut yard." The City commented that "the railroad, the Federal and State governments should provide funding to minimize the impacts to the low and moderate income neighborhoods." The City also expressed concern about the potential relocation of railroad jobs.

The City is concerned about the increased amount of hazardous materials that would be handled at Conneaut Yard. It stated that the public safety forces are not equipped to handle and do not have funding to handle an increased potential of hazardous materials incidents.

The City of Conneaut offered the following suggestions to minimize environmental impacts: construct a pedestrian overpass walkway at Mill Street over the NS tracks; construct a grade-separated crossing at Parrish Road for the NS and Conrail tracks; upgrade crossing signals at all highway/rail at-grade crossings; and make improvements at the Broad Street underpass.

Response. In the Conneaut, Ohio area, SEA conducted additional analysis of NS's Buffalo-to-Ashtabula (N-070) rail line segment. SEA's highway/rail at-grade crossing delay analysis considered crossings on rail line segments that met or exceeded the Board's thresholds for environmental analysis and were on roadways with an ADT of 5,000 or more vehicles. SEA concluded that the potential effect of increased train traffic

for highways with ADT volumes of less than 5,000 would be experienced by relatively few drivers and the additional vehicular delay would be minimal. SEA analyzed five highway/rail at-grade crossings in Ashtabula County, where Conneaut is located. SEA did not analyze highway/rail at-grade crossings at Buffalo, Sandusky, Mill, or Chestnut Streets because their ADT volumes were less than 5,000. Therefore, SEA concluded that the delay at these highway/rail at-grade crossings would be minimal.

SEA acknowledges that activities at Conneaut Yard affect the highway/rail at-grade crossings noted by the City, and that the projected increase in rail cars handled at the Conneaut Yard may further affect these highway/rail at-grade crossings. However, the Board does not regulate routine railroad operations (such as switching activities at rail yards), so the local government may wish to discuss these operational considerations with NS. SEA's highway/rail at-grade crossing safety analysis found that predicted increases in accident risk would be below SEA's criteria of significance for all highway/rail at-grade crossings in Ashtabula County.

SEA determined that the blocked-crossing time caused by a train on NS's Buffalo-to-Ashtabula rail line segment N-070, currently 4.2 minutes, would increase by 6 seconds to 4.3 minutes as a result of the proposed Conrail Acquisition. The average delays affecting emergency vehicles would be half of this blocked crossing time, which would be approximately 2.2 minutes. The average number of trains on the NS rail line segment would increase from 13 to 25.1 trains per day as a result of the proposed Conrail Acquisition, which would increase the total blocked crossing time from 54.5 minutes to 107.6 minutes per day.

In Conneaut, three fire stations are located south of the NS rail line segment. Each fire station provides fire and paramedic service. Ambulance service is provided from the westernmost fire station, located on Amboy Road. The paramedic service provides initial response to medical emergencies, and the ambulance service primarily transports patients. The police department patrols in three districts that are separated by the NS tracks.

The highway/rail crossing of the NS tracks at Broad Street on the east side of the community is grade-separated. Conneaut Yard is in the western portion of the community. Train speeds through Conneaut are limited to 20 miles per hour because of the yard, and trains entering or leaving the yard may travel more slowly. Switching activities may block the Parrish Road highway/rail at-grade crossing.

A Conrail track is located north of the NS track throughout the community. Access by emergency vehicles to areas west of Conneaut Yard, including businesses along Gore Road such as the Bailey Corporation, is difficult when trains block the Gore Road and Salisbury Road highway/rail at-grade crossings on the NS and Conrail tracks.

SEA recommends that the Board require NS to install and maintain a real-time train location monitoring system in Conneaut to assist emergency vehicles in avoiding delay when highway/rail at-grade crossings are blocked by trains. (See Chapter 7, "Recommended Environmental Conditions," of this Final EIS.) The blocked-crossing time caused by individual trains is long because of low train speeds, and blocked crossings affect emergency vehicle access to portions of the community.

Based on the City's comment, SEA reviewed the demographic data for the affected areas in Conneaut and determined that the percentage of minority and low-income populations was not sufficient to warrant environmental justice analysis. Appendix K, Section K.3, "Environmental Justice," of the Draft EIS presents the method used to determine the percentage of minority and low-income populations within the Area of Potential Effect.

SEA conducted a refined environmental justice analysis for this Final EIS and determined that populations in the Area of Potential Effect in Ashtabula County, Ohio, did not meet the criteria for disproportionality. Therefore, SEA determined that the proposed Conrail Acquisition would cause no environmental justice effects in the Conneaut area. (See Appendix M, "Environmental Justice," of this Final EIS.)

The City's concern about potential relocation of railroad employees' jobs is related to the economic and competitive merits of the proposed Conrail Acquisition. It is SEA's position that the appropriate means of addressing comments on the merits of the proposed Conrail acquisition is the Board's review of the Application's economic and competitive merits. The Board will consider the economic and competitive issues collectively with SEA's environmental analysis before making its decision.

With regard to the City's concern about hazardous materials transport, SEA recommends that the Board require NS to implement key route and major key route mitigation measures on rail line segment N-070. SEA also recommends that the Board require NS to implement hazardous materials mitigation for rail yards at the Conneaut Yard. (See Chapter 7, "Recommended Environmental Conditions," of this Final EIS.) In addition, SEA encourages the City to work with NS regarding hazardous materials and incident response planning.

Regarding the City's suggestions for mitigation, SEA has recommended mitigation measures, such as highway/rail at-grade crossing signal upgrades where its analysis indicated effects of the proposed Conrail Acquisition would be significant and warrant such measures. The condition of the Broad Street underpass is a pre-existing condition; SEA notes that it is not the Board's policy to recommend mitigation for pre-existing conditions. SEA encourages the City of Conneaut to meet with NS to address its concerns.

Summary of Comments. The State of Ohio Attorney General, the Ohio Rail Development Commission, and the Public Utilities Commission of Ohio (collectively Ohio) submitted comments concerning hazardous materials transport through Ohio and specifically along the following rail line segments: Cabin, Kentucky-to-Columbus, Ohio (C-230); Toledo-to-Deshler (C-065); Ashtabula, Ohio-to-Buffalo, New York (N-070); and Buffalo, New York-to-Ashtabula, Ohio (C-690). Specifically, Ohio wanted to know what hazardous materials were currently transported through the affected areas and what hazardous materials would be transported after the proposed Conrail Acquisition. Ohio also asked what would be done with the rail cars while they were in the communities so that communities may better respond to hazardous materials incidents.

In referring to the increased volume of hazardous materials that the Applicants would transport after the proposed Conrail Acquisition, Ohio stated, "The need to communicate effectively will require both CSX and NS to significantly increase their efforts to coordinate with local emergency response officials...they will also need more coordination for essential training in emergency responses to meet new challenges." The commentors continued, "Ohio urges the BOARD to require that NS and CSX invest sufficient effort and resources to adequately support local emergency response agencies in meeting substantially increased responsibility that will be caused by transaction related increases in movements of hazmat by rail." Further, the commentors stated, "Ohio urges the BOARD to retain jurisdiction over the area of transaction related hazmat accident preparedness to ensure that the applicants effectively deal with significant increases in hazmat carloadings."

Concerning the Buffalo-to-Ashtabula rail line segment (C-690), the commentors stated, "Ohio believes that a large part of the projected increase in the number of hazmat cars moving on this corridor results from the double handling of rail cars by CSX. ASHTA Chemicals of Ashtabula, OH, reports that CSX plans to move ASHTA hazmat chemical traffic bound for south and west of Ashtabula east to Buffalo first, and then back down through Ashtabula on its way to its final destination.... Ohio urges the SEA and BOARD to consider the wisdom of earlier requests of ASHTA and Ohio to allow ASHTA to pay for a reciprocal NS switch in the West Yard in Ashtabula so that NS could carry traffic directly south and west without any increase to the amount of hazmat carried in the Ashtabula to Buffalo corridor."

Ohio stated, "Joint Applicants should be required to expand current employee and public emergency response training and to report annually for the next five years regarding the frequency and nature of classes conducted and persons trained. In addition, the Joint Applicants should be required to fund equipment purchases, travel and tuition expenses for advanced training, and the costs associated with the development and implementation of community emergency response plans for public agency emergency responders which will be necessitated by substantial increases in hazardous materials traffic over specific routes."

Ohio also stated, "Adequate sanctions should be established for patterns of violations on both key and major key routes. As a condition to approval of the Acquisition, the Applicants should be subject to continuing Board oversight for a period of not less than five years and the Board

should urge development of specific monetary sanctions for patterns of violations of key route and major key route conditions established by the Board. Money raised by these payments should be set aside to fund community emergency response training and equipment grants."

Response. SEA carefully considered all comments received from the State of Ohio. SEA understands Ohio's concern about the potential impacts of hazardous materials transport. Based on the Board's policy, SEA does not recommend mitigation of existing conditions. SEA recommends mitigation when its analysis indicates that SEA's criteria of significance would be exceeded as a result of the proposed Conrail Acquisition.

If the Board approves the proposed Conrail Acquisition, hazardous materials transport on the Toledo-to-Deshlerrail line segment (C-065) would increase from zero to 14,000 carloads per year[7]; transport on the Cabin, Kentucky-to-Columbus, Ohio rail line segment (C-230) would increase from 4,000 to 10,000 carloads per year; transport on the Ashtabula-to-Buffalo (N-070) rail line segment would increase from 8,000 to 26,000 carloads of per year; and transport on the Buffalo, New York-to-Ashtabula,Ohio (C-690) rail line segment would increase from 40,000 to 44,000 carloads per year. As a result of these increases, rail line segments C-065 and C-230 would become new key routes; rail line segment N-070 would become a new key route and major key route; and rail line segment C-690, which is already a key route, would not warrant mitigation.

SEA recommends that the Board require CSX and NS to implement mitigation measures for rail line segments that would become new key routes and major key routes before they increase the number of rail cars carrying hazardous materials. Chapter 7, "Recommended Environmental Conditions," of this Final EIS discusses these mitigation measures, including expanded employee emergency response training and coordination with local emergency response organizations. SEA maintains that these mitigation measures would adequately address the potential safety risks associated with increased hazardous materials transport through these areas.

Rail car movement and hazardous materials transport are functions of rail operations that respond to market conditions and shippers' demands. SEA does not have the authority to require CSX and NS to pay for local emergency response equipment and/or training, but SEA encourages the communities to discuss local emergency response concerns with the Applicants to develop mutually agreeable solutions. Given the 50,000 generic chemicals and 80,000 trade name chemicals and mixtures used nationwide, it would be impractical to evaluate the types of incidents that could occur in or near each potentially affected community and prepare specific response plans for every scenario. Rather, SEA notes that planning, prevention, and response should focus on more manageable groups or classifications of chemicals.

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7 While Board Decision No 69 (Attachment G to this Addendum) notes 365 carloads per year, the correct number is actually zero carloads per year on this rail line segment

SEA points out that numerous laws and regulations set forth these requirements and responsibilities. Existing Federal Railroad Administration (FRA) regulations require CSX and NS to report hazardous material spills and FRA violations on all routes; these reports are available to the public.

By definition, all existing key routes comply with AAR Circular OT-55-B; however, legal sanctions do not exist for a railroad's failure to follow these voluntary operating practices. SEA understands that CSX and NS already generally exceed the requirements of AAR Circular OT-55-B. FRA and the United States Department of Transportation (DOT) have exclusive jurisdiction over rail safety, and the Board cannot mandate monetary sanctions for violations.

Appendix L, "Natural Resources Analysis," of this Final EIS provides general information on the procedures that the Applicants and Federal regulatory agencies have established to respond to hazardous materials releases. This appendix includes discussions of potential risks of hazardous materials spills for conditions both before and following the proposed Conrail Acquisition, types of materials transported, and potential effects of spilled materials. Appendix L also discusses the potential for spill events in rail yards and intermodal facilities, existing programs to minimize and avoid impacts, and the suggested Best Management Practices. SEA points out that existing procedures to limit the impacts of hazardous materials releases would remain in place following the proposed Conrail Acquisition.

SEA's analysis indicates that hazardous materials transport along the Buffalo-to-Ashtabula rail line segment (C-690) would increase by 10 percent after the proposed Conrail Acquisition. The commentors' concern about hazardous materials transport from the ASHTA Chemical Company on NS rail lines refers to an existing condition. SEA understands that after the proposed Conrail Acquisition, it will be physically possible to use the Ashtabula West Yard switch to transfer carloads of hazardous materials from ASHTA Chemical Company to NS. However, an Industrial Interchange Agreement between NS and CSX would be required. Since this is a merits issue, which the Board will consider separately, and since SEA's recommended mitigation would address the impacts of hazardous materials transport, SEA did not analyze the effects of a reciprocal switching agreement.

AD.6 CHANGES IN SEA'S RECOMMENDED ENVIRONMENTAL CONDITIONS

Chapter 7, "Recommended Environmental Conditions," of this Final EIS contains a complete list of all of SEA's recommended environmental conditions, including mitigation discussed in this Addendum. However, due to publication time constraints, SEA was not able to incorporate the evaluation and discussion of mitigation contained in this Addendum into either Chapter 4, "Summary of Environmental Review," or the Appendices of the Final EIS.

A review of NS's Supplemental Environmental Report revealed that changes to the technical analysis presented in Chapter 4, "Summary of Environmental Review," of this Final EIS would occur. SEA has concluded that the Revised Mitigation Proposal substantially addresses concerns expressed by the Cities of Cleveland, East Cleveland, Ashtabula, and the communities west of Cleveland. Therefore, SEA recommends that if the Board approves the proposed Conrail Acquisition, it should include as a condition a requirement that NS implement its Revised Mitigation Proposal. The technical areas affected by the Revised Mitigation Proposal are Noise; Safety: Hazardous Materials Transport; Safety: Highway/Rail At-grade Crossings; Transportation: Highway/Rail At-grade Crossing Delay; Transportation: Emergency Response, and Safety: Freight Rail Operations. SEA also recommends that the Board impose an additional condition on NS based on the new information NS provided about the Alexandria Connection. These changes have been reflected in Chapter 7, "Recommended Environmental Conditions," of this Final EIS. However, some of the technical analyses in Chapter 4, "Summary of Environmental Review," and the technical appendices do not reflect these changes.

Technical Areas

Noise

SEA considered mitigation where increased rail activity as a result of the proposed Conrail Acquisition potentially exposes noise-sensitive receptors to wayside noise levels of at least 70 dBA L_{dn} and increases in noise in levels of at least 5 dBA L_{dn}. In Chapter 4, "Summary of Environmental Review;" Section 4.12, "Noise;" and Appendix J, "Noise Analysis," that the Cleveland (Cloggsville)-to-CP 190 rail line segment (N-074) did not meet the wayside noise mitigation criteria. SEA determined that 70 noise-sensitive receptors on rail line segment N-079 would warrant mitigation. As a result of SEA's further analysis of the NS Revised Mitigation Proposal, the Cleveland (Cloggsville)-to-CP 190 rail line segment (N-074) would meet the wayside noise mitigation criteria and SEA identified 20 receptors. Additional analysis of the Oak Harbor-to-Bellevue rail line segment (N-079) identified a reduction of two receptors. Therefore, SEA recommends mitigation for a revised total of 88 receptors, identified in Attachment E of this Addendum. (See Chapter 7, "Recommended Environmental Conditions.")

Safety: Hazardous Materials Transport

SEA evaluated all rail line segments upon which the volume of hazardous materials transported would increase as a result of the proposed Conrail Acquisition. Chapter 4, "Summary of Environmental Review;" Section 4.3, "Safety: Hazardous Materials Transport;" and Appendix F, "Safety: Hazardous Materials Transport Analysis" of the Final EIS states that the Rochester-to-Youngstown (N-095), Youngstown-to-Ashtabula (N-082), and Cleveland (Cloggsville)-to-Vermilion (N-080) rail line segments warrant hazardous materials transport mitigation. However, as a result of SEA's further analysis of the NS Revised Mitigation Proposal, these three rail line segments would no longer warrant mitigation for hazardous materials transport.

Chapter 4, "Summary of Environmental Review;" Section 4.3, "Safety: Hazardous Materials Transport;" and Appendix F, "Safety: Hazardous Materials Transport Analysis," of the Final EIS did not identify the Cleveland (Cloggsville)-to-CP190 (N-074) and Oak Harbor-to-Bellevue(N-079) rail line segments as warranting hazardous materials transport mitigation. The traffic changes proposed in the NS Revised Mitigation Proposal warrant hazardous materials transport mitigation for rail line segments (N-074 and N-079). (See Chapter 7, "Recommended Environmental Conditions.")

Safety: Highway/Rail At-Grade Crossings

Chapter 4, "Summary of Environmental Review,"and Appendix E, "Safety: Highway/Rail At-grade Crossing Safety Analysis," of this Final EIS did not identify the Alliance-to-Whiterail line segment (N-084) as having highway/rail at-grade crossings impacts on safety. However, as a result of SEA's further analysis, SEA has concluded that the Greenbower Road highway/rail at-grade crossing in Alliance (Stark County) on the Cloggsville-to-CP 190 rail line segment (N-074) would warrant mitigation. SEA has conducted a site visit to this highway/rail at-grade crossing and has verified that the recommended warning device upgrade is already in place. Therefore, SEA does not recommend any additional mitigation.

Transportation: Emergency Response

Chapter 4, "Summary of Environmental Review;" Section 4.7, "Transportation: Highway/Rail At-grade Crossing Delay;" and Appendix G, "Transportation: Highway/Rail At-grade Crossing Delay Analysis," of this Final EIS identified the Vermilion-to-Bellevuerail line segment (N-072) and Cleveland (Cloggsville)-to-Vermilion rail line segment (N-080), through the communities of Lakewood and Vermilion as warranting emergency services mitigation. However, as a result of the train traffic changes proposed in the NS Revised Mitigation Proposal, these two rail line segments would no longer warrant emergency services mitigation.

Based on SEA's additional analysis in Conneaut, Ohio, SEA recommends that the Board require NS to install and maintain a real-time train location monitoring system in Conneaut to assist emergency vehicles in avoiding delays.

Transportation: Highway/Rail At-grade Crossing Delay

As a result of new information and SEA's further analysis, SEA recommends that the Board require NS to install a remote-controlled switch for the new rail connection at the Alexandria Connection and mitigate the elevation differential in the highway/rail at-grade crossing on Berry Street in Alexandria, Indiana. (See Chapter 7, "Recommended Environmental Conditions.")

Safety: Freight Rail Operations

Chapter 4, "Summary of Environmental Review;" Section 4.5, "Safety: Freight Rail Operations;" and Appendix E, "Safety: Highway/Rail At-Grade Crossing Safety Analysis," of this Final EIS

did not identify the CP 190-to-Berea rail line segment (N-293c) as warranting freight safety operations mitigation. SEA's further analysis determined that rail line segment N-293c warrants freight safety operations mitigation. (See Chapter 7, "Recommended Environmental Conditions.")

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ATTACHMENT A
NS SUPPLEMENTAL ENVIRONMENTAL REPORT: NORFOLK SOUTHERN MITIGATION PROPOSAL FOR TRAIN FREQUENCIES IN GREATER CLEVELAND AND VICINITY

On April 16, 1998, NS submitted, at SEA's request, a Supplemental Environmental Report, titled "NS Mitigation Proposal for Train Frequencies in Greater Cleveland and Vicinity." This report expands on the original NS proposed Cloggsville alternative by changing the routing of some NS traffic in the Greater Cleveland Area. The NS Revised Mitigation Proposal includes all of the connections and improvements that would have been required as part of the Cloggsville alternative; the double connection at Vermilion, Ohio; and upgrading the connection and rail lines on the Cleveland (Cloggsville)-to-CP 190 rail line segment (N-074). (For a discussion of the original NS proposed Cloggsville alternative, called "Alternative 2" in the Final EIS, see Chapter 4, "Summary of Environmental Review," and Appendix N, "Community Evaluations.")

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BEFORE THE
SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. 33388

CSX CORPORATION AND CSX TRANSPORTATION, INC.,
NORFOLK SOUTHERN CORPORATION AND
NORFOLK SOUTHERN RAILWAY COMPANY
----CONTROL AND OPERATING LEASES/AGREEMENTS---
CONRAIL INC. AND CONSOLIDATED RAIL CORPORATION

NORFOLK SOUTHERN CORPORATION AND
NORFOLK SOUTHERN RAILWAY COMPANY

NORFOLK SOUTHERN MITIGATION PROPOSAL FOR TRAIN FREQUENCIES IN GREATER CLEVELAND AND VICINITY

ENVIRONMENTAL REPORT

April 15, 1998

AD-A-3

PREFACE

This report, prepared by Norfolk Southern Corporation and Norfolk Southern Railway Co. (NS) at the request of the Section of Environmental Analysis (SEA) of the Surface Transportation Board, describes the environmental implications of NS' revised Cloggsville Connection mitigation proposal for train frequencies. This report is presented in four parts. Part I provides an overview of both the original NS Operating Plan proposal for routing rail traffic through Greater Cleveland and vicinity and the revised NS mitigation proposal for routing traffic through Greater Cleveland and vicinity. Part II provides an analysis of the environmental impacts associated with the revised NS mitigation proposal for Greater Cleveland and vicinity. Part III provides an analysis of the environmental impacts associated with the construction of the Cloggsville Connection (except for the double Vermilion connection). Part IV provides an analysis of the environmental impacts associated with the construction of a double connection at Vermilion.

The following presents the contents of this report.

PART I - OVERVIEW OF NORFOLK SOUTHERN'S REVISED CLOGGSVILLE CONNECTION MITIGATION PROPOSAL FOR TRAIN FREQUENCIES

PART II - OPERATIONS THROUGH GREATER CLEVELAND AND VICINITY UNDER THE REVISED CLOGGSVILLE CONNECTION MITIGATION PROPOSAL FOR TRAIN FREQUENCIES

PART III - CLOGGSVILLE CONNECTION CONSTRUCTION

PART IV - VERMILION DOUBLE CONNECTION CONSTRUCTION

PART I

OVERVIEW OF NORFOLK SOUTHERN'S REVISED CLOGGSVILLE CONNECTION MITIGATION PROPOSAL FOR TRAIN FREQUENCIES

PART I - OVERVIEW OF NORFOLK SOUTHERN'S REVISED CLOGGSVILLE CONNECTION MITIGATION PROPOSAL FOR TRAIN FREQUENCIES

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PART I - OVERVIEW OF NORFOLK SOUTHERN'S REVISED CLOGGSVILLE CONNECTION MITIGATION PROPOSAL FOR TRAIN FREQUENCIES

1.0 INTRODUCTION

In June 1997, Norfolk Southern Corporation and Norfolk Southern Railway Co. (NS) and CSX Corporation and CSX Transportation, Inc. (CSX) jointly submitted a Railroad Control Application (Application) to the Surface Transportation Board (STB) to acquire control of the assets of Conrail Inc. and Consolidated Rail Corporation (Conrail). The Application includes detailed Operating Plans showing how the railroads propose to operate after the Conrail Transaction (the "Transaction") is approved by STB, and a comprehensive report on the environmental implications of the Transaction. These documents address changes in rail traffic, new construction, abandonments and other activities that will occur on the rail lines and facilities to be controlled by NS and CSX as a result of the Transaction, which comprises a total of 44,000 miles of trackage in 24 states. In December 1997, STB's Section of Environmental Analysis (SEA) released its Draft Environmental Impact Statement (DEIS) on the Transaction.

The Transaction will improve the efficiency of rail transportation as a mode of moving freight in the Eastern United States. NS developed its Operating Plan with the goals of, among other things, making the most efficient use of the existing rail infrastructure (comprised of current NS lines and facilities and those Conrail lines and facilities to be operated by NS post-Transaction) and providing shippers with a reliable service plan, including routings and schedules post-Transaction, that would compete favorably with other rail carriers and with other modes of transportation (particularly trucks). Integrating Conrail lines and facilities into NS' system necessarily results in changes in traffic patterns and changes in utilization of rail lines and facilities. As detailed in the Applicants' Operating Plans and Environmental Report, and confirmed in the DEIS, the Transaction will result in increased rail traffic on a number of rail line segments and decreased rail traffic on a number of other rail line segments.

Among the communities that would see increased rail traffic as a result of the routing included in the original NS Operating Plan are several in Greater Cleveland and vicinity. This is largely due to Cleveland's location at the confluence of a number of existing major rail lines that link destinations in the Midwest and Northeast United States.

In November 1997, after extensive discussions with community representatives from the Cleveland area and the communities west of Cleveland, NS proposed an alternative plan for routing increased train traffic between Cloggsville in the City of Cleveland and Vermilion, Ohio, 37 miles west of Cleveland, known as the "Cloggsville Connection" mitigation proposal. NS developed the Cloggsville Connection mitigation proposal in response to the unique circumstances described by community representatives. Several of the communities along the Nickel Plate line between Cloggsville and Vermilion contain an unusual number and concentration of at-grade highway crossings with emergency response facilities, medical treatment centers and other public services separated from densely populated residential areas by the rail line. With Lake Erie immediately to the north, alternative routings for highway vehicles to these facilities are frequently limited. It was possible for NS to develop the Cloggsville Connection mitigation proposal because the lines and facilities to be operated by NS post-Transaction, if upgraded and enhanced, would permit operations over two distinct routes between Cloggsville and Vermilion.

Under the Cloggsville Connection mitigation plan as proposed in November 1997, traffic on the Nickel Plate line between Cloggsville and Vermilion would remain at its May 1997 level of 16.4 trains per day (an increase of 2.9 trains per day relative to 1995 base case levels). This would be accomplished by routing 17.7 of the Operating Plan's projected 20.6 trains per day of post-Transaction increased traffic between Cloggsville and Vermilion onto the Cloggsville Connection alternative route between Cloggsville and Vermilion. NS' Cloggsville Connection proposal was published in the DEIS as a potential mitigation alternative, for review and analysis by interested parties. (See DEIS Volume 3B, Chapter 5, Page OH-138.)

The DEIS directed NS to further consult with officials in various communities with potentially significant impacts resulting from the Transaction. Cleveland and its western suburbs were each identified in the DEIS as communities "with unique circumstances." NS was directed to continue to consult with government agencies, elected officials and interested parties regarding train traffic increases on the Nickel Plate line between Cloggsville and Vermilion and with regard to NS' proposed Cloggsville Connection mitigation proposal. NS was also directed to continue to consult with government agencies, elected officials and interested parties regarding, among other things, train traffic increases on the Nickel Plate line between Cloggsville and Ashtabula, east of Cleveland.

These consultations led NS to reevaluate whether by virtue of the Cloggsville Connection alternative, reductions could also be achieved in projected train traffic increases on the Nickel

Plate line east of Cloggsville. NS determined that with the alternative routings and connections afforded by the Cloggsville Connection project (including the second connection at Vermilion), NS would be able to reroute 10.6 trains per day from the Nickel Plate line east of Cleveland to a route composed of lines currently controlled by Conrail and to be operated by NS post-Transaction. Thus, instead of being routed from Rochester, PA through Youngstown, OH to Ashtabula, OH and thence to Cleveland on the Nickel Plate, these 10.6 trains would be routed from Rochester, PA to Alliance, OH, White, OH and thence to Cleveland on the Pittsburgh line, currently controlled by Conrail, then from Cleveland to Vermilion on the Conrail Main line (the former New York Central Lakeshore line) and the Conrail Chicago line. With this additional rerouting over the Pittsburgh line, NS would be able to reduce the number of trains running on the Nickel Plate line between Ashtabula and Cleveland (Cloggsville) from 36.6 to 26.0 trains per day. NS would also be able to further reduce the number of trains running on the Nickel Plate line from Cloggsville to Vermilion through the Western Cleveland Suburbs to only 13.9 trains per day, which would be just 0.4 trains per day higher than the base case 1995 level for this line segment (and would actually represent a reduction of 2.5 trains per day from May 1997 levels). NS' proposal to reduce train frequencies on the Nickel Plate line from Cloggsville to Vermilion to only 13.9 trains per day also represents a reduction from the current train frequency of 19 trains per day for the first quarter of 1998 (January to March 1998). The proposed rerouting over the Pittsburgh line in combination with NS' November 1997 Cloggsville Connection proposal is referred to in this report as the "revised Cloggsville Connection mitigation proposal" or the "revised mitigation proposal for train frequencies in Greater Cleveland and vicinity."

The Cloggsville Connection would include two modifications to existing track--the upgrading of existing rail lines and connections between Cloggsville and CP-190 to NS main line standards and the construction of a double connection at Vermilion. The construction and upgrades between Cloggsville and CP-190 would establish a new main line route between the NS Nickel Plate line and the existing Conrail Chicago line to be operated by NS post-Transaction. The Cloggsville Connection would allow trains moving from Cleveland to Vermilion to be routed off of the Nickel Plate line at Cleveland (Cloggsville) and rerouted to Vermilion via CP-190 and Berea. The double connection just west of Vermilion would allow trains coming off the Cloggsville Connection route at Vermilion to be routed back onto the Nickel Plate line at Vermilion. The Vermilion double connection would also provide routing flexibility between Vermilion and Bellevue (on NS' Nickel Plate line) and between Vermilion and Oak Harbor (on the existing Conrail Chicago line).

Thus, NS' revised mitigation proposal for train frequencies in Greater Cleveland and vicinity includes both construction and operation of the Cloggsville Connection route and an additional rerouting of 10.6 trains per day off of the Nickel Plate line and onto lines currently controlled by Conrail (the Pittsburgh line, the Conrail Mainline and the Chicago line) that would be controlled by NS post-Transaction.

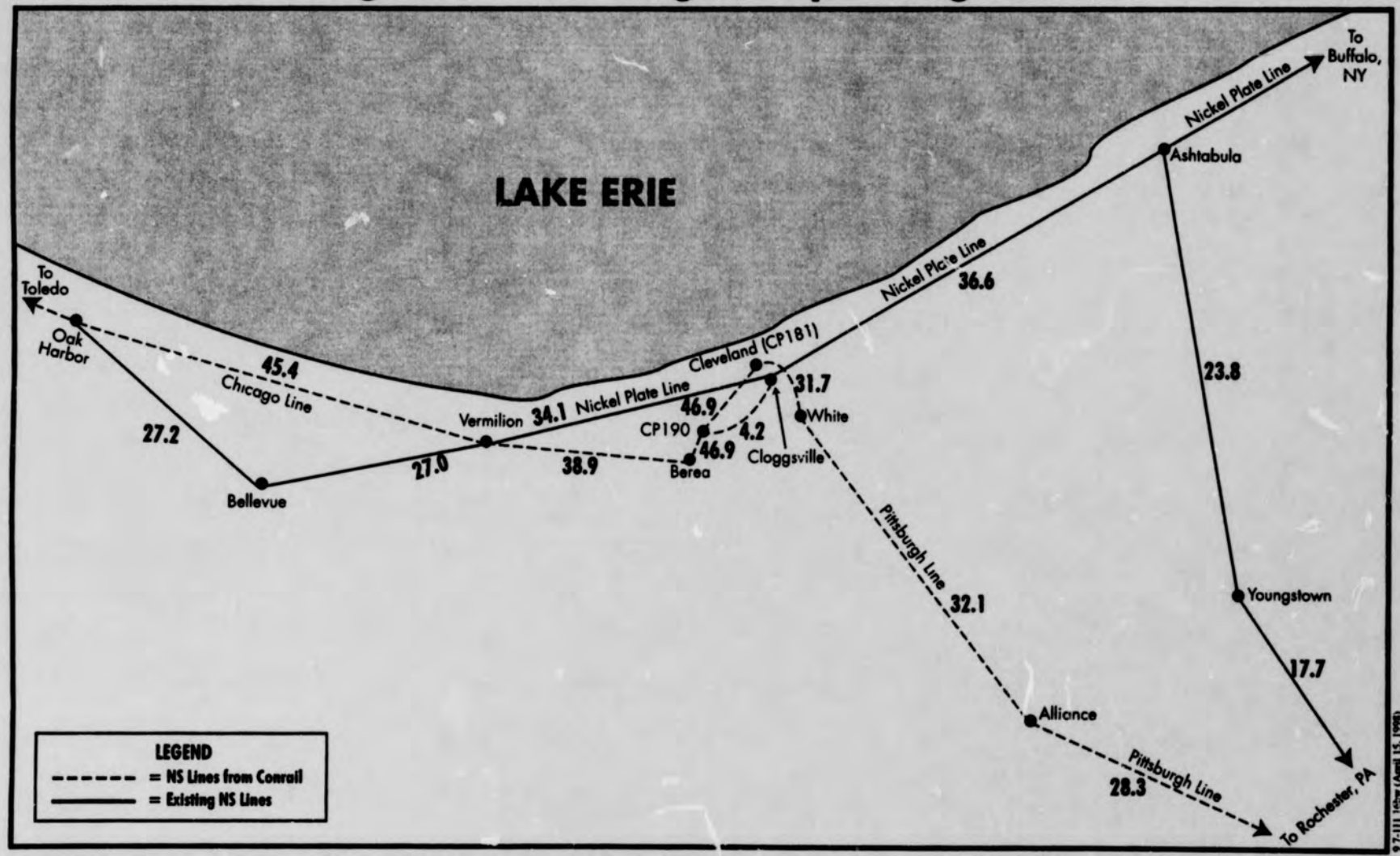
This report, prepared by NS at the request of the Section of Environmental Analysis (SEA), describes the environmental implications of NS' revised Cloggsville Connection mitigation proposal for train frequencies. This report is presented in four parts. This part (Part I) provides an overview of both the original NS Operating Plan proposal for routing rail traffic through Greater Cleveland and vicinity and the revised NS mitigation proposal for routing traffic through Greater Cleveland and vicinity. Part II provides an analysis of the environmental impacts associated with the revised NS mitigation proposal for routing traffic through Greater Cleveland and vicinity. Part III provides an analysis of the environmental impacts associated with the construction of the Cloggsville Connection (except for the double Vermilion connection). Part IV provides an analysis of the environmental impacts associated with the construction of a double connection at Vermilion.

2.0 THE ORIGINAL NS OPERATING PLAN IN GREATER CLEVELAND AND VICINITY

The original Operating Plan called for NS to utilize two principal routes for east-west traffic through Cleveland. One of these is NS' existing Nickel Plate line, and the other is the existing Conrail high-speed route, comprised of the Pittsburgh Line, the Conrail Main line (the former New York Central Lakeshore line) and the Conrail Chicago line. Under the original Operating Plan, increased post-Transaction NS east-west train traffic through the Cleveland area would have been largely routed over the Nickel Plate line. These projected traffic increases resulted both from increased utilization of the Southern Tier line in New York for traffic moving between New York/New Jersey and Chicago and the Midwest and from increased NS traffic moving between Pittsburgh and Youngstown and Chicago and the Midwest. The latter traffic included traffic moving between Rochester, PA and Youngstown and Bellevue, OH, some of which would under the original NS Operating Plan be routed on the existing Conrail track from Rochester to Youngstown to Ashtabula, then routed through the Cleveland area on the Nickel Plate line in order to access Bellevue and points west. NS' original Operating Plan was centered on efficient use of the existing main line rail infrastructure to provide safe transport of rail freight from day one on the Conrail Transaction. In Greater Cleveland and vicinity, this meant increasing train traffic on NS' Nickel Plate main line. The Nickel Plate line is an efficient, safe and long standing route for rail freight transport through Greater Cleveland and vicinity.

Under the original NS Operating Plan, post-Transaction traffic on the Nickel Plate line between Ashtabula and Cleveland (Cloggsville) was projected to be 36.6 trains per day, an increase of 23.6 trains per day over 1995 base case levels, and post-Transaction traffic on the Nickel Plate line between Cleveland (Cloggsville) and Vermilion was projected to be 34.1 trains per day, an increase of 20.6 trains per day over 1995 base case levels. At the same time, the original NS Operating Plan projected decreases in traffic post-Transaction on the existing Conrail Mainline between Cleveland (CP-181)and Berea and on the existing Conrail Chicago line between Berea and Vermilion. Projected freight train frequencies based on the original NS Operating Plan over lines in Greater Cleveland and vicinity that would be operated by NS post-Transaction are shown in the map in Figure I-1 and Figure I-2 below.

Figure I-1. NS Original Operating Plan



NOTE: Rail traffic volumes are presented on this map for the purpose of environmental analysis as required by STB regulations. Thus, the total rail traffic volumes include all trains operating over individual line segments including freight trains, passenger trains and trackage rights. These numbers may differ from previous maps produced for other purposes that did not include passenger trains and CSX trackage rights.

Figure I-2. NS Original Operating Plan

Segment	Passenger Trains	Freight Trains per Day			Million Gross Tons	
		Pre	Post	Change	Pre	Post
Rochester to Youngstown	0.0	12.6	17.7	5.1	31.8	37.1
Youngstown to Ashtabula*	0.0	11.7	23.8	12.1	31.0	54.5
Ashtabula to Cleveland (Cloggsville)	0.0	13.0	36.6	23.6	19.9	62.4
Cleveland (Cloggsville) to Vermilion	0.0	13.5	34.1	20.6	25.5	63.8
Rochester to Alliance	2.0	37.9	26.3	-11.6	82.3	58.5
Alliance to White	2.0	26.4	30.1	3.7	57.5	60.3
White To Cleveland (CP-181)	2.0	12.5	29.7	17.2	25.9	59.9
Cleveland (CP-181) to CP-190**	4 0	48 4	42.9	-5.5	100.8	84.1
CP-190 to Berea	4.0	48.4	42.9	-5.5	100.8	84.1
Cleveland (Cloggsville) to CP-190	0 0	2.0	4.2	2.2	0 7	11.5
Berea to Vermilion	4.0	48 4	34.9	-13.5	100.8	70.2
Vermilion to Bellevue	0.0	15.6	27.0	11.4	30.6	50.1
Bellevue to Oak Harbor	0.0	7.7	27.2	19.5	17 2	49.0
Vermilion to Oak Harbor	4 0	48.3	41.4	-6.9	100.3	82.3
Vermilion Connection west of Coen Road	0 0	0	7	7	0	12.9
Vermilion Connection east of Coen Road	0 0	n/a	n/a	n/a	n/a	n/a

* Post numbers include 7 CSX trains per day and 19.0 MGT.

** Post numbers include 10 CSX trains per day and 14.6 MGT.

*** Post numbers include 2 CSX trains per day and 0.7 MGT.

n/a = not applicable

3.0 NS' REVISED MITIGATION PROPOSAL FOR TRAIN FREQUENCIES IN GREATER CLEVELAND AND VICINITY

3.1 Train Routing and Frequencies

As discussed above, the key elements of NS' revised mitigation proposal are (1) construction and operation of the Cloggsville Connection (as described in the proposal submitted by NS in November 1997), with associated rerouting of trains between Cloggsville and Vermilion from the Nickel Plate to an upgraded line between Cloggsville and CP-190 and thence to Berea and then on to Vermilion via existing Conrail lines, and (2) rerouting of 10.6 trains per day between Rochester and Vermilion from the original NS Operating Plan routing via Ashtabula and the Nickel Plate line through Cleveland to a routing over the existing high-speed Conrail lines through Cleveland (via the Conrail Pittsburgh line, the Conrail Main line and thence from Berea to Vermilion over the Conrail Chicago line).

The most significant beneficial affects of the revised Cloggsville Connection mitigation proposal on train frequencies in Greater Cleveland and vicinity are the following:

- A reduction of 20.2 trains per day (relative to the original NS Operating Plan) on the Nickel Plate line from Cleveland (Cloggsville) to Vermilion, including the Edgewater-Cudell, Ohio City and Detroit Shoreway neighborhoods in Cleveland, and the West Shore suburbs of Bay Village, Rocky River and Lakewood. Rail traffic on this segment would be only 13.9 trains per day, just 0.4 trains above 1995 base case levels and well below current levels. (In the first quarter of 1998, train frequency on this segment was 19 trains per day.)

- A reduction of 10.6 trains per day (relative to the original NS Operating Plan) on the Nickel Plate line from Ashtabula to Cleveland (Cloggsville), including the University Circle, Little Italy, Fairfax and Nottingham neighborhoods in Cleveland, and the communities of East Cleveland and Euclid. Rail traffic on this segment would be 26.0 trains per day, 13.0 trains above 1995 base case levels.

- A reduction of 10.6 trains per day (relative to the original NS Operating Plan) on the Youngstown to Ashtabula rail line segment, which ameliorates potential impacts on this segment identified in the DEIS.

There are, of course, rail line segments in Greater Cleveland and vicinity on which train traffic would increase as a result of this proposal. The most notable increases would be on the existing Conrail lines between Rochester, PA and Vermilion through Cleveland. However, as discussed in this report, the mitigation proposal for train frequencies in Greater Cleveland and vicinity largely relocates most of the increases in traffic to main lines through corridors with high concentrations of industry and fewer residential areas.

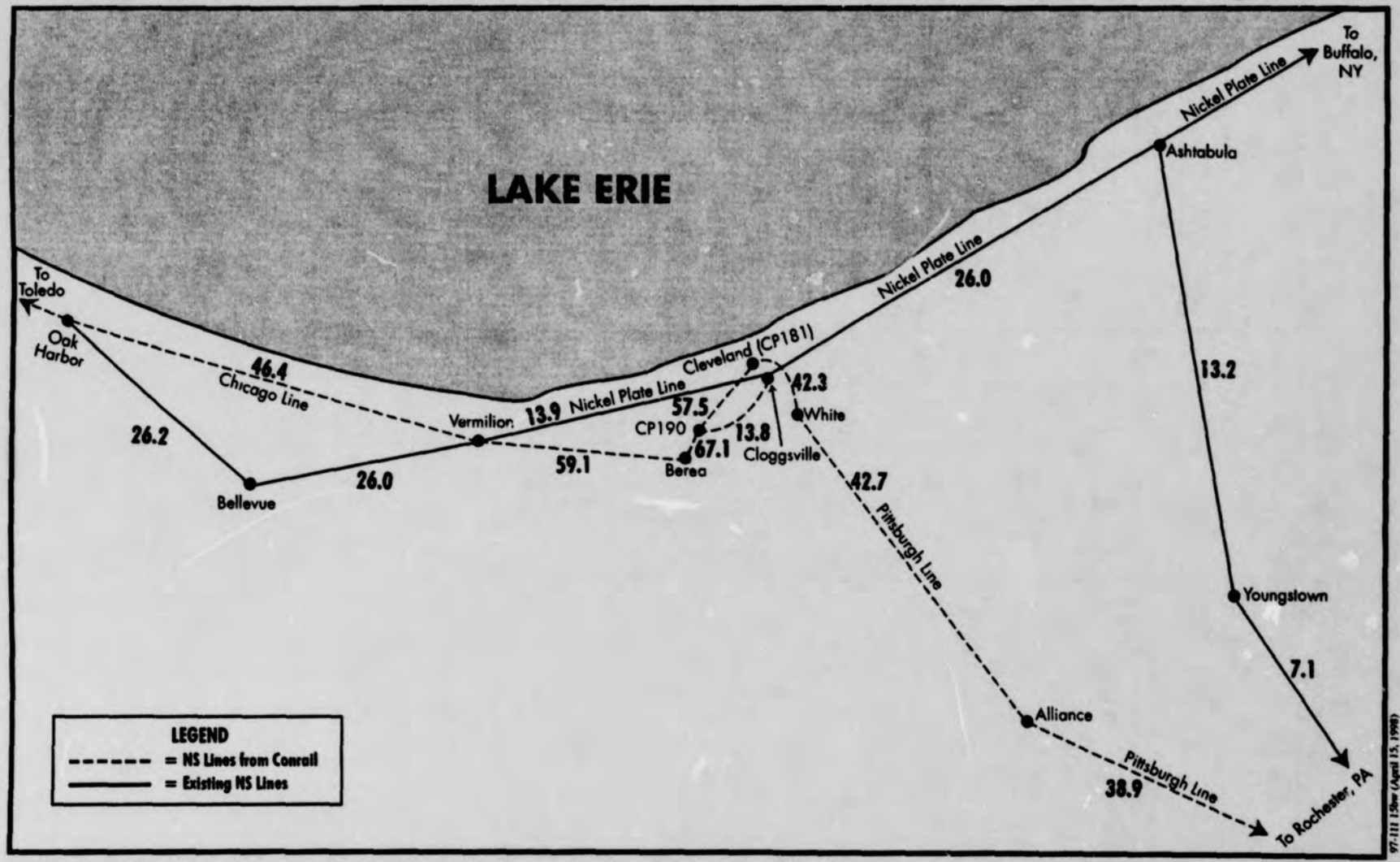
Projected train frequencies based on NS' revised Cloggsville Connection mitigation proposal over lines in Greater Cleveland and vicinity that would be operated by NS post-Transaction are shown in the map in Figure I-3 and Figure I-4 below. An analysis of the environmental impacts associated with these revised train routings and projected traffic levels is contained in Part II of this report.

3.2 Construction Projects

NS described the improvements and new construction needed to implement the Cloggsville Connection alternative routing in its November 1997 proposal. These include: upgrading of track between Cleveland (Cloggsville) and CP-190 to NS main line standards and addition of a second main track on this segment; rehabilitation or replacement of a bridge over West 65th Street, construction of an additional span over West 150th Street, and construction of a new bridge over Train Ave. in Cleveland; construction of a new ramp at Cloggsville in Cleveland to reduce the maximum grade and improve horizontal alignment of track; construction of a new interchange with the Flats Industrial Railroad near Cloggsville in Cleveland; installation of power switches and crossovers to fully signalize the rail line segment between Cleveland (Cloggsville) and CP-190; construction of a new double track route around Rockport Yard in Cleveland; reconfiguration of existing trackage at CP-190, each end of Rockport Yard, CP-Short, and the Ford Assembly Yard; and construction of a second connection at Vermilion (to be accomplished by constructing a double connection instead of the single connection proposed in the original NS Operating Plan). Other improvements associated with the Cloggsville Connection mitigation proposal would be construction of two-lane grade separations at Front Street in Berea (in conjunction with the adjacent CSX line) and at Fitch Road in Olmsted Falls, and crossing protection upgrades for the Nickel Plate line between Cleveland (Cloggsville) and Vermilion.

An environmental report with respect to these construction projects is included herein. In view of the geographical distance between the Cloggsville Connection construction areas in the

Figure I-3. NS Revised Cloggsville Connection Mitigation Proposal



NOTE: Rail traffic volumes are presented on this map for the purpose of environmental analysis as required by STB regulations. Thus, the total rail traffic volumes include all trains operating over individual line segments including freight trains, passenger trains and trackage rights. These numbers may differ from previous maps produced for other purposes that did not include passenger trains and CSX trackage rights.

Figure I-4. NS Revised Cloggsville Connection Mitigation Proposal

Segment	Passenger Trains	Freight Trains per Day			Million Gross Tons	
		Pre	Post	Change	Pre	Post
Rochester to Youngstown	0.0	12.6	7.1	-5.5	31.8	17.5
Youngstown to Ashtabula*	0.0	11.7	13.2	1.5	31.0	34.9
Ashtabula to Cleveland (Cloggsville)	0.0	13.0	26.0	13.0	19.9	42.8
Cleveland (Cloggsville) to Vermilion	0.0	13.5	13.9	0.4	25.5	28.1
Rochester to Alliance	2.0	37.9	36.9	-1.0	82.3	78.1
Alliance to White	2.0	26.4	40.7	14.3	57.5	79.9
White To Cleveland (CP-181)	2.0	12.5	40.3	27.8	25.9	79.5
Cleveland (CP-181) to CP-190**	4.0	48.4	53.5	5.1	100.8	103.7
CP-190 to Berea	4.0	48.4	63.1	14.7	100.8	119.8
Cleveland (Cloggsville) to CP-190	0.0	2.0	13 8	11 8	0.7	27 6
Berea to Vermilion	4.0	48.4	55 1	6.7	100.8	105.9
Vermilion to Bellevue	0.0	15.6	26.0	10.4	30.6	47.3
Bellevue to Oak Harbor	0.0	7.7	26.2	18.5	17.2	46.2
Vermilion to Oak Harbor	4.0	48.3	42.4	-5.9	100.3	85.1
Vermilion Connection west of Coen Road	0.0	0.0	0 9	0.9	0.0	2.4
Vermilion Connection east of Coen Road	0.0	0.0	11.6	11.6	0.0	22.4

* Post numbers include 7 CSX trains per day and 19.0 MGT.

** Post numbers include 10 CSX trains per day and 14.6 MGT.

*** Post numbers include 2 CSX trains per day and 0.7 MGT.

n/a = not applicable

City of Cleveland and the community of Vermilion, the construction of the double-connection at Vermilion is discussed separately from the remainder of the Cloggsville Connection construction. The Cloggsville Connection construction report is Part III hereof and the Vermilion double connection construction report is Part IV hereof.

3.3 Costs of the Mitigation Proposal for Train Frequencies

The routing changes offered by this NS mitigation proposal for train frequencies in Greater Cleveland and vicinity involve very significant public and private expenditures. Making the Cloggsville Connection a viable alternative for routing additional rail traffic through the Greater Cleveland area requires considerably more capital expenditures than would be needed simply to utilize the NS Nickel Plate line, as proposed in the original NS Operating Plan. As described in the NS Operating Plan (and evaluated in Applicants' June 1997 Environmental Report submitted to the STB), the use of the Nickel Plate line for post-Transaction rail traffic would involve only the construction of a single connection – at Vermilion – in order to connect the Nickel Plate line to the existing Conrail Chicago line to be operated by NS post-Transaction. The cost of constructing this single connection, which would be incurred by NS, was estimated at $2,587,000 in NS' original Operating Plan.

By contrast, NS' Cloggsville Connection mitigation proposal would, among other things, require upgrading and/or reconfiguring segments of track, adding double track on some segments, constructing a new double-track route around Rockport Yard, rehabilitating or replacing certain rail bridges, and constructing a double connection at Vermilion. As part of its mitigation proposal, NS has also proposed the construction of two additional grade separations, one in Berea and one in Olmsted Falls, and to participate in upgrading of grade crossing protection at 17 crossings in Cleveland and the West Shore suburbs located on the Cleveland (Cloggsville) to Vermilion corridor (consistent with state regulatory approval). None of the projects would be required under the Nickel Plate line routing proposed by NS in its original Operating Plan. As described in NS' November 25, 1997 letter to SEA, the costs associated with the mitigation proposal include an estimated $24,350,000 for the necessary improvements on the Cleveland (Cloggsville) to CP-190 rail line segment, an estimated $3,000,000 to construct a second connection at Vermilion, an estimated total of $19,600,000 for construction of grade separations at Berea and Olmsted Falls, and an estimated $2,300,000 for upgrading crossing protection on the Cleveland (Cloggsville) to Vermilion rail line segment of the Nickel Plate line. These construction projects, including grade separations, crossing protection upgrades and rail line adjustments to accommodate the rerouting are proposed in response to public concerns and

go beyond the levels required to address significant impacts identified in the DEIS. Implementation of the mitigation proposal for train frequencies is subject to federal and state funding and support. The grade separation projects are, in fact, currently proposed for funding allocation under pending BESTEA Legislation before Congress.

Despite the qualification of these projects for public funding, NS has recently notified government officials, elected representatives and other parties interested in Greater Cleveland and vicinity that NS will commit up to $27,350,000 of its own money to this mitigation proposal for the construction of the necessary improvements on the Cleveland (Cloggsville) to CP-190 line segment and the construction of the second connection at Vermilion, contingent on approval by STB of the Transaction and NS' mitigation proposal for train frequencies in Greater Cleveland and vicinity. NS will also participate within identified grade separation and grade crossing upgrade projects using customary railroad percentages (from 0 to 10 percent) for these public-private improvements. This very substantial financial commitment underscores NS' willingness to voluntarily participate in finding satisfactory solutions to the issues raised by interested parties concerning projected train traffic increases in Greater Cleveland and vicinity.

PART II

OPERATIONS THROUGH GREATER CLEVELAND AND VICINITY UNDER THE REVISED CLOGGSVILLE CONNECTION MITIGATION PROPOSAL FOR TRAIN FREQUENCIES

PART II - OPERATIONS THROUGH GREATER CLEVELAND AND VICINITY UNDER THE REVISED CLOGGSVILLE CONNECTION MITIGATION PROPOSAL FOR TRAIN FREQUENCIES

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PART II - OPERATIONS THROUGH GREATER CLEVELAND AND VICINITY UNDER THE REVISED CLOGGSVILLE CONNECTION MITIGATION PROPOSAL FOR TRAIN FREQUENCIES

As a mitigation plan for Greater Cleveland and vicinity, NS is proposing an alternative routing of post-Transaction increases in rail traffic through this area. The alternative routing encompasses rail line segments between Rochester, PA, east of Cleveland, and Vermilion, OH, west of Cleveland. Part II of this report discusses the environmental implications of NS' proposal, which is called the revised Cloggsville Connection mitigation proposal. Section 1 of Part II describes train routing under the revised Cloggsville Connection mitigation proposal. Sections 2 through 7 describe environmental implications of the revised Cloggsville Connection mitigation proposal including at-grade crossing safety, highway traffic delay, noise, air quality, hazardous materials transportation, other transportation impacts, and community demographics.

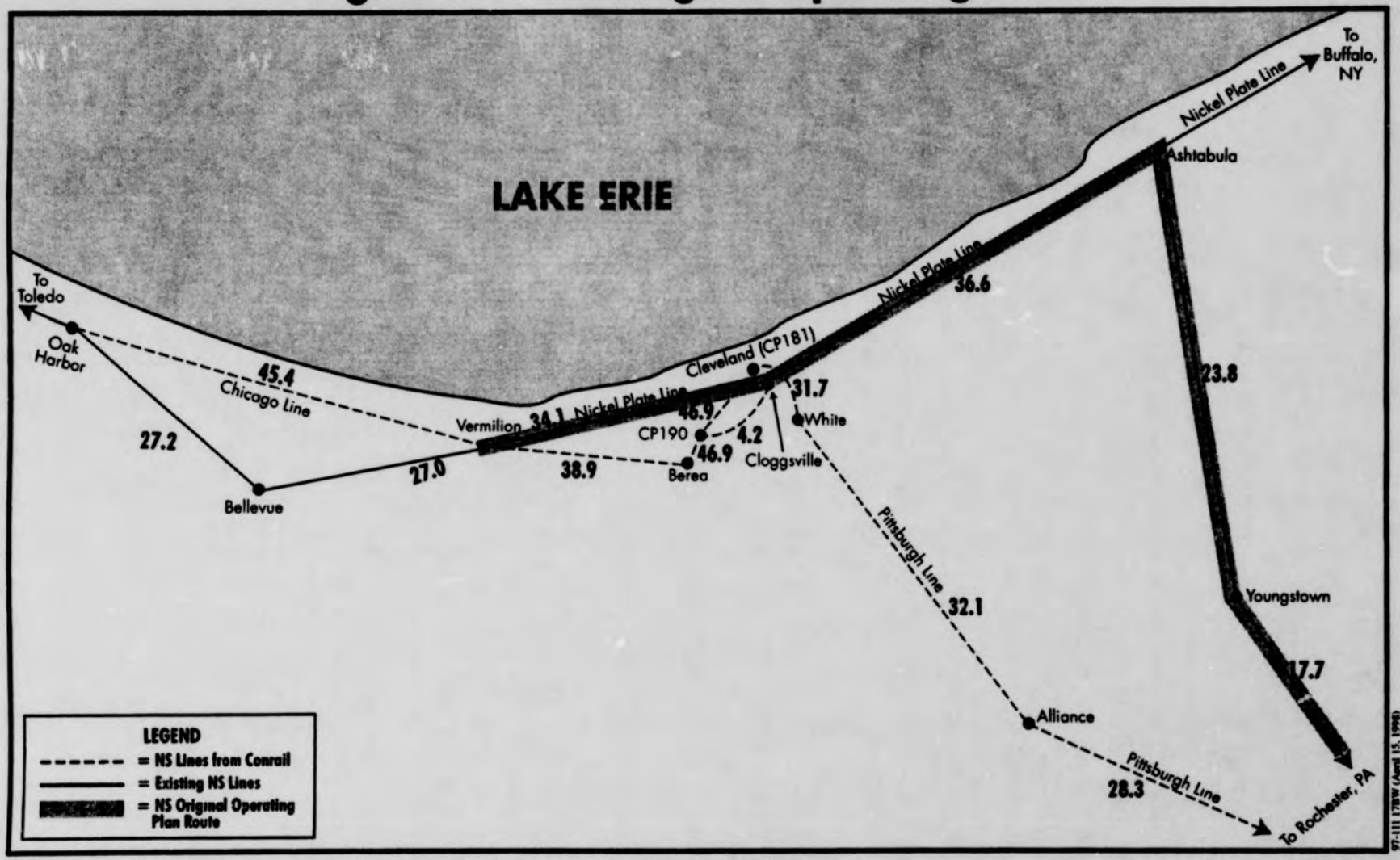
1.0 DESCRIPTION OF THE REVISED CLOGGSVILLE CONNECTION MITIGATION PROPOSAL

1.1 The Original NS Operating Plan

In its original Operating Plan, NS proposed to utilize its Nickel Plate line as the primary route for post-Transaction increases in rail traffic through Greater Cleveland. Under the original Operating Plan, rail traffic would increase post-Transaction on the Ashtabula to Cleveland (Cloggsville) and Cleveland (Cloggsville) to Vermilion segments of the Nickel Plate line. In order to concentrate rail traffic increases on the Nickel Plate, rail traffic would also increase on rail line segments from Rochester, PA to Youngstown and from Youngstown to Ashtabula. Projected changes in rail traffic in Cleveland and vicinity under the original NS Operating Plan are shown in the map in Figure II-1 and in Figure II-2. The map in Figure II-1 also highlights the main NS east-west route through Greater Cleveland and vicinity.

Based on SEA's analysis of the original NS Operating Plan, the DEIS identified the City of Cleveland and the West Shore suburbs of Lakewood, Bay Village and Rocky River as areas of special concern.

Figure II-1. NS Original Operating Plan



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NOTE: Rail traffic volumes are presented on this map for the purpose of environmental analysis as required by STB regulations. Thus, the total rail traffic volumes include all trains operating over individual line segments including freight trains, passenger trains and trackage rights. These numbers may differ from previous maps produced for other purposes that did not include passenger trains and CSX trackage rights.

Figure II-2: Rail Traffic on NS Rail Line Segments in Greater Cleveland and Vicinity[1]

NS Rail Line Segment	1995 Base Case Traffic	Change in Traffic from 1995 Base Case Under The Original NS Operating Plan (Trains Per Day)	Change in Traffic from 1995 Base Case Under The Revised Cloggsville Connection Mitigation Proposal (Trains Per Day)
Rochester to Youngstown	12.6	+ 5.1	- 5.5
Youngstown to Ashtabula	11.7	+ 12.1	+ 1.5
Ashtabula to Cleveland (Cloggsville)	13.0	+ 23.6	+13.0
Cleveland (Cloggsville) to Vermilion	13.5	+ 20.6	+ 0.4
Rochester to Alliance	39.9	- 11.6	- 1.0
Alliance to White	28.4	+ 3.7	+ 14.3
White to Cleveland (CP-181)	14.5	+ 17.2	+ 27.8
Cleveland (CP-181) to CP-190	46.9	- 5.5	+ 5.1
CP-190 to Berea	52.4	- 5.5	+ 14.7
Cleveland (Cloggsville) to CP-190	2.0	+ 2.2	+ 11.8
Berea to Vermilion	52.4	- 13.5	+ 6.7
Vermilion Connection west of Coen Road	0	+ 7	0.9
Vermilion Connection east of Coen Road	0	N/A[2]	+ 11.6

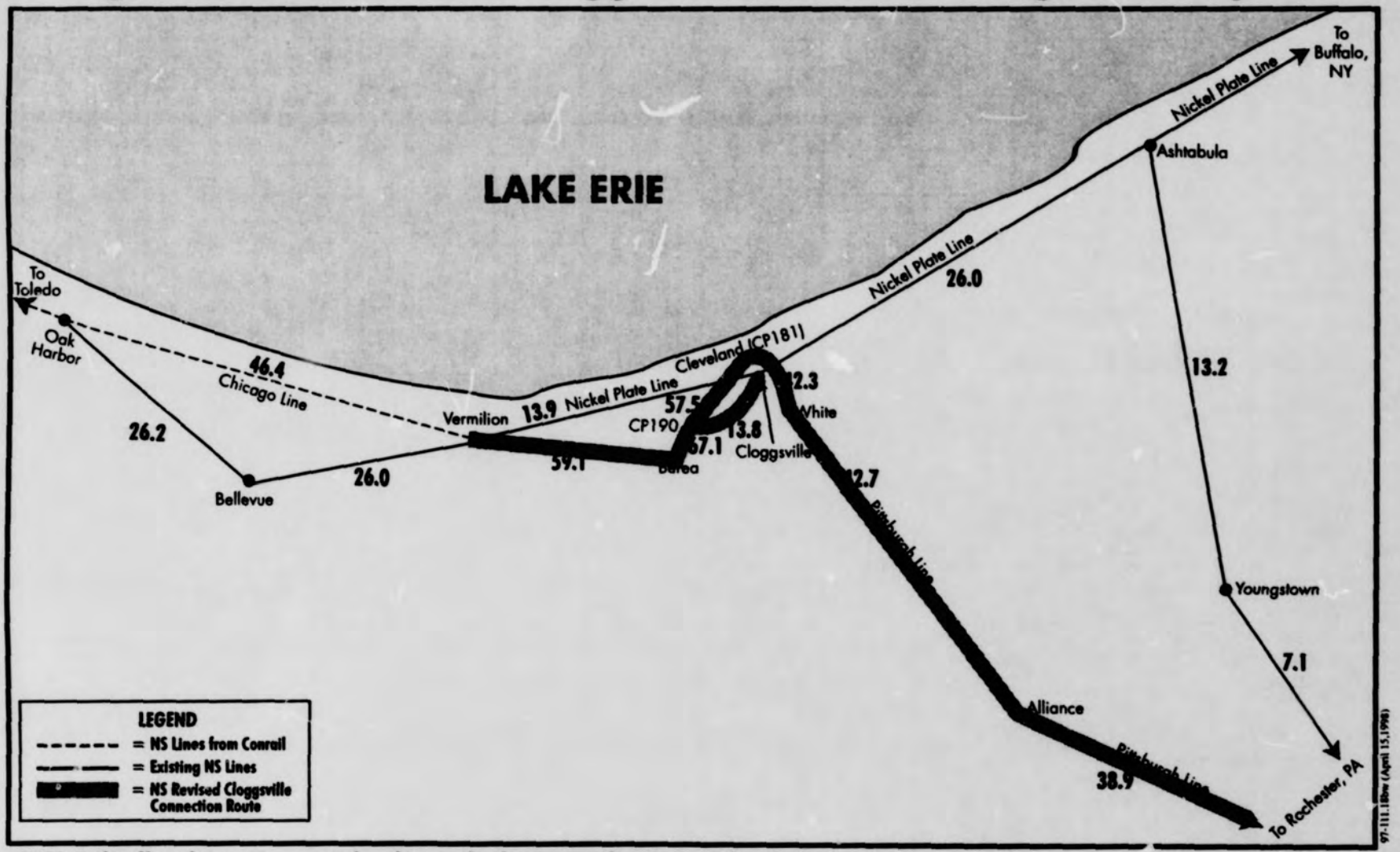
(1) Figures include all freight and passenger trains and trackage rights
(2) This connection would not be constructed under the original NS Operating Plan.

1.2 The Revised Cloggsville Connection Mitigation Proposal - NS' Mitigation Proposal for Greater Cleveland and Vicinity

Under the revised Cloggsville Connection mitigation proposal, NS would utilize rail line segments currently controlled by Conrail (to be controlled by NS post-Transaction) as the primary route for post-Transaction increases in rail traffic through Greater Cleveland and vicinity. The alternative route between Rochester, PA and Vermilion would include the Rochester to Alliance, Alliance to White, and White to Cleveland (CP-181) segments of the Conrail Pittsburgh line, the Cleveland (CP-181) to CP-190 and CP-190 to Berea segments of the Conrail Mainline (former New York Central Lakeshore line), and the Berea to Vermilion segment of the Conrail Chicago line. The alternative route would also include the Cleveland (Cloggsville) to CP-190 rail line segment which connects the Nickel Plate line to the Conrail Mainline. Rail traffic under the revised Cloggsville Connection mitigation proposal is shown in the map in Figure II-3, which highlights the main NS east-west route through Greater Cleveland and vicinity. As shown in Figure II-4, rail traffic on all of these segments would increase relative to NS' original Operating Plan.

Under the revised Cloggsville Connection mitigation proposal, 10.6 trains per day between Rochester, PA and Vermilion would be routed on track currently controlled by Conrail instead of the Nickel Plate line. Between Cleveland (Cloggsville) and Vermilion, another 9.6 trains (or a total of 20.2 trains) would be routed over track currently controlled by Conrail instead of the Nickel Plate line.

Figure II-3. NS Revised Cloggsville Connection Mitigation Proposal



NOTE: Rail traffic volumes are presented on this map for the purpose of environmental analysis as required by STB regulations. Thus, the total rail traffic volumes include all trains operating over individual line segments including freight trains, passenger trains and trackage rights. These numbers may differ from previous maps produced for other purposes that did not include passenger trains and CSX trackage rights.

Figure II-4. NS Revised Cloggsville Connection Mitigation Proposal

Segment	Passenger Trains	Freight Trains per Day			Million Gross Tons	
		Pre	Post	Change	Pre	Post
Rochester to Youngstown	0.0	12.6	7.1	-5.5	31.8	17.5
Youngstown to Ashtabula*	0.0	11.7	13.2	1.5	31.0	34.9
Ashtabula to Cleveland (Cloggsville)	0.0	13.0	26.0	13.0	19.9	42.8
Cleveland (Cloggsville) to Vermilion	0.0	13.5	13.9	0.4	25.5	28.1
Rochester to Alliance	2.0	37.9	36.9	-1.0	82.3	78.1
Alliance to White	2.0	26.4	40.7	14.3	57.5	79.9
White To Cleveland (CP-181)	2.0	12.5	40.3	27.8	25.9	79.5
Cleveland (CP-181) to CP-190**	4.0	48.4	53.5	5.1	100.8	103.7
CP-190 to Berea	4.0	48.4	63.1	14.7	100.8	119.8
Cleveland (Cloggsville) to CP-190	0.0	2.0	13.8	11.8	0.7	27.6
Berea to Vermilion	4.0	48.4	55.1	6.7	100.8	105.9
Vermilion to Bellevue	0.0	15.6	26.0	10.4	30.6	47.3
Bellevue to Oak Harbor	0.0	7.7	26.2	18.5	17.2	46.2
Vermilion to Oak Harbor	4.0	48.3	42.4	-5.9	100.3	85.1
Vermilion Connection west of Coen Road	0.0	0.0	0.9	0.9	0.0	2.4
Vermilion Connection east of Coen Road	0.0	0.0	11.6	11.6	0.0	22.4

* Post numbers include 7 CSX trains per day and 19.0 MGT.

** Post numbers include 10 CSX trains per day and 14.6 MGT.

*** Post numbers include 2 CSX trains per day and 0.7 MGT.

n/a = not applicable

2.0 AT-GRADE CROSSING SAFETY AND DELAY

The DEIS describes the potential for train accidents with motor vehicles or pedestrians as being mainly related to the number of at-grade crossings on a route, and the average daily vehicular traffic on these roads. The DEIS describes the potential for highway motor vehicle delays as being a function of the above factors and trains speeds at at-grade crossings. Complete information on at-grade crossings affected by the revised Cloggsville Connection mitigation proposal is provided in Attachment A.

Figure II-5 provides the number of grade separated and at-grade crossings on each rail line segments between Rochester, PA and Vermilion. It also indicates the number of at-grade crossings on each rail line segment with average daily highway traffic volume above 5,000 vehicles per day.

Figure II-5: Grade Crossings on NS Rail Line Segments in Greater Cleveland and Vicinity

NS Rail Line Segment	Grade Separated Crossings	At-Grade Crossings	At-Grade Crossings with Highway Traffic Volume Above 5,000 Vehicles Per Day
Rochester to Youngstown	36	10	2
Youngstown to Ashtabula	54	39	1
Ashtabula to Cleveland (Cloggsville)	59	61	14
Cleveland (Cloggsville) to Vermilion	24	64	12
Rochester to Alliance	66	44	1
Alliance to White	47	30	2
White to Cleveland (CP-181)	35	3	0
Cleveland (CP-181) to CP-190	18	0	0
CP-190 to Berea	2	3	2
Cleveland (Cloggsville) to CP-190	13	0	0
Berea to Vermilion	31	30	3
Vermilion Connection west of Coen Road	0	0	0
Vermilion Connection east of Coen Road	0	0	0

The revised Cloggsville Connection mitigation proposal for train frequencies would include construction of two new grade separations, at Front Street in Berea (located on the CP-190 to Berea segment of the Conrail Main line) and at Fitch Road in Olmsted Falls (located on the Berea to Vermilion segment of the Conrail Chicago line). Implementation of the revised Cloggsvile Connection proposal is dependent on public funding and support. These proposed grade separations mitigate concerns with both traffic safety and delay for these communities. Under the original NS Operating Plan route, these crossings would not be grade-separated. Figure II-6 provides additional information on these crossings.

Figure II-6: Grade Separations in Berea and Olmsted Falls under the Revised Cloggsville Connection Mitigation Proposal

	Front Street (Berea)	Fitch Road (Olmsted Falls)
1995 base case rail traffic	52.4 trains per day	52.4 trains per day
Rail traffic under the Original NS Operating Plan route	46.9 trains per day	38.9 trains per day
Rail traffic under the Cloggsville Connection Mitigation Proposal	67.1 trains per day	59.1 trains per day
Average daily highway motor vehicle traffic volume	4,930 highway vehicles	5,850 highway vehicles

Under the revised Cloggsville Connection mitigation proposal, NS would utilize segments currently controlled by Conrail as the primary route for post-Transaction increases in rail traffic through Greater Cleveland and vicinity. Under the original NS Operating Plan, NS would utilize its Nickel Plate line for this traffic. Figure II-7 compares the alternatives in terms of at-grade crossings.

Figure II-7: At-Grade Crossings on NS Routes between Rochester and Vermilion

	Nickel Plate Line[1]	Conrail Lines That Would Be Controlled by NS Post-Transaction[2]
Number of at-grade crossings	174	110
Number of at-grade crossings with traffic volume > 5,000 ADT	28	8

(1)Includes the following segments that would see decreased rail traffic relative to NS' original Operating Plan as a result of the mitigation proposal for Greater Cleveland and vicinity: Rochester to Youngstown; Youngstown to Ashtabula; Ashtabula to Cleveland (Cloggsville), and Cleveland (Cloggsville) to Vermilion. All of these segments are on or feed into the Nickel Plate line.

(2)Includes the following segments that would see increased rail traffic relative to NS' original Operating Plan as a result of the mitigation proposal for Greater Cleveland and vicinity. Rochester to Alliance; Alliance to White, White to Cleveland (CP181), Cleveland (CP181) to CP-190; CP-190 to Berea, Cleveland (Cloggsville) to CP-190, and Berea to Vermilion.

The revised Cloggsville Connection mitigation proposal would also address at-grade crossing safety for the Edgewater-Cudell neighborhood in Cleveland and West Shore suburbs of Lakewood, Rocky River and Bay Village on the Nickel Plate line which have raised particular concerns about this issue. Train traffic through these communities would increase by only 0.4 trains per day from 1995 levels (and will actually decline by 5 trains per day from current levels in the first quarter of 1998). NS also proposes to support the upgrade of grade crossing protection at some 17 crossings in those communities (consistent with state approval and the availability of public funding).

3.0 NOISE

The potential for adverse noise impacts is related to a number of factors, including change in rail traffic volume, proximity of sensitive noise receptors (e.g., residences, schools, churches, hospitals and libraries) to the tracks, and topographical features. In the DEIS, SEA set out criteria for determining the significance of noise increases to sensitive receptors near rail line segments. SEA's threshold for noise analysis is an increase in rail traffic post-Transaction in excess of eight trains per day or a doubling of gross ton-miles relative to 1995 base case levels. Sensitive noise receptors may be affected, according to SEA, where noise levels from wheel/rail noise and locomotive engines will exceed 65 dBA L_{dn} in total. Mitigation is considered potentially appropriate by SEA if noise levels from wheel/rail noise and locomotive engines[1] will increase by at least 5 dBA L_{dn} and will exceed 70 dBA L_{dn} in total. The following sections examine potential noise impacts for relevant rail line segments under the original NS Operating Plan and the revised Cloggsville Connection mitigation proposal.

3.1 Original NS Route

Under the original NS Operating Plan, rail traffic on five rail line segments between Rochester, PA and Vermilion, OH would increase by more than eight trains per day or double in turns of freight volume (relative to the 1995 base case levels) and would therefore require additional noise impact analysis:

- Youngstown to Ashtabula
- Ashtabula to Cleveland (Cloggsville)
- Cleveland (Cloggsville) to Vermilion
- White to Cleveland (CP-181)
- Cleveland (Cloggsville) to CP-190

These segments were analyzed in the DEIS. A noise model was used by SEA to determine the potential effect of increased train traffic. The model impacts were compared to the SEA noise significance criteria of a 70 dBA L_{dn} total and a 5 dBA increase in noise levels. None of these line segments were found by SEA to meet its noise significance criteria.

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[1]Consistent with FRA safety requirements for sounding locomotive horns when approaching at-grade crossings, SEA does not consider horn noise from trains to be appropriate for mitigation.

3.2. The Revised Cloggsville Connection Mitigation Proposal for Train Frequencies

Under the revised Cloggsville Connection mitigation proposal for train frequencies, rail traffic on the following rail line segments from Rochester, PA to Vermilion, OH would increase by more than eight trains per day or double in terms of freight volume (relative to 1995 base case levels) and therefore would require additional noise impact analysis:

- Ashtabula to Cleveland (Cloggsville)
- Alliance to White
- White to Cleveland (CP-181)
- CP-190 to Berea
- Cleveland (Cloggsville) to CP-190
- The proposed Vermilion Connection west of Coen Road
- The proposed Vermilion Connection east of Coen Road

A noise model was used to determine the potential effect of increased train traffic.[2] As shown in Figure II-8, modeling indicates that under the revised Cloggsville Connection mitigation proposal, noise levels would meet SEA's 70 dBA L_{dn} total and 5 dBA L_{dn} increase significance criteria at the Cleveland (Cloggsville) to CP-190 line segment and the double connection east and west of Coen Road at Vermilion.

Along the Cleveland (Cloggsville) to CP-190 rail line segment, modeling indicates that noise levels would increase by 8.4 dBA L_{dn}, and a 70 dBA L_{dn} contour would extend out 65 feet perpendicular from the rail line. Based on aerial photographs and on site visits, however, NS has identified no sensitive noise receptors within 65 feet of this rail line segment.

Noise modeling predicted that the noise level from post-Transaction train traffic along the Vermilion connection west of Coen Road would exceed the noise significance criterion of a 5 dBA increase and a 70 dBA L_{dn} contour would extend 12 feet perpendicular to the connection. However, NS has identified no noise receptors within 12 feet of this proposed connection. Modeling also predicted that the noise level from post-Transaction train traffic along the Vermilion connection east of Coen Road would exceed the noise significance criterion of a

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[2]The noise modeling methodology used here is identical to that used in the ER. For detailed information see Applicants' Control Application, Volume 6A (Environmental Report), Part I, Appendix B.

5 dBA increase and a 70 dBA L_{dn} contour would extend 58 feet perpendicular to the connection. NS has identified no noise receptors within 58 feet of the proposed connection. Thus no NS rail line segments between Rochester, PA and Vermilion, OH that meet SEA's noise significance criteria would impact any sensitive noise receptors under the revised Cloggsville Connection mitigation proposal.

Figure II-8: Noise Analysis for the Revised Cloggsville Connection Mitigation Proposal*

NS Line Segment	Trains per Day*		Change in dBA	Impacts to Sensitive Noise Receptors at 70 dBA L_{dn}
	Pre	Post		Post-Transaction
Rochester to Youngstown	12.6	7.1	0	No significant impact
Youngstown to Ashtabula	11.7	13.2	0.5	No significant impact
Ashtabula to Cloggsville	13	26	3.0	No significant impact
Cleveland (Cloggsville) to Vermilion	13.5	13.9	0.1	No significant impact
Rochester to Alliance	39.9	38.9	-0.1	No significant impact
Alliance to White	28.4	42.7	1.8	No significant impact
White to Cleveland (CP-181)	14.5	42.3	4.6	No significant impact
Cleveland (CP-181) to CP-190	52.4	57.5	0.4	No significant impact
CP-181 to Berea	52.4	67.1	1.1	No significant impact
Cleveland (Cloggsville) to CP-190	2	13.8	8.4	No significant impact
Berea to Vermilion	52.4	59.1	0.5	No significant impact
Vermilion Connection west of Coen Rd.	0	0.9	>5	No significant impact
Vermilion Connection east of Coen Rd.	0	11.6	>5	No significant impact

* Includes passenger, NS freight and trackage rights trains.

4.0 AIR QUALITY

Air quality is affected by changes in emissions from locomotives and changes in emissions due to mode of transportation shifts (i.e., diversion from trucks to rail). The number of trains, the volume of freight being hauled, and the length of the rail route all affect air emissions from freight trains.

The Transaction will create significant emissions reductions system-wide and throughout the Eastern United States by diverting freight from trucks to rail. These benefits, which are recognized in the DEIS, far outweigh minor emission increases or decreases on any single rail line segment.[3] EPA's Ozone Transport Assessment group (OTAG) has concluded that the impacts of criteria air pollutant emissions (such as NO_x) are system-wide or regional, not local. These conclusions are cited in the DEIS.[4] Therefore, local mitigation options for ozone precursor emissions (such as NO_x emissions) are not indicated because precursor emissions would decrease at the system-wide level due to this transaction. Emissions will decrease further in the future due to locomotive standards newly promulgated by the U.S. Environmental Protection Agency.

Because the Transaction will allow rail to compete more favorably with trucks, it will reduce truck traffic in many areas, including Greater Cleveland and vicinity. This shift in freight from trucks to locomotives means that freight can be transported with fewer emissions per pound of freight hauled, meaning more efficient and less polluting transportation.

Figure II-9 indicates changes in air emissions under the original NS Operating Plan and the revised Cloggsville Connection mitigation proposal relative to 1995 base case levels from NS rail operations between Rochester, PA and Vermilion, OH. Attachment B to this report presents the results of the detailed air quality analysis for each of the line segments affected by the revised Cloggsville Connection mitigation proposal.

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[3]DEIS, Volume I, Chapter 5, pg. 4-50.

[4]Id. At 4-56

Figure II-9: Air Emissions from NS Rail Operations Between Rochester, PA and Vermilion, OH

Air emission	1995 base case emissions (tons per year)	Post-Transaction Change Under the Original NS Operating Plan (tons per year)	Post-Transaction Change Under the Revised Cloggsville Connection Mitigation Proposal (tons per year)
HC	278.92	37.37	40.43
CO	835.41	111.88	121.08
NO_x	7522.88	1007.30	1090.17
SO_2	487.46	65.25	70.62
PM_{10}	189.92	25.45	27.55
Pb	0.015938	0.002134	0.002310

HC = Hydrocarbons
CO = Carbon MoNOxide
NOx = Nitrogen Oxides
SO2 = Sulfur Dioxide
PM = Particulate matter smaller than 10 microns
Pb = Lead

Although there would be an increase in emissions from the revised Cloggsville Connection mitigation proposal, Greater Cleveland and vicinity will also see an aggregate decrease in emissions from truck-to-rail diversions as shown in Figure II-10. These decreases, which are not included in Figure II-9, are a result of reductions in truck traffic in Ashtabula, Cuyahoga, Lake, Erie, Lorain, Mahoning, Trumbell, Portage, Stark, Summit and Columbiana counties in Ohio and Lawrence and Beaver counties in Pennsylvania.

Figure II-10: Reduction in Air Emissions from Truck-to-Rail Diversions in the Affected Counties (tons per year)

HC	CO	NO_x	SO_2	PM_{10}	Pb
20.63	104.10	237.37	7.72	27.63	0.0013

5.0 HAZARDOUS MATERIALS TRANSPORTATION

Figure II-11 indicates hazardous materials transportation under the original NS Operating Plan and the revised Cloggsville Connection mitigation proposal relative to 1995 base case levels.

Figure II-11: Post-Transaction Hazardous Materials Transport in Greater Cleveland and Vicinity

NS Rail Line Segment	1995 Base Case (hazmat carloads per year)	Changes From the 1995 Base Case in the Original NS Operating Plan (hazmat carloads per year)*	Changes From the 1995 Base Case in the Revised Cloggsville Connection Mitigation Proposal (hazmat carloads per year)*
Rochester to Youngstown	2,920	+ 8,760	- 1,095
Youngstown to Ashtabula	2,920	+ 8,760	- 1,095
Ashtabula to Cleveland (Cloggsville)	7,665	+ 29,565	+ 19,710
Cleveland (Cloggsville) to Vermilion	9,490	+ 22,995	- 2,920
Rochester to Alliance	70,810	- 35,405	- 25,550
Alliance to White	29,930	+ 4,015	+ 13,870
White to Cleveland (CP-181)	12,775	+ 21,535	+ 31,390
Cleveland (CP-181) to CP-190	84,315	- 37,960	- 28,105
CP-190 to Berea	84,315	- 37,960	- 12,045
Cleveland (Cloggsville) to CP-190	110	+ 6,826	+ 22,886
Berea to Vermilion	84,315	- 44,165	- 18,250
Vermilion to Oak Harbor	82,855	- 24,455	- 23,360
Vermilion to Bellevue	9,490	+ 6,205	+ 5,110
Oak Harbor to Bellevue	3,285	+ 15,330	+ 20,805
Vermilion Connection west of Coen Rd.	0	+ 18,250	+10,585
Vermilion Connection east of Coen Rd.	0	0	+ 4,015

*Increase (+) or decrease (-) from the 1995 Base Case. To obtain the total post-Transaction hazardous materials transport anticipated for a rail line segment, add or subtract the increase or decrease to the 1995 Base Case Levels

Transportation of hazardous materials will not create significant environmental impacts under either the original NS Operating Plan or the revised Cloggsville Connection mitigation proposal. Safety, including safe transport of hazardous materials, is NS' highest priority. This unflagging commitment, which goes far beyond simply complying with existing regulations and accepted industry practices, has resulted in NS' industry-leading safety performance. NS is dedicated to being a responsible member of the communities it serves and is also motivated by the tenet that safety is good business. Simply put, accidents are both damaging and expensive, and NS is devoted to preventing them. NS participates in many voluntary programs, such as the guidelines of the Association of American Railroads (AAR) Circular No. OT-55B - "Recommended Railroad Operating Practices for Transportation of Hazardous Materials," Responsible Care®, and the North American Non-Accident Release (NAR) Program. NS complies fully with U.S. Department of Transportation, U.S. Environmental Protection Agency, state and local regulations designed to minimize the risk of a hazardous materials release. These factors, along with NS' own risk reduction procedures, have produced a steady decline in the frequency of hazardous materials incidents on NS trains. In 1996, 99.96 percent of all hazardous materials shipments through the NS system arrived without incident. That figure has steadily improved from 99.90 percent a decade ago, reflecting NS' continuing commitment to safety.

6.0. IMPACTS RELATED TO INTERMODAL FACILITIES AND PASSENGER RAIL

The routing of post-Transaction increases in rail traffic from Rochester to Vermilion will not impact intermodal facilities (where freight is transferred between rail and trucks) or passenger rail operations under either the original NS Operating Plan or the revised Cloggsville Connection mitigation proposal. An intermodal facility is located northeast of Cloggsville along the Nickel Plate line. Activity at this intermodal facility would not be affected by the revised Cloggsville Connection mitigation proposal.

Amtrak operates 2 to 4 trains per day along portions of the rail lines currently controlled by Conrail that would see increased rail traffic post-Transaction under the revised Cloggsville Connection mitigation proposal. Amtrak would continue to operate these trains post-Transaction. The affected line segments and the associated train traffic are shown in Figure II-12.

Figure II-12: Revised Cloggsville Connection Mitigation Proposal Route: Freight Traffic on Line Segments with Passenger Rail Service

Rail Line Segment	Passenger Trains Per Day	Revised Cloggsville Connection Mitigation Proposal Freight Trains Per Day		
		1995 Base Case	Post-Transaction	Change
Rochester to Alliance	2	37.9	36.9	-1.0
Alliance to White	2	26.4	40.7	+14.3
White to Cleveland (CP-181)	2	12.5	40.3	+27.8
Cleveland (CP-181) to CP-190	4	48.4	53.5	+5.1
CP-190 to Berea	4	48.4	63.1	+14.7
Berea to Vermilion	4	48.4	55.1	+6.7

7.0 COMMUNITY PROFILE

This section provides demographic information on populations living near NS rail line segments in Greater Cleveland and vicinity. Figure II-13 presents demographic information for populations living within 1,000 feet of the rail line segments.[5]

Figure II-13. Demographic Profile of NS Rail Line Segments in Greater Cleveland and Vicinity

NS Rail Line Segment	Total Population within 1,000 feet of the Tracks	Share of Population with Minority Status	Share of Population with Low Income Status
Rochester to Youngstown	3,043	22%	30%
Youngstown to Ashtabula	6,848	27%	34%
Ashtabula to Cleveland (Cloggsville)	45,966	49%	28%
Cleveland (Cloggsville) to Vermilion	52,348	13%	21%
Rochester to Alliance	8,304	4%	18%
Alliance to White	15,290	11%	13%
White to Cleveland (CP181)	9,962	60%	51%
Cleveland (CP181) to CP-190	15,367	15%	29%
CP-190 to Berea	2,423	15%	10%
Cleveland (Cloggsville) to CP-190	12,122	21%	31%
Berea to Vermilion	10,376	6%	15%

[5]The methodology for obtaining demographic information used here is identical to that described in the DEIS. Demographic figures in this section are based on census block group level data from the 1990 U.S. Census. To calculate figures, population data for census block groups were obtained from the 1990 U.S. Census data files. All census block groups of which any portion was within 1,000 feet of the tracks were included. Total census block group population, minority population and low-income population for each census block group were then reduced in proportion to the percentage of the census block group's geographic area within 1,000 feet of any point on the tracks. Minority persons include Non-White persons and White Hispanic persons. The share of population classified as low income equals the share of those persons for whom poverty status was reported who have a household income below the poverty line.

NS' mitigation proposal for Greater Cleveland and vicinity would concentrate NS' post-Transaction rail traffic increases on rail lines currently controlled by Conrail and away from NS' Nickel Plate line. Figure II-14 compares the demographics of these rail lines in Greater Cleveland and vicinity.

Figure II-14: Demographic Profile of Alternative Routes through Greater Cleveland and Vicinity*

NS Rail Line Segment	Total Population within 1,000 feet of the Tracks	Share of Population with Minority Status (%)	Share of Population with Low Income Status (%)
Routing Via Nickel Plate line [1]	108,203	30%	25%
Routing via Conrail lines to be controlled by NS post-Transaction[2]	73,844	19%	25%

[1]Includes the following segments that would see decreased rail traffic relative to NS' original Operating Plan as a result of the mitigation proposal for Greater Cleveland and vicinity Rochester to Youngstown; Youngstown to Ashtabula, Ashtabula to Cleveland (Cloggsville), and Cleveland (Cloggsville) to Vermilion All of these segments are on or feed into the Nickel Plate line.

[2]Includes the following segments that would see increased rail traffic relative to NS' original Operating Plan as a result of the mitigation proposal for Greater Cleveland and vicinity Rochester to Alliance; Alliance to White, White to Cleveland (CP181), Cleveland (CP181) to CP-190, CP-190 to Berea, Cleveland (Cloggsville) to CP-190, and Berea to Vermilion.

Many of the minority and low-income residents along these rail lines are located within the City of Cleveland. Figures II-15 and II-16 provide demographic data for populations residing within the City of Cleveland only.

Figure II-15 Demographic Profile of NS Rail Line Segments in City of Cleveland

NS Rail Line Segment	Total Population within 1,000 feet of the Tracks	Share of Population with Minority Status	Share of Population with Low Income Status
Rochester to Youngstown	N/A	N/A	N/A
Youngstown to Ashtabula	N/A	N/A	N/A
Ashtabula to Cleveland (Cloggsville)	12,554	60%	43%
Cleveland (Cloggsville) to Vermilion	12,762	25%	42%
Rochester to Alliance	N/A	N/A	N/A
Alliance to White	N/A	N/A	N/A
White to Cleveland (CP181)	9,323	61%	54%
Cleveland (CP181) to CP-190	13,758	17%	30%
CP-190 to Berea	213	16%	25%
Cleveland (Cloggsville) to CP-190	11,455	22%	32%
Berea to Vermilion	N/A	N/A	N/A

Note. N/A = Not Applicable and indicates that no area within 1,000 feet of the tracks is within the City of Cleveland.

Figure II-16. Demographic Profile of Alternative Routes through the City of Cleveland

NS Rail Line Segment	Total Population within 1,000 feet of the Tracks	Share of Population with Minority Status	Share of Population with Low Income Status
Routing via Nickel Plate line [1]	25,316	42%	43%
Routing via Conrail lines to be controlled by NS post-Transaction [2]	34,749	31%	37%

[1] Includes the following segments that would see decreased rail traffic relative to NS' original Operating Plan as a result of the mitigation proposal for Greater Cleveland and vicinity. Ashtabula to Cleveland (Cloggsville), Cleveland (Cloggsville) to Vermilion All of these segments are on or feed into the Nickel Plate line

[2] Includes the following segments that would see increased rail traffic relative to NS' original Operating Plan as a result of the mitigation proposal for Greater Cleveland and vicinity White to Cleveland (CP181), Cleveland (CP181) to CP-190, CP-190 to Berea, and Cleveland (Cloggsville) to CP-190

ATTACHMENT A

GRADE CROSSINGS

ROCHESTER TO ALLIANCE
(public at-grade crossings)

Crossing	State	County	City	Milepost	ADT	Highway	Street
507586N	PA	BEAVER	BEAVER FALLS	000062	2250	CITY ST	15TH ST.
544682P	PA	BEAVER	NEW GALILEE	003979	2966	SR 168	CENTENIAL AVE
544683W	PA	BEAVER	NEW GALILEE	003899		LR04012	WALNUT RD
544679G	PA	BEAVER	NEW GALILEE	003643	50	BORO ST	HIGHLAND
544685K	PA	BEAVER	NEW GALILEE	003536	330	BORO	SCHOOL HOUSE
							MARKET ST
							JAMES ST
							PLEASANT DR
502549U	PA	BEAVER		004740	718	LR04022	LITTLE BEAVER RD
502550N	PA	BEAVER		004669	100	TWP 384	MCROBERTS RD
							MAIN ST
							HAGGARTY RD
							HAYS RD
							MONROE ST
							S MAIN ST
							ELM ST
544663K	OH	COLUMBIANA	COLUMBIANA	005937	2000	VILLAGE	PITTSBURGH ST
544665Y	OH	COLUMBIANA	COLUMBIANA	005678	110	TR 923	CREEK RD
544667M	OH	COLUMBIANA	NEW WATERFORD	005648	30	TR 884	WILHELM RD
544668U	OH	COLUMBIANA	NEW WATERFORD	005585	30	TR923	SLAGER XING
502873J	OH	COLUMBIANA	SALEM	006997	3040	CITY	NEW GARDEN RD
502857A	OH	COLUMBIANA	SALEM	006985	2960	SR 9	MILL ST
502874R	OH	COLUMBIANA	SALEM	006962	3600	CITY	S ELLSWORTH RD
502876E	OH	COLUMBIANA	SALEM	006878	7460	CR 444A	S. LINCOLN AVE
502878T	OH	COLUMBIANA	SALEM	006727	360	TR 765	CUNNINGHAM RD
502886K	OH	COLUMBIANA	LEETONIA	006375	866	VILLAGE	WASHINGTON ST
502895J	OH	COLUMBIANA	LEETONIA	006322	2287	VILLAGE	WALNUT
502896R	OH	COLUMBIANA	LEETONIA	006314	4970	VILLAGE	CHESTNUT ST
502900D	OH	COLUMBIANA	LEETONIA	006270	420		WILSON ST
502901K	OH	COLUMBIANA	LEETONIA	006200	210	TRP 790	BEESON MILL RD
502903Y	OH	COLUMBIANA	COLUMBIANA	006081	290	TR1705	QUIGLEYS
							JOHNSON RD
502858G	OH	MAHONING	SEBRING	007916	4950	VILLAGE	15TH ST
502859N	OH	MAHONING	SEBRING	007882	3210	VILLAGE	12TH ST
502862W	OH	MAHONING	BELOIT	007783	1080	SR165	MAIN ST
502863D	OH	MAHONING	BELOIT	007720	280	CR 27	ELLETT RD
502864K	OH	MAHONING	BELOIT	007686	460	CR29	SMITH-GOSHEN
502865S	OH	COLUMBIANA	SALEM	007187	890	TR 739	ALLEN RD
502868M	OH	COLUMBIANA	SALEM	007025	7020	CITY	PERSHING
502872C	OH	COLUMBIANA	SALEM	007013	660	CITY	WILSON
502964P	OH	MAHONING	SEBRING	008038	570	CR21	HEACOCK
							BARRY RD
502459V	OH	MAHONING		008220	1020	CR11	OYSTER RD
							MAHONING AVE.

ASHTABULA TO YOUNGSTOWN
(public at-grade crossings)

Crossing	State	County	City	Milepost	ADT	Highway	Street
544906Y	OH	ASHTABULA	ASHTABULA	000023	2397	CITY	WEST 32ND ST
544595L	OH	ASHTABULA	ASHTABULA	000110	1810	CITY	W 52ND ST
544582K	OH	ASHTABULA	ASHTABULA	000120	1460	CITY	W 54TH ST.
502651A	OH	ASHTABULA	ASHTABULA	000340	1380	CR25	STATE
503107T	OH	ASHTABULA	ASHTABULA	000399	290	CR23	PLYMOUTH
503108A	OH	ASHTABULA		000474	250	TR7	CARSON RD
503114D	OH	ASHTABULA	JEFFERSON	000947	30	TR290	MARCH RD
						SR 167	
503115K	OH	ASHTABULA	JEFFERSON	001141	70	TR292	NETCHER
503116S	OH	ASHTABULA	JEFFERSON	001282	50	TR284	CLAY RD
503117Y	OH	ASHTABULA	DORSET	001314	400	CR291	S. DENMARK RD
503118F	OH	ASHTABULA	DORSET	001496	250	TR281	TOWER RD
544915J	OH	ASHTABULA	DORSET	001627	360	CR 12	FOOTVILLE RICHMND
544914C	OH	ASHTABULA	DORSET	001535	1390	SR 193	SR 193
503121N	OH	ASHTABULA	DORSET	001727	60	TR183	MARRIAN RD
503122V	OH	ASHTABULA	DORSET	001911	30	TR10	AYERS RD
503124J	OH	ASHTABULA	ANDOVER	002114	810	US 6	US 6
							MANN RD
503126X	OH	ASHTABULA	ANDOVER	002361	10	TR90	WOODWORTH RD
503127E	OH	ASHTABULA	ANDOVER	002617	1260	US 322	MEADVILLE RD
503128L	OH	ASHTABULA	ANDOVER	002792	60	TR 142	UNDERWOOD RD
503134P	OH	TRUMBULL		003987	120	TR 193	CORLAND HULL RD
503133H	OH	TRUMBULL	CORTLAND	003909	530	CR 192	BRADLEY-BROWNLEE
503132B	OH	TRUMBULL		003626	2050	SR 88	CHARGRIN FALLS
503136D	OH	TRUMBULL	KINSMAN	003504	120	TR 248	FISHER CORINTH RD
503135W	OH	TRUMBULL	KINSMAN	003335	280	TR 288	DAVIS PECK RD
503130M	OH	TRUMBULL	KINSMAN	003157	1180	SR 87	BLOOMFLD KINSMAN
503129T	OH	TRUMBULL	KINSMAN	003020	90	TR 286	WAKEFIELD CRK RD
503138S	OH	TRUMBULL		004162	2150	SR 305	SR 305
544732R	OH	TRUMBULL	BROOKFIELD	004442	550	TR 158	KINGS GRAVE RD
544731J	OH	TRUMBULL	BROOKFIELD	004522	30	TR 166	AMY BOIL RD
544729H	OH	TRUMBULL	BROOKFIELD	004712	2925	329	WARREN SHARON RD
544721D	OH	TRUMBULL	YOUNGSTOWN	005159	690	TR 10	MT. EVERT
544720W	OH	TRUMBULL	YOUNGSTOWN	005244	1012	CR 11B	BELL WICK RD
544719C	OH	TRUMBULL	YOUNGSTOWN	005301	960	CR 98	LEWIS-SEIFERT
544718V	OH	TRUMBULL	YOUNGSTOWN	005331	3438	SR 304	SR 304
544717N	OH	TRUMBULL	YOUNGSTOWN	005432	2165	CR 1088	LOGAN GATE RD
544716G	OH	MAHONING	YOUNGSTOWN	005607	7698		HUBBARD RD
544711X	OH	MAHONING	YOUNGSTOWN	005749	781	CITY	VALLEY ST

ROCHESTER TO YOUNGSTOWN
(public at-grade crossings)

Crossing	State	County	City	Milepost	ADT	Highway	Street
502530C	PA	LAWRENCE	WAMPUM	008162	820	BOROUGH	DARLINGTON
502529H	PA	LAWRENCE	WAMPUM	008121	1540	BOROUGH	CLYDE ST
503754D	PA	LAWRENCE	WAMPUM	008011	240	TWP 386	NEWPORT RD
503738U	PA	LAWRENCE	NEW CASTLE	007492	6400	SR 18	MONTGOMERY
503739B	PA	LAWRENCE	NEW CASTLE	000023	50	T 372	COVERT'S CROSSING
503741C	PA	LAWRENCE	NEW CASTLE	000150	1150	SR 551	RT 551
544754R	PA	LAWRENCE	HILLSVILLE	006792	380	TWP 324	CHURCH RD
544755X	OH	MAHONING	LOWELLVILLE	006530	3330	VILLAGE	E WASHINGTON ST
544756E	OH	MAHONING	LOWELLVILLE	006389	1230	CR196	LOWELLVILLE RD
544963Y	OH	MAHONING	STRUTHERS	006207	10640	SR616	BRIDGE ST

WHITE TO CLEVELAND
(public at-grade crossings)

Crossing	State	County	City Name	Milepost	ADT	Highway	Street
524226K	OH	CUYAHOGA	CLEVELAND	011651	002560	CITY ST	AETNA
524223P	OH	CUYAHOGA	CLEVELAND	011700	002680	CITY ST	BESSEMER
524190E	OH	CUYAHOGA	CLEVELAND	012166	003500	CITY ST	EAST 26TH ST

ALLIANCE TO WHITE
(public at-grade crossings)

Crossing	State	County	City Name	Milepost	ADT	Highway	Street
503008V	OH	STARK	ALLIANCE	006710	5150	CITY	PATTERSON
503010W	OH	STARK	ALLIANCE	006751	470	CITY	WALNUT
503011D	OH	STARK	ALLIANCE	006762	460	CITY	PARK AVE
503012K	OH	STARK	ALLIANCE	006763	620	CITY	KEYSTONE
503013S	OH	STARK	ALLIANCE	006774	4420	SR 225	UNION
503014Y	OH	STARK	ALLIANCE	006782	450	CITY	VINE ST
503015F	OH	STARK	ALLIANCE	006849	1240	CR18	GASKILL
503016M	OH	STARK	ALLIANCE	006869	1510	TR15	ROCKHILL
503018B	OH	STARK	ALLIANCE	007037	230	CR 16	FLORIDA AVE
503019H	OH	STARK	ALLIANCE	007078	500	TWP 12	GREENBOWER RD
503020C	OH	STARK	LIMAVILLE	007189	30	TWP 3	MAIN ST
503021J	OH	PORTAGE		007231	20	TWP 49	GERMAN CHURCH
503022R	OH	PORTAGE		007289	3160	SR 183	IRON ST.
503025L	OH	PORTAGE	ATWATER	007496	1350	CR 87	WATERLOO RD
503028G	OH	PORTAGE	ATWATER	007612	320	CR50	STROUP
503029N	OH	PORTAGE	ATWATER	007634	30	T-51	MOFF RD
503030H	OH	PORTAGE	ATWATER	007790	110	CH 116	WILKES RD
503031P	OH	PORTAGE	ATWATER	007900	270	CH 47	INDUSTRY RD
503568C	OH	PORTAGE	ROOTSTOWN	008129	360	TR110	HATTRICK RD
503566N	OH	PORTAGE	ROOTSTOWN	008172	360	CR31	NEW MILFORD
503565G	OH	PORTAGE	ROOTSTOWN	008185	380	TR99	LYNN RD
503564A	OH	PORTAGE	RAVENNA	008287	470	CR89	SANDYLAKE RD
503558W	OH	PORTAGE	RAVENNA	008477	940	CITY	LAKE ST
524356G	OH	SUMMIT	NORTHFIELD	010273	4140	CR 111	E HIGHLAND RD
503033D	OH	SUMMIT	TWINSBURG	010125	1140	CR 112	TWINSBURG
503034K	OH	SUMMIT	HUDSON	009970	950	CR 115	HINES HILL RD
503541T	OH	SUMMIT	HUDSON	009476	6390	CR106	STOW RD
	OH	SUMMIT	BEDFORD				W GRACE
	OH	SUMMIT	BEDFORD				W GLENDALE
	OH	SUMMIT	BEDFORD				MCCRACKEN RD

CP-181 TO CP-190
(public at-grade crossings)

There are no public at-grade crossings along this segment.

ASHTABULA TO CLOGGSVILLE
(public at-grade crossings)

Crossing	State	County	City	Milepost	ADT	Street
471979R		Ashtabula	Ashtabula	128.2	380	State Ave.
471980K		Ashtabula	Ashtabula	128.4	180	Dwight Ave.
		Ashtabula	Ashtabula			Main Ave.
471983F		Ashtabula	Ashtabula	128 9	4290	Park Ave.
471984M		Ashtabula	Ashtabula	129	20	Elm Ave.
471985U	OH	Ashtabula	Ashtabula	129 1	810	Gary Ave.
471986B	OH	Ashtabula	Ashtabula	129 2	1180	Jefferson Ave.
471988P	OH	Ashtabula	Ashtabula	129.4	2590	West 52nd St.
471989W	OH	Ashtabula	Ashtabula	129 5	8000	West Ave.
471990R	OH	Ashtabula	Ashtabula	129.7	1310	Nathan Ave.
471991X	OH	Ashtabula	Ashtabula	129 9	300	Samuel Ave.
471992E	OH	Ashtabula	Ashtabula	130 2	4330	Woodman Ave.
471993L	OH	Ashtabula	Ashtabula	131 3	960	Sanborn Rd.
471997N	OH	Ashtabula	Saybrook	133.1	4930	State Route 45
471998V	OH	Ashtabula	Saybrook	134	340	Depot Rd
472001J	OH	Ashtabula	Saybrook	134 7	170	Brown Rd.
472004E	OH	Ashtabula	Saybrook	136 8	740	Myers Rd
472005L	OH	Ashtabula	Geneva	137.9	2020	Centennial Rd
472007A	OH	Ashtabula	Geneva	138 2	2110	Sherman St
472008C	OH	Ashtabula	Geneva	138 4	7320	Broadway Ave (SR 534)
472009N	OH	Ashtabula	Geneva	138 6	1400	Eagle Ave.
472010H	OH	Ashtabula	Geneva	138 8	120	Chestnut St
472011P	OH	Ashtabula	Geneva	139 3	260	West St.
472012W	OH	Ashtabula	Geneva	140	230	Walter Main Rd
472013D	OH	Lake	Unionville	141 5	2810	County Line Rd
472015S	OH	Lake	Madison	143	510	Bates Rd.
472017F	OH	Lake	Madison	143 9	8810	Lake St (SR 528)
472018M	OH	Lake	Madison	145 2	890	Dayton Rd
472023J	OH	Lake	Perry	146 3	101	Wood Rd
472024R	OH	Lake	Perry	146 9	1120	Townline Rd.
472025X	OH	Lake	Perry	147 5	570	Davis Rd
472026E	OH	Lake	Perry	148.7	1190	Main St
472027L	OH	Lake	Perry	148 9	450	Maple St.
472028T	OH	Lake	Perry	149.7	1360	Shepard Rd.
472030U	OH	Lake	Perry	151.4	1250	Lane Rd
472031B	OH	Lake	Painesville	152.3	1090	Park Rd.
472032H	OH	Lake	Painesville	152.5	3590	Madison Ave
472033P	OH	Lake	Painesville	153.9	1830	Riverside Dr.
472035D	OH	Lake	Painesville	154 4	2320	Bank St.
472036K	OH	Lake	Painesville	154.5	2990	State St. (SR 4 & 86)
472039F	OH	Lake	Painesville	154 9	7580	Liberty St.
472040A	OH	Lake	Painesville	155.9	5980	Chestnut St
472044C	OH	Lake	Painesville	156 4	19260	Mentor Ave (U S 20)
472045J	OH	Lake	Painesville	156.9	5230	Jackson St.
472046R	OH	Lake	Mentor	158 6	6360	Heisley Rd

ASHTABULA TO CLOGGSVILLE
(public at-grade crossings)

472048E	OH	Lake	Mentor	159 4	5460	Hopkins Rd.
472263R	OH	Lake	Mentor	159.7	250	Patterson Dr.
472050F	OH	Lake	Mentor	160.3	2100	Station St.
472051M	OH	Lake	Mentor	160.4	870	Maple St.
472052U	OH	Lake	Mentor	160.5	2850	Hart St.
472055P	OH	Lake	Willoughby	164 2	4380	Pelton St.
472056W	OH	Lake	Willoughby	164.8	8570	Erie St.
472060L	OH	Lake	Willoughby	165.1	260	Church St.
472062A	OH	Lake	Willoughby			Belder Rd.
472064N	OH	Lake	Willowick	168	6164	E 305th/Rush Rd
472068R	OH	Lake	Wickliffe	169 5	7400	Lloyd Rd (SR 633)
472070S	OH	Lake	Wickliffe			Depot Rd.
472089J	OH	Cuyahoga	Euclid	173.4	4770	Chardon Rd
472093Y	OH	Cuyahoga	Cleveland	173.8	15430	Dille Rd.
472097B	OH	Cuyahoga	Cleveland	174.9	3770	Wayside Rd
472098H	OH	Cuyahoga	Cleveland	175	5310	London Rd

BEREA TO VERMILION
(public at-grade crossings)

Crossing	State	County	City	Milepost	ADT	Highway	Street
524047U	OH	Erie	Vermilion	022357	176	TR 143	Risden Rd.
524046M	OH	Erie	Vermilion	022256	430	TR 147	Coen Rd.
524045F	OH	Erie	Vermilion	022168	870	City St.	Adams Rd
524044Y	OH	Erie	Vermilion	022125	620	City St.	Decatur St.
524043S	OH	Erie	Vermilion	022118	340	City St.	Perry St.
524042K	OH	Erie	Vermilion	022114	310	City St.	Washington St.
524041D	OH	Erie	Vermilion	022106	2030	City St.	Grand St.
524040W	OH	Erie	Vermilion	022090	5630	SR 60	Division St. or Main St.
524037N	OH	Erie	Vermilion	022034	2100	City St.	River Rd. or Vermilion Rd.
523882R	OH	Lorain	Vermilion	021777	480	City St	Sunnyside Rd.
523879H	OH	Lorain	Amherst	021570	90	TWP	Cooper Foster Rd.
523878B	OH	Lorain	Amherst	021546	90	City St.	Crosse Rd.
523868V	OH	Lorain	Amherst	021220	950		Dewey Rd.
523866G	OH	Lorain	Amherst	021161	1540	TWP 39	Oberlin Rd.
523864T	OH	Lorain	Amherst	021025	2450	CR	West Ridge Rd.
523861X	OH	Lorain	Elyria	020942	2660	TWP	Murray Ridge Rd
523851S	OH	Lorain	Elyria	020595	5060	City St.	Olive St.
523850K	OH	Lorain	Elyria	020551	2650	City St.	Abbe Rd.
523848J	OH	Lorain	Elyria	020376	750	City St.	Race Rd.
523847C	OH	Lorain	North Ridgeville	020330	880	City St.	Maddock Rd.
523846V	OH	Lorain	North Ridgeville	020244	4170	SR 83	SR 83
523845N	OH	Lorain	North Ridgeville	020167	3120	City St.	Root Rd.
523844G	OH	Lorain	North Ridgeville	020136	1000	City St.	Chestnut Ridge
	OH	Cuyahoga	Olmsted Falls	019975			Bronson Rd.
	OH	Cuyahoga	Olmsted Falls	019855			Stearns Rd
	OH	Cuyahoga	Olmsted Falls	019750			Fitch Rd.
	OH	Cuyahoga	Olmsted Falls	019686			Mapleway
	OH	Cuyahoga	Olmsted Falls	019675			Brookside
523836P	OH	Cuyahoga	Olmsted Falls	019339	10700	SR 252	Columbia Rd (SR 252)
	OH	Cuyahoga	Berea	019610			Lewis Rd

CP-190 TO BEREA
(public at-grade crossings)

Crossing	State	County	City	Milepost	ADT	Highway	Street
523941R	OH	Cuyahoga	Berea	019357	4930	SR 237	Front St.
523940J	OH	Cuyahoga	Brook Park	019315	5060	City St.	Sheldon Rd.
523937B	OH	Cuyahoga	Brook Park	019254	7690	City St.	Eastland Rd.

CLOGGSVILLE TO CP-190
(public at-grade crossings)

There are no public at-grade crossings along this segment.

VERMILION TO CLOGGSVILLE
(public at-grade crossings)

Crossing	State	County	City	Milepost	ADT	Highway	Street
876686J	OH	Erie	Vermilion	220.9	100		Douglass St.
472306G	OH	Erie	Vermilion	220.6	6260		Water St.
472300R	OH	Lorain	Vermilion	218.7	3230		Overlook Rd.
472299Y	OH	Lorain	Vermilion	218.2	560		Woodside Rd.
472296D	OH	Lorain	Lorain	214.8	0		Beaver Park Rd.
472293H	OH	Lorain	Lorain	212.2	9660	SR 58	Leavitt Rd. (SR 58)
472292B	OH	Lorain	Lorain	211.3	11060		Oberlin Ave.
472291U	OH	Lorain	Lorain	210.9	3670		Washington St.
472290M	OH	Lorain	Lorain	210.7	650		Long St.
472289T	OH	Lorain	Lorain	210.6	3700		Ried Ave.
472286X	OH	Lorain	Lorain	209.9	6270		Colorado Ave.
472284J	OH	Lorain	Lorain	209.4	3483		Kansas Ave.
472283C	OH	Lorain	Lorain	208.9	3520		Missouri Ave.
472282V	OH	Lorain	Lorain	208.4	1660		Euclid Ave.
472281N	OH	Lorain	Lorain	208.1	1797		Root Rd.
472278F	OH	Lorain	Sheffield	207.2	2160		Lake Breeze Rd.
472277Y	OH	Lorain	Sheffield	206.1	2490		Harris Rd.
472269G	OH	Lorain	Avon Lake	204.4	5110		Miller Rd.
472268A	OH	Lorain	Avon Lake	203.7	4410		Moore Rd.
472258U	OH	Lorain	Avon Lake	202.3	6700	SR 83	Avon Center Rd. (SR 83)
472257M	OH	Lorain	Avon Lake	201.2	610		Jaycox Rd.
472256F	OH	Lorain	Avon Lake	200.7	610		Naigle Rd.
472252D	OH	Cuyahoga	Bay Village	199	5670		Bradley Rd.
472250P	OH	Cuyahoga	Bay Village	198.7	240		Bassett Rd.
472249V	OH	Cuyahoga	Bay Village	197.4	3110		Cahoun Rd.
472248N	OH	Cuyahoga	Bay Village	197.2	7630		Dover Center Rd.
472245T	OH	Cuyahoga	Bay Village	196.2	11320	SR 252	SR 252\Columbia Rd.
472241R	OH	Cuyahoga	Rocky River	193.8	2340		Elmwood Rd.
472240J	OH	Cuyahoga	Rocky River	193.6	4520		Wager Rd.
472239P	OH	Cuyahoga	Rocky River	193.3	960		Morrows St.
472237B	OH	Cuyahoga	Rocky River	192.9	2090		Linda St.
472230D	OH	Cuyahoga	Lakewood	191.8	2350		Webb Rd.
472219D	OH	Cuyahoga	Lakewood	191.6	1880		Granger Ave.
472218W	OH	Cuyahoga	Lakewood	191.6	1330		Bonnieview Ave.
472217P	OH	Cuyahoga	Lakewood	191.5	1150		Edwards Ave.
472216H	OH	Cuyahoga	Lakewood	191.4	960		Ethel Ave.
472215B	OH	Cuyahoga	Lakewood	191.4	670		Hall Ave.
472214U	OH	Cuyahoga	Lakewood	191.3	720		Westlake Ave.
472213M	OH	Cuyahoga	Lakewood	191.3	1070		Cranford Ave.
472212F	OH	Cuyahoga	Lakewood	191.2	1120		Brockley Ave.
472211Y	OH	Cuyahoga	Lakewood	191.1	1570		Summit Ave.
472210S	OH	Cuyahoga	Lakewood	191.1	1380		Lakeland Ave.
472209X	OH	Cuyahoga	Lakewood	190.9	1040		Andrews Ave.
472208R	OH	Cuyahoga	Lakewood	190.9	900		Gladys Ave.
472207J	OH	Cuyahoga	Lakewood	190.8	2440		Cook Ave.

VERMILION TO CLOGGSVILLE
(public at-grade crossings)

472206C	OH	Cuyahoga	Lakewood	190.7	3000		Warren Rd.
472205V	OH	Cuyahoga	Lakewood	190.7	1090		St.Charles Ave.
472204N	OH	Cuyahoga	Lakewood	190.6	4030		Belle Ave.
472203G	OH	Cuyahoga	Lakewood	190.5	1460		Marlowe Ave.
472202A	OH	Cuyahoga	Lakewood	190.4	1930		Manor Park
472201T	OH	Cuyahoga	Lakewood	190.2	5300		Bunts Rd.
472200L	OH	Cuyahoga	Lakewood	190.1	1990		Giel Ave.
472199U	OH	Cuyahoga	Lakewood	189.9	4080		Nicholson Ave.
472198M	OH	Cuyahoga	Lakewood	189.8	480		Thoreau Ave.
472197F	OH	Cuyahoga	Lakewood	189.6	2920		Cove Ave.
472196Y	OH	Cuyahoga	Lakewood	189.5	700		Beach Ave
472195S	OH	Cuyahoga	Lakewood	189.5	770		Fry Ave.
472194K	OH	Cuyahoga	Lakewood	189.3	2180		Hird Ave.
472192W	OH	Cuyahoga	Cleveland	189.3	15610		West 117 St.
472191P	OH	Cuyahoga	Cleveland	189.2	2570		West 116 St
472190H	OH	Cuyahoga	Cleveland	189.1	370		West 114 St
472189N	OH	Cuyahoga	Cleveland	189	750		West 112 St.
472188G	OH	Cuyahoga	Cleveland	188.9	1520		West 111 St
472187A	OH	Cuyahoga	Cleveland	188 8	5970		West 110 St.

ATTACHMENT B

AIR EMISSIONS

ATTACHMENT B - DETAILED AIR QUALITY ANALYSIS - <u>ORIGINAL NS OPERATING PLAN</u>

County	Line Segment From	To		HC Base	HC Post	HC Change	CO Base	CO Post	CO Change	NOx Base	NOx Post	NOx Change	SO2 Base	SO2 Post	SO2 Change	PM10 Base	PM10 Post	PM10 Change	Pb Base	Pb Post	Pb Change
Ashtabula																					
Ohio	Youngstown	Ashtabula		12.30	21.68	9.38	36.85	64.88	28.03	331.83	584.21	252.38	21.50	37.85	16.35	8.38	14.75	6.37	0.000703	0.001238	0.000535
	Ashtabula	Cleveland		3.01	9.42	6.41	9.01	28.20	19.19	81.11	253.95	172.84	5.26	16.45	11.19	2.05	6.41	4.36	0.000172	0.000538	0.000366
			County Total:	15.31	31.09	15.77	45.86	93.08	47.22	412.94	838.16	425.22	26.76	54.30	27.54	10.43	21.16	10.73	0.000875	0.001776	0.000901
Cuyahoga																					
Ohio	Ashtabula	Cleveland		3.55	11.13	7.58	10.64	33.33	22.69	95.85	300.12	204.27	6.21	19.45	13.24	2.42	7.58	5.16	0.000203	0.000636	0.000433
	Cleveland	Vermilion		4.56	11.38	6.82	13.67	34.08	20.41	123.09	306.93	183.84	7.98	19.89	11.91	3.11	7.75	4.64	0.000261	0.000650	0.000389
	Alliance	White		5.50	5.79	0.29	16.47	17.35	0.88	148.35	156.25	7.90	9.61	10.12	0.51	3.75	3.94	0.19	0.000314	0.000331	0.000017
	White	Cleveland		3.89	9.04	5.15	11.66	27.07	15.41	105.04	243.76	138.72	6.81	15.79	8.98	2.65	6.15	3.50	0.000223	0.000516	0.000293
	CP-161	CP-190		26.17	21.91	-4.26	78.38	65.63	-12.75	705.80	590.98	-114.82	45.73	38.29	-7.44	17.82	14.92	-2.90	0.001486	0.001242	-0.000244
	Cloggsville	CP-190		0.07	1.30	1.23	0.22	3.89	3.67	1.98	35.02	33.04	0.13	2.27	2.14	0.05	0.88	0.83	0.000004	0.000074	0.000070
	CP-190	Berea		5.10	4.27	-0.83	15.26	12.78	-2.48	137.45	115.09	-22.36	8.91	7.46	-1.45	3.47	2.91	-0.56	0.000291	0.000244	-0.000047
	Berea	Vermilion		13.08	9.15	-3.93	39.19	27.42	-11.77	352.90	246.88	-106.02	22.87	16.00	-6.87	8.91	6.23	-2.68	0.000748	0.000523	-0.000225
			County Total:	61.92	73.97	12.05	185.49	221.55	36.06	1670.46	1995.03	324.57	108.25	129.27	21.02	42.18	50.36	8.18	0.003530	0.004216	0.000686
Lake																					
Ohio	Ashtabula	Cleveland		7.11	22.26	15.15	21.29	66.66	45.37	191.70	600.24	408.54	12.42	32.89	20.47	4.84	15.15	10.31	0.000406	0.001272	0.000866
			County Total:	7.11	22.26	15.15	21.29	66.66	45.37	191.70	600.24	408.54	12.42	32.89	20.47	4.84	15.15	10.31	0.000406	0.001272	0.000866
Erie																					
Ohio	Cleveland	Vermilion		1.05	2.63	1.58	3.15	7.87	4.72	28.40	70.83	42.43	1.84	4.59	2.75	0.72	1.79	1.07	0.000060	0.000150	0.000090
	CP-161	CP-190		2.75	2.31	-0.44	8.25	6.91	-1.34	74.30	62.21	-12.09	4.81	4.03	-0.78	1.88	1.57	-0.31	0.000157	0.000132	-0.000025
	Berea	Vermilion		1.10	0.77	-0.33	3.30	2.31	-0.99	29.72	20.79	-8.93	1.93	1.35	-0.58	0.75	0.52	-0.23	0.000063	0.000044	-0.000019
	Vermilion Connection			0.00	0.16	0.16	0.00	0.48	0.48	0.00	4.29	4.29	0.00	0.29	0.29	0.00	0.11	0.11	0.000000	0.000009	0.000009
			County Total:	4.90	5.87	0.97	14.70	17.57	2.87	132.42	158.11	25.69	8.58	10.26	1.67	3.35	3.99	0.64	0.000280	0.000335	0.000055
Lorain																					
Ohio	Cleveland	Vermilion		7.37	18.38	11.01	22.08	55.06	32.98	196.83	495.81	298.98	12.88	32.12	19.24	5.02	12.52	7.50	0.000421	0.001051	0.000630
	CP-161	CP-190		28.93	24.22	-4.71	86.63	72.54	-14.09	780.10	653.19	-126.91	50.55	48.81	-1.74	19.70	16.49	-3.21	0.001653	0.001384	-0.000269
	Berea	Vermilion		27.68	19.37	-8.31	82.92	58.01	-24.91	746.67	522.34	-224.33	48.38	33.84	-14.54	18.85	13.19	-5.66	0.001582	0.001106	-0.000476
			County Total:	63.98	61.97	-2.01	191.63	185.61	-6.02	1723.60	1671.34	-52.26	111.81	114.77	2.96	43.57	42.20	-1.37	0.003656	0.003541	-0.000115
Lawrence																					
PA	Rochester	Youngstown		3.09	3.62	0.53	9.24	10.83	1.59	83.24	97.55	14.31	5.39	6.32	0.93	2.10	2.46	0.36	0.000176	0.000207	0.000031
	Rochester	Alliance		4.39	3.13	-1.26	13.14	9.37	-3.77	118.32	84.38	-33.94	7.67	5.47	-2.20	2.99	2.13	-0.86	0.000251	0.000179	-0.000072
			County Total:	7.48	6.75	-0.73	22.38	20.20	-2.18	201.56	181.93	-19.63	13.06	11.79	-1.27	5.09	4.59	-0.50	0.000427	0.000386	-0.000041
Mahoning																					
Ohio	Rochester	Youngstown		8.08	9.48	1.40	24.22	28.38	4.16	218.07	255.54	37.47	14.13	16.56	2.43	5.50	6.45	0.95	0.000462	0.000541	0.000079
	Youngstown	Ashtabula		1.70	2.99	1.29	5.08	8.95	3.87	45.77	80.58	34.81	2.97	5.22	2.25	1.16	2.03	0.87	0.000097	0.000171	0.000074
	Rochester	Alliance		11.47	8.18	-3.29	34.37	24.51	-9.86	309.45	220.69	-88.76	20.08	14.30	-5.78	7.81	5.57	-2.24	0.000659	0.000469	-0.000190
			County Total:	21.25	20.65	-0.60	63.67	61.84	-1.83	573.29	556.81	-16.48	37.18	36.08	-1.10	14.47	14.05	-0.42	0.001218	0.001180	-0.000038
Beaver																					
PA	Rochester	Youngstown		5.76	6.76	1.00	17.32	20.29	2.97	155.93	182.73	26.80	10.10	11.84	1.74	3.94	4.61	0.67	0.000330	0.000387	0.000057
	Rochester	Alliance		20.25	14.44	-5.81	60.64	43.25	-17.39	546.09	389.44	-156.65	35.38	25.23	-10.15	13.79	9.83	-3.96	0.001157	0.000825	-0.000332
			County Total:	26.01	21.20	-4.81	77.96	63.54	-14.42	702.02	572.17	-129.85	45.48	37.07	-8.41	17.73	14.44	-3.29	0.001487	0.001212	-0.000275
Trumbull																					
Ohio	Youngstown	Ashtabula		11.03	19.42	8.39	33.04	58.17	25.13	297.50	523.77	226.27	19.28	33.94	14.66	7.51	13.22	5.71	0.000630	0.001110	0.000480
			County Total:	11.03	19.42	8.39	33.04	58.17	25.13	297.50	523.77	226.27	19.28	33.94	14.66	7.51	13.22	5.71	0.000630	0.001110	0.000480
Portage																					
Ohio	Alliance	White		17.28	18.21	0.93	51.78	54.53	2.75	466.24	491.06	24.82	30.21	31.82	1.61	11.77	12.40	0.63	0.000988	0.001040	0.000052
			County Total:	17.28	18.21	0.93	51.78	54.53	2.75	466.24	491.06	24.82	30.21	31.82	1.61	11.77	12.40	0.63	0.000988	0.001040	0.000052
Stark																					
Ohio	Alliance	White		3.93	4.14	0.21	11.77	12.39	0.62	105.96	111.60	5.64	6.87	7.23	0.36	2.68	2.82	0.14	0.000224	0.000236	0.000012
	Rochester	Alliance		0.90	0.64	-0.26	2.70	1.92	-0.78	24.27	17.31	-6.96	1.57	1.12	-0.45	0.61	0.44	-0.17	0.000051	0.000037	-0.000014
			County Total:	4.83	4.78	-0.05	14.47	14.31	-0.16	130.23	128.91	-1.32	8.44	8.35	-0.09	3.29	3.26	-0.03	0.000275	0.000273	-0.000002
Summit																					
Ohio	Alliance	White		9.43	9.93	0.50	28.24	29.74	1.50	254.31	267.85	13.54	16.40	17.30	0.90	6.42	6.76	0.34	0.000539	0.000567	0.000028
			County Total:	9.43	9.93	0.50	28.24	29.74	1.50	254.31	267.85	13.54	16.40	17.30	0.90	6.42	6.76	0.34	0.000539	0.000567	0.000028
Columbiana																					
Ohio	Rochester	Alliance		27.11	19.33	-7.78	81.20	57.90	-23.30	731.16	521.42	-209.74	47.38	33.79	-13.59	18.46	13.17	-5.29	0.001549	0.001105	-0.000444
			County Total:	27.11	19.33	-7.78	81.20	57.90	-23.30	731.16	521.42	-209.74	47.38	33.79	-13.59	18.46	13.17	-5.29	0.001549	0.001105	-0.000444
			All County Total:	278.92	316.29	37.37	835.41	947.29	111.88	7522.86	8530.16	1007.30	467.46	552.71	85.25	189.92	216.37	26.45	0.015936	0.018072	0.002136

ATTACHMENT B - DETAILED AIR QUALITY ANALYSIS - CLOGGSVILLE CONNECTION ALTERNATIVE MITIGATION PROPOSAL

County	Line Segment From	To		HC Base	HC Post	HC Change	CO Base	CO Post	CO Change	NOx Base	NOx Post	NOx Change	SO2 Base	SO2 Post	SO2 Change	PM10 Base	PM10 Post	PM10 Change	Pb Base	Pb Post	Pb Change
Ashtabula																					
Ohio	Youngstown	Ashtabula		12.30	13.88	1.58	36.85	41.52	4.67	331.83	373.88	42.05	21.50	24.23	2.73	8.38	9.44	1.06	0.000703	0.000782	0.000080
	Ashtabula	Cleveland		3.01	6.46	3.45	9.01	19.34	10.33	81.11	174.17	93.06	5.29	11.29	6.00	2.05	4.40	2.35	0.000172	0.000369	0.000197
			County Total:	15.31	20.32	5.01	45.86	60.86	15.00	412.94	548.05	135.12	26.79	35.52	8.73	10.43	13.84	3.41	0.000875	0.001151	[illegible]
Cuyahoga																					
Ohio	Ashtabula	Cleveland		3.55	7.63	4.08	10.64	22.86	12.22	95.95	205.84	109.89	6.21	13.34	7.13	2.42	5.20	2.78	0.000203	0.000436	0.000233
	Cleveland	Vermilion		4.56	5.01	0.45	13.67	15.01	1.34	123.09	135.13	12.04	7.98	8.76	0.78	3.11	3.41	0.30	0.000261	0.000286	0.000025
	Alliance	White		5.50	7.60	2.10	16.47	22.99	6.52	148.35	207.01	58.66	9.61	13.41	3.80	3.75	5.23	1.48	0.000314	0.000438	0.000125
	White	Cleveland		3.89	12.00	8.11	11.66	35.93	24.27	105.04	323.53	218.49	6.81	20.96	14.15	2.65	8.17	5.52	0.000223	[illegible]	0.000462
	CP-181	CP-190		26.17	27.02	0.85	78.38	80.93	2.55	706.80	729.77	22.97	45.73	47.22	1.49	17.82	18.40	0.58	0.001499	0.001544	0.000048
	Cloggsville	CP-190		0.37	3.10	3.03	0.22	9.29	9.08	1.99	83.59	81.61	0.13	5.42	5.29	0.06	2.11	2.05	0.000004	0.000177	0.000173
	CP-190	Berea		5.10	6.09	0.99	15.26	18.21	2.95	137.45	163.99	26.53	8.91	10.63	1.72	3.47	4.14	0.67	0.000291	0.000347	0.000056
	Berea	Vermilion		13.08	13.79	0.71	39.19	41.31	2.12	352.90	372.04	19.14	22.87	24.11	1.24	8.91	9.39	0.48	0.000748	0.000789	0.000040
			County Total:	61.62	82.31	20.30	185.40	246.62	[illegible]	1670.40	2210.89	540.43	108.26	143.86	35.60	42.16	[illegible]	13.87	[illegible]	[illegible]	[illegible]
Lake																					
Ohio	Ashtabula	Cleveland		7.11	15.29	8.15	21.29	45.72	24.43	191.70	411.66	219.96	12.42	57.27	44.85	4.84	10.39	5.55	0.000409	0.000872	0.000466
			County Total:	7.11	15.29	8.15	21.29	45.72	24.43	191.70	411.66	219.96	12.42	57.27	44.85	4.84	10.39	5.55	0.000409	0.000872	0.000466
Erie																					
Ohio	Cleveland	Vermilion		1.05	1.16	0.11	3.15	3.46	0.31	28.40	31.16	2.76	1.84	2.02	0.18	0.72	0.79	0.07	[illegible]	[illegible]	[illegible]
	CP-181	CP-190		2.75	2.84	0.09	8.25	8.52	0.27	74.30	76.71	2.41	4.81	4.97	0.16	1.88	1.94	0.06	0.000157	0.000163	[illegible]
	Berea	Vermilion		1.10	1.16	0.06	3.30	3.48	0.18	29.72	31.33	1.61	1.93	2.03	0.10	0.75	0.79	0.04	0.000063	[illegible]	[illegible]
	Vermilion Connection			0.00	0.31	0.31	0.00	0.92	0.92	0.00	8.27	8.27	0.00	0.54	0.54	0.00	0.21	0.21	0.000000	0.000018	0.000018
			County Total:	4.90	5.47	0.57	14.70	16.39	1.69	132.42	147.49	15.07	8.59	9.59	0.98	3.35	3.73	0.38	[illegible]	[illegible]	[illegible]
Lorain																					
Ohio	Cleveland	Vermilion		7.37	8.09	0.72	22.08	24.24	2.16	198.83	218.29	19.46	12.88	15.52	2.64	5.02	5.51	0.49	0.000421	0.000463	0.000042
	CP-181	CP-190		28.93	29.87	0.94	86.63	89.45	2.82	780.10	805.40	25.30	50.55	53.90	3.35	19.70	20.34	0.64	0.001653	0.001707	0.000054
	Berea	Vermilion		27.68	29.19	1.51	82.92	87.41	4.49	746.67	787.16	40.49	48.38	53.78	5.40	18.85	19.88	1.03	0.001582	0.001668	[illegible]
			County Total:	63.98	67.15	3.17	191.63	201.10	9.47	1725.60	1810.83	85.33	111.81	123.20	11.39	43.57	45.73	2.16	[illegible]	[illegible]	[illegible]
Lawrence																					
PA	Rochester	Youngstown		3.09	1.71	-1.38	9.24	5.11	-4.13	83.24	46.06	-37.18	5.39	2.98	-2.41	2.10	1.16	-0.94	0.000176	0.000098	-0.000078
	Rochester	Alliance		4.39	4.18	-0.21	13.14	12.51	-0.63	118.32	112.66	-5.66	7.67	6.96	-0.71	2.99	2.84	-0.15	0.000251	0.000239	-0.000012
			County Total:	7.48	5.89	-1.59	22.38	17.62	-4.76	201.56	158.72	-42.84	13.06	9.94	-3.12	5.09	4.00	-1.09	0.000427	0.000337	[illegible]
Mahoning																					
Ohio	Rochester	Youngstown		8.08	4.47	-3.61	24.22	13.40	-10.82	218.07	120.65	-97.42	14.13	7.82	-6.31	5.50	3.09	-2.46	0.000462	0.000256	-0.000206
	Youngstown	Ashtabula		1.70	1.91	0.21	5.08	5.73	0.65	45.77	51.57	5.80	2.97	3.34	0.37	1.16	1.30	0.14	0.000097	0.000109	0.000012
	Rochester	Alliance		11.47	10.92	-0.55	34.37	32.72	-1.65	309.45	294.66	-14.79	20.05	19.09	-0.96	7.81	7.44	-0.37	0.000656	0.000624	-0.000032
			County Total:	21.25	17.30	-3.95	63.67	51.85	-11.82	573.29	466.88	-106.41	37.15	30.25	-6.90	14.47	11.79	-2.68	0.001215	[illegible]	[illegible]
Beaver																					
PA	Rochester	Youngstown		5.78	3.20	-2.58	17.32	9.58	-7.74	155.93	86.27	-69.66	10.10	3.09	-7.01	3.94	2.18	-1.76	0.000330	0.000183	-0.000147
	Rochester	Alliance		20.25	19.28	-0.97	60.64	57.75	-2.89	546.09	519.99	-26.10	35.38	33.69	-1.69	13.79	13.13	-0.66	0.001157	0.001102	[illegible]
			County Total:	26.03	22.48	-3.55	77.96	67.33	-10.63	702.02	606.26	-95.76	45.48	36.78	-8.70	17.73	15.31	-2.42	0.001487	0.001285	[illegible]
Trumbull																					
Ohio	Youngstown	Ashtabula		11.03	12.43	1.40	33.04	37.23	4.19	297.50	335.21	37.71	19.29	24.49	5.20	7.51	8.47	0.96	0.000630	0.000710	0.000080
			County Total:	11.03	12.43	1.40	33.04	37.23	4.19	297.50	335.21	37.71	19.29	24.49	5.20	7.51	8.47	0.96	0.000630	0.000710	[illegible]
Portage																					
Ohio	Alliance	White		17.28	24.12	6.84	51.78	72.25	20.47	466.24	650.61	184.37	30.21	42.15	11.94	11.77	16.43	4.66	0.000988	0.001378	[illegible]
			County Total:	17.28	24.12	6.84	51.78	72.25	20.47	466.24	650.61	184.37	30.21	42.15	11.94	11.77	16.43	4.66	[illegible]	0.001378	[illegible]
Stark																					
Ohio	Alliance	White		3.93	5.48	1.55	11.77	16.42	4.65	105.96	147.87	41.91	6.87	13.36	6.49	2.68	3.73	1.05	0.000224	0.000313	[illegible]
	Rochester	Alliance		0.90	0.86	-0.04	2.70	2.57	-0.13	24.27	23.11	-1.16	1.57	1.50	-0.07	0.61	0.58	-0.03	0.000051	0.000049	[illegible]
			County Total:	4.83	6.34	1.51	14.47	18.99	4.52	130.23	170.98	40.75	8.44	14.86	6.42	3.29	4.31	1.02	0.000275	[illegible]	[illegible]
Summit																					
Ohio	Alliance	White		9.43	13.16	3.73	28.24	39.41	11.17	254.31	354.88	100.57	16.48	22.99	6.51	6.42	8.96	2.54	0.000539	0.000752	0.000213
			County Total:	9.43	13.16	3.73	28.24	39.41	11.17	254.31	354.88	100.57	16.48	22.99	6.51	6.42	8.96	2.54	0.000539	0.000752	0.000213
Columbiana																					
Ohio	Rochester	Alliance		27.11	25.81	-1.30	81.20	77.31	-3.89	731.16	696.20	-34.96	47.38	45.11	-2.27	18.48	17.59	-0.89	0.001549	0.001475	-0.000074
			County Total:	27.11	25.81	-1.30	81.20	77.31	-3.89	731.16	696.20	-34.96	47.38	45.11	-2.27	18.48	17.59	-0.89	0.001549	0.001475	-0.000074
			All County Total:	278.92	319.35	40.43	836.41	956.49	121.08	7522.80	8613.00	1090.17	487.48	558.08	70.62	189.92	217.47	27.55	0.015936	0.018240	0.002310

PART III

CLOGGSVILLE CONNECTION CONSTRUCTION

PART III - CLOGGSVILLE CONNECTION CONSTRUCTION

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

PART III - CLOGGSVILLE CONNECTION CONSTRUCTION

1.0 PROJECT DESCRIPTION

This part of the NS mitigation proposal for Greater Cleveland and vicinity provides an analysis of the potential environmental impacts associated with the proposed construction and improvements to upgrade existing rail lines and facilities between Cloggsville and CP-190 in order to create a new main line route between those two points. The project area is located in the western part of the City of Cleveland and in the City of Brooklyn in Cuyahoga County, Ohio (Figure III-1A and B). This part of the mitigation proposal consists of four sections. This Section 1 contains a description of the proposed construction. Section 2 contains a description of the existing environment in the proposed construction project area. Section 3 contains a description of the potential environmental impacts related to the proposed construction. Section 4 lists the references used for this part of the mitigation proposal.

The proposed construction and improvements addressed in this Part III are described herein as the "Cloggsville Connection." It would involve the development, through construction and upgrades, of a new main line route between the existing Conrail main line (DEIS segment number N-293) and the existing NS Nickel Plate rail line (DEIS segment number N-080).[1] This new main line route would be between Cloggsville and CP-190, and would consist of a double-track line. The proposed main line route would allow for 40 mile per hour through train movements between the Nickel Plate main line and the Conrail main line. Train traffic on the Nickel Plate moving west via Ashtabula and Cleveland could be rerouted onto the Cloggsville Connection route at Cloggsville, proceed southwest to CP-190 via CP-Short, then connect to the Conrail mainline at CP-190 and travel southwest to Berea, and then continue west to Vermilion (and the reverse). The Cloggsville Connection would allow NS trains traveling between Cloggsville and Vermilion to bypass the Nickel Plate Line through the Edgewater-Cudell, Ohio City and Detroit Shoreway neighborhoods in Cleveland and the western suburbs of Lakewood, Rocky River, Bay Village and Lorain.

Virtually all of the proposed new main line routing between Cloggsville and CP-190 would involve construction and upgrades within the existing Flats Industrial Track (DEIS segment

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[1]Another essential component of the revised Cloggsville Connection mitigation proposal construction project would involve the construction of a double connection at Vermilion (instead of the single connection proposed in NS' original Operating Plan). The Vermilion double connection construction project is addressed separately in Part IV of this report.

AD-A-67

Legend

Upgraded or New Rail Line Within Existing Right-of-Way

Realigned Connection

N

Scale 1" = 2,000'

Burns & McDonnell

Figure III-1A
GENERAL LOCATION OF THE PROPOSED CONSTRUCTION CLEVELAND, CUYAHOGA COUNTY, OHIO

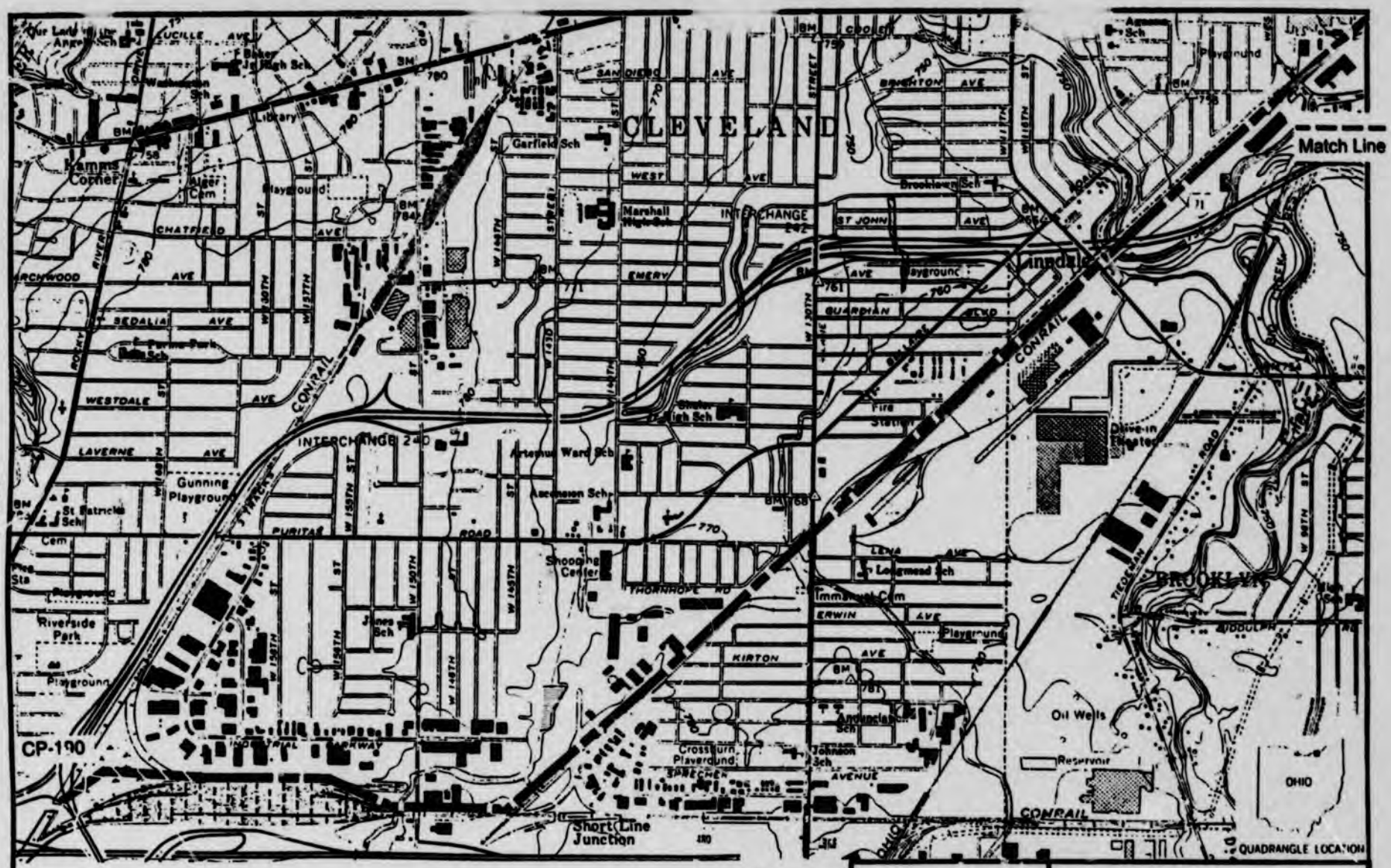


Figure III-1B
GENERAL LOCATION OF THE PROPOSED CONSTRUCTION
CLEVELAND,
CUYAHOGA COUNTY, OHIO

AD-A-68

number N-074) right-of-way, allocated to NS post-Transaction, and within other railroad property and right-of-way. Only approximately 2.7 acres of additional property would need to be acquired for this proposed construction project.

At Cloggsville, on the northeastern end of the proposed new main line routing, realignment and reconstruction of the existing connection between the NS Nickel Plate and the Cleveland Belt line would be required (Figure III-2). This site is in an urban area bordered on the north by the existing Nickel Plate main line (N-080) and east/west-oriented railroad communication lines; on the south by the Metalcrete Manufacturing Company building, the foundation of the former Fosters City Foundry, east/west-oriented electric power lines and Train Avenue; on the east by the West 25th Street overpass; and on the west by the existing Flats Industrial Track (N-074). The proposed connection realignment would diverge from the existing east/west-oriented Nickel Plate line, curve toward the southwest and connect with the existing northeast/southwest-oriented Flats Industrial Track. This realignment would be southwest of the existing connection between the Nickel Plate and the Flats Industrial track. The realignment would require the acquisition of approximately 2.7 acres for new railroad right-of-way and for the construction of a new Train Avenue railroad bridge. There would be a new double-track bridge constructed over Train Avenue with a new double track approach ramp constructed as well.

The existing Flats Industrial Railroad trackage from "Knob" to Cloggsville would become redundant under the proposal. In order to maintain efficient interchange with the Flats Industrial Railroad, a new 30 car-length connecting track would be constructed at Cloggsville. Existing bridges over Clark and West 65th Streets would be either rehabilitated or replaced, depending on their condition. Unrestricted clearance would be provided at the overhead bridge at Dennison Avenue.

Additional construction at the Knob would be required to install a double No. 20 crossover and No. 15 switches to supply operational flexibility in obtaining access to the Cleveland Belt Line and the Campbell Road Yard.

At CP-Short, the existing track layout would be reconfigured to allow the addition of the new double main track. The reconfiguration would maintain access to Parma (via the CSX Short Line) and provide sufficient pullback capability for switching operations at Rockport Yard. The existing rail crossing at CP-Short would be removed, providing greater alignment flexibility for the main line tracks.

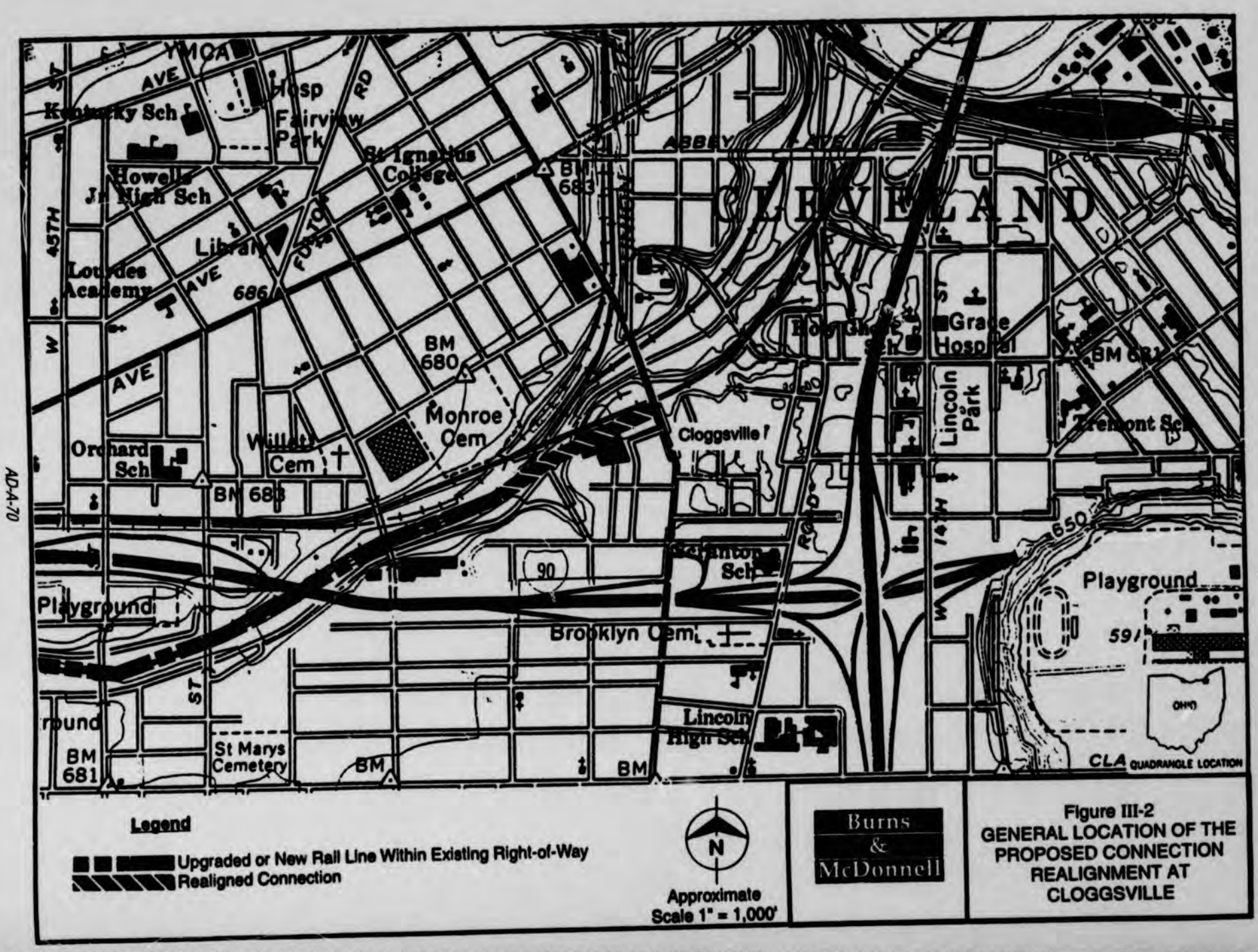


Figure III-2
GENERAL LOCATION OF THE PROPOSED CONNECTION REALIGNMENT AT CLOGGSVILLE

At Rockport Yard, the No. 3 main track would be upgraded to Norfolk Southern main line standards. The No. 3 main track is currently utilized as a yard bypass/runner and is not used for switching operations. A second main track would be constructed parallel to the No. 3 main track along the north side of Rockport Yard. Power switches and a crossover would be added to provide Yard access from the east leg of the wye. A new double-track roadbed would be constructed from the east end of the wye to CP-190. This would tie into the existing Conrail Chicago Line east of the existing control point. The new roadbed would pass through an undeveloped area below the I-71/I-480 highway interchange, which area is presently owned by Conrail and the State of Ohio. Construction of an additional single track span over W. 150th Street may also be required. The culvert that transports creek water under Rockport Yard west of W. 150th Street would be extended northward as required.

Finally, at CP-190 the existing control point would be reconfigured to provide unrestricted operation to and from the new double-track main line, the Conrail Chicago Line, Rockport Yard and the Ford Assembly Yard. Figure III-3 depicts areas of construction in the vicinity of Rockport Yard and CP-190.

Construction of the proposed project may require relocation of some electric power line structures.

NS' construction specifications and procedures meet or exceed the practices recommended by the American Railway Engineering Association (AREA). The entire length of the proposed connection would involve either new construction or upgrading existing track. Recycled rail may be used where practicable. New ties, subgrade, subballast, and ballast materials would be used for the roadbed. A typical cross-section is provided in Figure III-4, and the design specifications for the project are set out in Figure III-5 below.

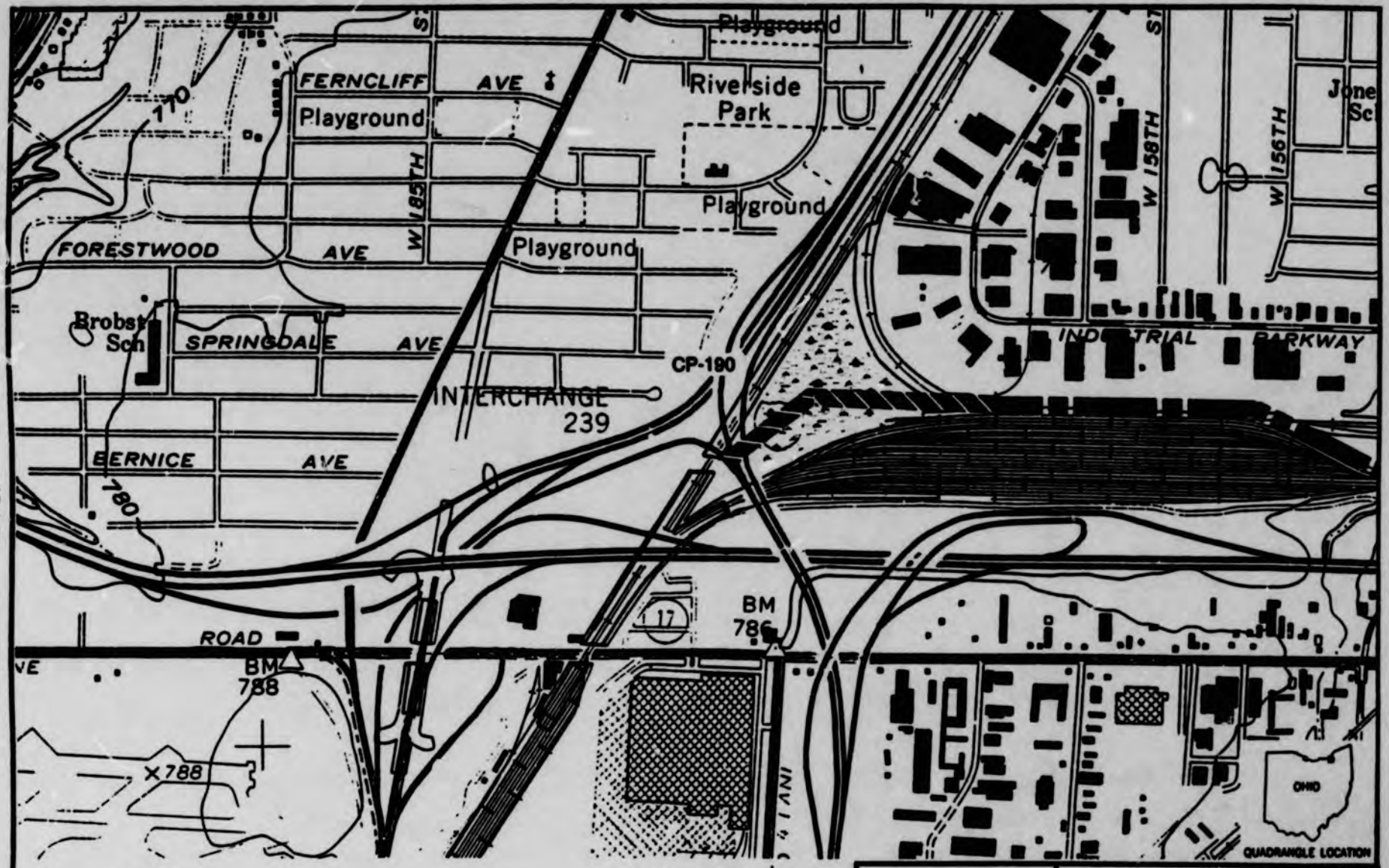
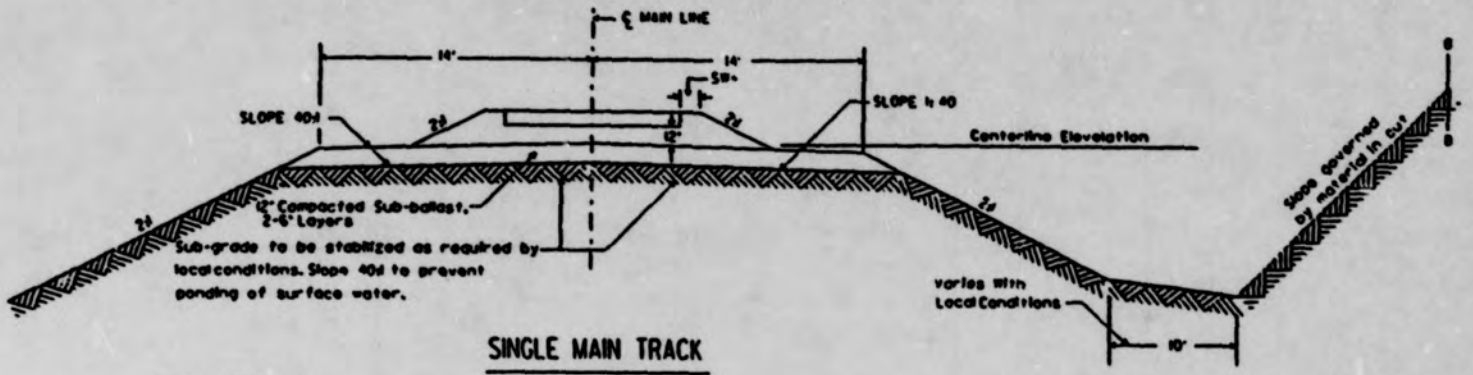


Figure III-3
GENERAL LOCATION OF THE PROPOSED CONNECTION REALIGNMENT AT CP-190

AD-A-72

TYPICAL ROADBED SECTION



SINGLE MAIN TRACK

FILL SECTION

CUT SECTION

SHOULDER WIDTH (SW*)

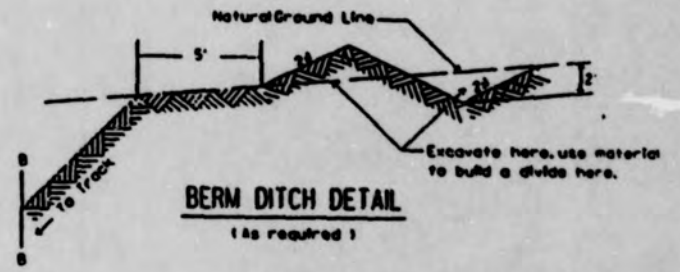
BALLAST WIDTH FROM END OF TIE TO EDGE EDGE OF SLOPE

	Jointed Rail	Welded Rail
SW (Inside of Curve)	0"	6"
SW (Outside of Curve)	6"	12"
SW (Tangent both sides)	0"	6"

(1) Sub-grade may be stabilized with lime, lime-fly ash, cement or stone.

(2) Tamping of ballast must not disturb compacted sub-ballast.

(3) Top of sub-grade is to be crowned.



BERM DITCH DETAIL

(As required)

SOURCE: Typical Roadbed Section, Norfolk Southern.

Burns & McDonnell

Figure III-4
TYPICAL CROSS-SECTION

AD-A-73

Figure III-5
Design Specifications for the Proposed Cloggsville to CP-190 Routing

Maximum train speed	Would vary at different sections of the line segment based on the final design
Maximum curvature	4 degrees, 0.0 minutes
Maximum grade	0.60 percent
Minimum weight of rail	136 pounds per yard
Tie lengths	8 feet, 6 inches
Grade of ties	4 and 5
Ties per mile	3,168 (20" on center)
Ballast depth	12 inches
Minimum subballast depth	12 inches
Minimum subgrade width	32 feet
Minimum depth of ditches	1 foot, 0 inches
Maximum side slopes	2 horizontal : 1 vertical
Maximum cut	3 feet
Maximum fill	3 feet

The topography along the proposed construction area is generally level. Only minor grading would be required to prepare the roadbed outside of the existing right-of-way. Fill would be required to construct the railbed for the new connection realignments at Cloggsville and west of Rockport Yard. Grading activities typically consist of:

- removal and disposal of vegetative and non-vegetative debris
- excavation and compaction of existing material to achieve desired subgrade elevation in cut sections
- placement and compaction of borrow material as required to achieve desired subgrade elevation in fill sections
- placement of compacted subballast layer upon finished subgrade

- recontouring of property and ditches as required to ensure drainage, and
- seeding and mulching of all areas in which existing ground is disturbed

The width of the new right-of-way required for the new main line and realignments would be approximately 40 feet. The proposed new or upgraded track would be parallel to existing rail lines within the Flats Industrial Track right-of-way and spaced at a perpendicular distance of 15 feet from the centerline of the existing adjacent rail line to the centerline of the subject rail line. This line would parallel existing Flats Industrial Track rail lines until it would diverge from the existing right-of-way north of Rockport Yard to connect with the Chicago main line approximately 1,500 feet west of Rockport Yard.

The exact labor force required and the duration of construction have not been determined, but the project is expected to require 10 to 15 people, and take up to 18 to 24 months to complete. It is expected that the work would be done during normal working hours. Borrow material for the project would be obtained from local sources and hauled to the construction site by rail or truck. It is planned that construction activities would be performed either by qualified contractors working for NS or by NS employees. The project would be advertised in recognized trade journals and bids solicited in accordance with NS' Corporate Standard Procedures.

Portions of the track and signal work would be performed by NS' existing Maintenance of Way and Structures (MW&S) and Signal and Electrical Department maintenance and construction crews. No new NS positions are anticipated to be created specifically for this project.

2.0 EXISTING ENVIRONMENT

This section provides a description of the existing environment of the proposed project site and surrounding vicinity. Information regarding the natural and human resources within and adjacent to the project area is included in this chapter. This narrative is based on literature review, field reconnaissance, and consultations with Federal, state, and local agencies on other projects associated with the Conrail Transaction in the vicinity of the proposed project.

2.1 Land Use

2.1.1 Existing Land Use

The proposed project area is within the Cities of Cleveland and Brooklyn in Cuyahoga County, Ohio. Land around the proposed construction site in Cleveland is zoned as General Industrial. Short portions of the existing rail line have adjacent residential areas. The north end of the project site, the area for the realignment of the Cloggsville Connection, is bordered on the north by the existing Nickel Plate main line and east/west-oriented railroad communication lines; on the south by the Metalcrete Manufacturing Company building, the foundation of the former Fosters City Foundry, east/west-oriented electric power lines and Train Avenue; on the east by West 25th Street overpass; and on the west by the existing Flats Industrial Track. Small areas west of the former Fosters City Foundry foundation contain vegetation characteristic of disturbed areas. The middle section of the proposed double main line connections between Train Avenue and Rockport Yard, the new Rockport Yard Bypass and the reconfiguration of the connection at CP-190 would be constructed in existing right-of-way. The south end of the proposed project site is bordered on the east by Rockport Yard and on the west by the Conrail main line. A potential wetland on existing railroad property is west of Rockport Yard and east of the Conrail main line.

2.1.2 Physiography

The topography of the proposed project area slopes from the southwest at an elevation of approximately 780 feet above mean sea level to the northeast at an elevation of 650 feet above mean sea level (USGS, 1973). A slight depression exists between Rockport Yard and CP-190. The general drainage pattern for Cuyahoga County is from south to north. Cuyahoga County is cold and snowy in winter and warm in summer. Northern areas nearest the lake are markedly cooler than the rest of the county in summer. Average daily minimum temperatures are commonly 22 degrees Fahrenheit in winter and average daily maximum temperatures are

commonly 81 degrees Fahrenheit in summer. July is the warmest month and January is the coolest. Precipitation is highest in June and lowest in February. The average annual precipitation is 35.40 inches (SCS, Cuyahoga County, 1980).

2.1.3 Soils

All of the proposed construction site is within areas of previously disturbed soils. The proposed project would cross six soil types -- Urban land, Urban land oshtemo complex undulating, udorthents loamy, Urban land elnora complex nearly level, Mitiwanga urban land complex undulating, and Mahoning silt loam. None of these soils are considered prime farmland or hydric soils. However, the Mahoning silt loam could have hydric components where depressions and flats occur (SCS, Cuyahoga, 1980).

2.1.4 Coastal Zone

None of the proposed project area is within a coastal zone.

2.2 Water Resources

2.2.1 Groundwater

Surficial aquifers are the principle sources of potable water in the northern half of Cuyahoga County, Ohio. These aquifers vary in thickness and consist of coarse gravel and sand. Wells along streams and rivers have a depth between 25 and 200 feet and will yield 100 to 500 gallons per minute (USGS, Groundwater Atlas of the U.S., #10, 1995). In the vicinity of the proposed construction site, ground water generally flows from southern recharge areas toward northern discharge areas.

2.2.2 Surface Water

Surface water in Cuyahoga County generally drains from south to north. No surface water resources are present within 500 feet of the proposed construction site. The closest surface water resource in the project vicinity is the Cuyahoga River, which is 3,500 feet northeast of the proposed construction site.

The National Wetland Inventory (NWI) map of Lakewood, Ohio was used to identify potential wetlands in the project area. According to the NWI map, there are no wetlands in the

project area. The soils crossed by the proposed construction are not classified as hydric soils; however, the Mahoning silt loam could have hydric components where depressions and flats occur (SCS, Cuyahoga County, 1980). Potential wetlands were noted during the site visit in the area of the CP-190 connection realignment in railroad right-of-way. The primary soil type at CP-190, where a depression and a potential wetland occurs, is Mahoning silt loam.

Federal Emergency Management Agency (FEMA) maps for the area show that the proposed project area is not within the 100-year floodplain.

2.3 Biological Resources

2.3.1 Vegetation

Vegetation in the proposed project area is typical of disturbed areas in northern Ohio. Specific species of vegetation identified in the project area include eastern cottonwood (*Populus deltoides*) catalpa (*Caltalpa speciosa*), elm (*Ulmus spp*), trumpet honeysuckle (*Lonicera sempervirens*), goldenrod (*Salidago spp*), common ragweed (*Ambrosia artemisiifolia*), Queen Anne's Lace (*Daucus carota*), redtop (*Agrostis alba*), Timothy (*Pheleum pratense*), Kentucky bluegrass (*Poa pratensis*), pokeweed (*Phytolacca americana*), and sedges.

2.3.2 Wildlife

Wildlife habitat found on and adjacent to the proposed construction site is limited to narrow strips of deciduous trees and shrubs adjacent to the existing rail right-of-way. This area provides suitable habitat for a variety of insects. small birds, and small mammals. Wildlife species that were identified during a site visit included the northern cardinal (*Cardinalis cardinalis*), blue jay (*Cyanocitta cristata*), American robin (*Turdis migratorius*), European starling (*Sturnus vulgaris*), field sparrow (*Spizella pusilla*), mourning dove (*Zenaida macroura*), rock dove (*Columba livia)*, fox squirrel (*Sciurius niger*) and eastern cottontail (*Sylvilagus floridanus*). Additional wildlife species that are expected to be found in this urban setting include the house mouse (*Mus musculus*) and deer mouse (*Peromyscus maniculatus*), common sulfur butterfly (*Colias philodice*), and the golden northern bumble bee (*Bombus fervidus*).

2.3.3 Threatened and Endangered Species

The U.S. Fish and Wildlife Services (USFWS) and the Ohio Department of Natural Resources (DNR) were contacted regarding threatened and endangered species in the area of the

proposed rail line construction at Cleveland. The USFWS responded that the proposed project is within the range of the Indiana bat (*Myotis sodalis*), peregrine falcon (*Falco peregrinus*) and piping plover (*Charadrius melodus*), Federally listed endangered species. The USFWS also stated that the type of habitat in the proposed project area is not typically associated with these species. The Ohio DNR stated that it did not anticipate any significant, adverse environmental impacts to result from the construction of the proposed project.

2.3.4 Parks, Forests, Preserves, Refuges and Sanctuaries

Thrush Park is within 1,000 feet of the proposed construction site between West 105th Street and West 107th Street. It contains three ball diamonds, two basketball courts, playground equipment, and a large open field. No other parks, forests, preserves, refuges or sanctuaries are located within 1,000 feet of the construction site.

2.4 Air Quality

According to 40 CFR 81, Cuyahoga County is classified as nonattainment (moderate) for PM-10, maintenance (moderate) for ozone and maintenance for CO. Portions of Cuyahoga County are also classified as nonattainment for SO_2. All of the proposed construction is within the part of Cuyahoga County that is nonattainment for SO_2. Current sources of emissions in the project area include locomotives and other motorized vehicles and light industrial facilities.

2.5 Noise

Rail, automobile and truck traffic are the primary sources of noise in the area of the proposed rail line construction. The 70 dBA L_{dn} contour for the existing Flats Industrial Track extends 65.9 feet perpendicular to the centerline. No residences, schools, churches, hospitals, nursing homes or libraries are within the existing 70 dBA L_{dn} contour that extends perpendicular to the centerline of the existing Flats Industrial Track.

2.6 Historic and Cultural Resources

Records at the Ohio State Historical Preservation Office (SHPO) were reviewed to determine if previously identified cultural resources are located in the project construction area. No known structures in the proposed project area were listed on the National Register of Historic Places (NRHP). The former Fosters City Foundries Company and Walworth Run Foundry at

Filmore Avenue and 27th Street has occupied this site from 1896 through at least 1982. The foundry has since ceased operations and the buildings have been demolished.

2.7 Transportation and Safety

The existing rail transportation network in the project vicinity consists of the Nickel Plate main line that crosses the existing Conrail Flats Industrial Track and the existing Conrail main line (both Conrail lines would be operated by NS post-Transaction). A total of 13.5 trains per day currently operate over the NS' Nickel Plate rail line (1995 Base Case), 2 trains per day currently operate over the Flats Industrial Track and 48.4 freight and 4 passenger trains per day currently operate over the Conrail main line.

2.7.1 Grade Crossings

No at-grade crossings currently exist within the existing right-of-way proposed for the Cloggsville Connection.

2.7.2 Hazardous Waste Sites

Review of the appropriate environmental data bases by Environmental Data Resources, Inc. and the results of a Phase I environmental site assessment indicated the following environmental conditions in the general vicinity of the proposed project area (e.g., along the Conrail Flats Industrial Track):

- Four RCRA Treatment, Storage, and Disposal Facilities (TSDFs) are located within 1 mile of the rail corridor.
- One CERCLIS site is located less than 0.5 mile north of the Conrail line near the intersection of 58th Street and Lorain Avenue.
- A Solid Waste Facility Transfer facility operated by the City of Cleveland is located approximately 0.5 mile south of the Conrail rail lines on Ridge Road.
- Seven Ohio hazardous waste sites are located within 1 mile of the Conrail rail line.
- Five RCRA Corrective Action (CORRACTS) sites are located within 1 mile of the Conrail rail line.
- Sixty-four leaking underground storage tank (LUST) sites are located within 0.5 mile of the Conrail rail line. Thirty-six of these are north of the right-of-way; twenty-eight are south.

- Auto dismantling and scrap metal recycling operations were observed on properties north and south of the Linndale yard.
- Numerous spills of hazardous materials have been reported at the trucking companies located on Industrial Parkway, just north of Rockport Yard. Released material could have potentially flowed to the drainage ditch located south of these properties and immediately adjacent to the Conrail right-of-way.

The EDR database search revealed 22 unmappable sites within the city limits of Cleveland. These sites could not be located because of poor address or geocoding information provided to the state and/or Federal databases. Three of the 22 unmappable sites were underground storage tanks (UST) within one-half mile of the proposed main line connection construction. No other hazardous waste sites or known environmental conditions were identified in the vicinity of the proposed main line connection construction.

2.8 Community Demographics

In order to study the effects of the proposed construction on the population in the vicinity of the project, information on racial composition and average income level in the area was obtained from the U.S. Census Bureau 1990 CD-ROM and other statistical sources.

2.8.1 General County Information

The proposed project would be in Cuyahoga County, Ohio. The Cloggsville Connection route would be within the city limits of Cleveland and Brooklyn. Cleveland is an incorporated city with a 1990 population of 505,616. It is the largest city in Cuyahoga County and the county seat. Brooklyn is also an incorporated city with a 1990 population of 11,706. Population data for Cleveland and Brooklyn are provided below in Figure III-6.

Figure III-6
Population of Cleveland and Brooklyn, Ohio

	1994	1990	1980
Cleveland	492,901	505,616	573,822
Brooklyn	Not Available	11,706	12,342

2.8.2 Information on the Area Surrounding the Proposed Project

An estimated 60,035 people reside within 1,000 feet of NS line segments in the City of Cleveland. Of that total, 35 percent are minorities and 39 percent are classified as low income. The minority share of the population residing within 1,000 feet of NS rail line segments in the City of Cleveland is significantly lower than that of the City as a whole (35 percent versus 52 percent). The low-income share of the population residing within 1,000 feet of NS rail line segments in the City of Cleveland is somewhat higher than that of the City as a whole (39 percent versus 29 percent). In general, the demographics of populations residing near NS rail line segments in the City of Cleveland reflect the demographics of the City as a whole. Figure III-7 compares the demographics of populations residing within 1,000 feet of NS rail line segments to the demographics of the entire City of Cleveland, City of Brooklyn and the proposed Cloggsville Connection construction and realignments.

Figure III-7
Demographic Comparison of Populations Residing in the City of Cleveland, the City of Brooklyn, within 1,000 Feet of the Proposed Construction, and within 1,000 Feet of All NS Line Segments*

Geographic Area	Population	Share of Population with Minority	Share of Population Classified as Low
Area within 1,000 feet of all NS rail line segments in the City of Cleveland	60,035	35%	39%
Area within 1,000 feet of Proposed Construction: Cleveland (Cloggsville) to CP-190	11,455	22%	32%
Entire City of Brooklyn	11,709	3%	6%
Entire City of Cleveland	512,403	52%	29%

* Figures are based on the results of the 1990 U.S. Census.

3.0 POTENTIAL ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

This Section provides a description of the potential environmental impacts of the proposed connection.

Relevant governmental agencies were consulted for their comments on environmental issues, permit requirements, and necessary approvals related to the proposed project. No responses have yet been received. All agency responses will be forwarded to the Board upon their receipt.

3.1 Land Use

After construction and upgrades between Cloggsville and CP-190, the Cloggsville Connection would be comprised of approximately 39,600 feet of contiguous double-track main line. The proposed project would result in minimal impacts to land use outside the existing right-of-way. The properties for which NS is negotiating rights to allow the proposed construction are disturbed parcels of land west of Cloggsville, once occupied by the Fosters City Foundry. The proposed double-track main line connection at Cloggsville would only require the acquisition of approximately 2.7 acres of land and the construction of a new Train Avenue double-track bridge, 50 feet south of the existing bridge. The new connection at Cloggsville would require acquisition of new right-of-way for approximately 1,300 feet. Between the new Train Avenue bridge at Cloggsville and Rockport Yard, a contiguous double-track main line would be created within existing railroad right-of-way by a combination of rehabilitation of existing track, reconstructing previously removed trackage, and minor or new construction on existing rights of way. The proposed double mainline track would consist of parallel tracks spaced at a perpendicular distance of approximately 15 feet from each track's centerline. The reconfigured connection between Rockport Yard and the Chicago main line would be constructed on existing railroad property, have an approximately 46-foot wide rail bed and impact approximately 1.7 acres of potential wetland within existing railroad property.

No new land would be required to rehabilitate or replace the bridges at Clark Avenue or West 56th Street.

There would be no loss of prime farmland within the proposed new right-of-way. Temporary construction impacts to adjacent land from excavation, such as mixing of soil profiles or soil compaction, are expected to be minor due to the small amount of land affected. Furthermore, construction would be limited mainly to areas within existing rail right-of-way,

within the minimal area required outside of existing rail right-of-way for connection realignments, and the limiting of construction activities to the area within the right-of-way. The proposed construction would not conflict with adjacent land uses or Cleveland zoning districts.

No construction activities would occur within a designated coastal zone or a 100-year floodplain.

3.2 Water Resources

A description of potential impacts to groundwater and surface water resources in the project vicinity are provided in this section.

3.2.1 Groundwater

The construction of the proposed main line connection would not have adverse impacts on groundwater resources. Only a small amount of fuel and oil would be present on the site during construction activities. Therefore, any potential leaks or spills could only involve small amounts and would be cleaned up immediately. Any spill or contaminant release would be reported and cleaned up in accordance with all Federal and state statutes and regulations.

3.2.2 Surface Water

No surface waters would be crossed by the proposed project. Final project design would consider local drainage patterns and ensure storm water drainage patterns are not altered by the proposed project. Potential impacts from soil erosion resulting from cleared vegetation and disturbed soil would be insignificant because Best Management Practices (BMPs) would be used to control runoff and soil erosion. In addition, NS would restore disturbed areas through reseeding.

National Wetland Inventory (NWI) maps of Cleveland South and Lakewood, Ohio were used to identify potential wetlands in the proposed project area. According to the NWI maps, there are no wetlands in the project area. The soils crossed by the proposed main line connection are not classified as hydric soils (SCS Cuyahoga County, 1980). Although NWI maps did not indicate the presence of wetlands and no hydric soils have been mapped for the project area, preliminary indications from a site visit identified areas of potential wetlands in the area that would be crossed by the realigned connection at CP-190. Up to 1.7 acres of potential wetland

within existing railroad property could be impacted in this area. If it is determined to be a wetland, NS would obtain all necessary permits.

Federal Emergency Management Agency (FEMA) maps for the area show that the proposed project area is not within the 100-year floodplain.

3.3 Biological Resources

The following sections contain analysis of potential impacts to vegetation and wildlife within the project area.

3.3.1 Vegetation

Vegetation that would be lost due to construction of the proposed project would include primarily common grasses and weeds located within the existing rail right-of-way. This vegetation, which is typical of disturbed urban areas, is found in the 95 percent of the project area that is within railroad right-of-way, or vacant lots containing the concrete foundation of the demolished Fosters City Foundry. The remaining five percent of the project area includes grasses, weedy annuals, shrubs (Cloggsville realignment), and a small woodlot (CP-190 realignment). None of the area is used for cropland. The proposed connection realignment at CP-190 would impact woody vegetation of a wedge-shaped potential wetland, surrounded on all sides by existing railroad right-of-way. Following construction, NS would reseed any disturbed areas outside the subgrade slope.

3.3.2 Wildlife

No adverse impacts to wildlife populations are anticipated because the proposed construction site is primarily within existing railroad right-of-way, and is entirely within an urbanized area of the City of Cleveland and the City of Brooklyn. The proposed project would require acquisition of approximately 2.7 acres of additional urban land. Wildlife habitat impacted by the proposed project would be limited to recently disturbed urban land and the small wooded area west of Rockport Yard. The limited wildlife within the project area would be subject to sporadic disturbance because of noise and human activity generated during construction activities.

Construction of the proposed main line and connection realignments could temporarily displace local terrestrial wildlife because of increased noise from construction equipment.

However, such disturbances would be temporary and are not anticipated to cause a major, permanent, redistribution of resident species. The width of the right-of-way and low height of rail should not pose a significant to the movement of wildlife. Limited mortality of small animals may result during construction due to compaction of burrows and encounters with heavy equipment.

3.3.3 Threatened and Endangered Species

The U.S. Fish and Wildlife Services (USFWS) and the Ohio Department of Natural Resources (DNR) were contacted regarding threatened and endangered species in the area of the proposed rail line construction. Both the USFWS and the Ohio DNR stated that they did not anticipate any significant adverse impacts to threatened or endangered species as a result of the proposed main line connection construction.

3.3.4 Parks, Forests, Preserves, Refuges and Sanctuaries

No potential impacts on parks, forests, preserves, refuges or sanctuaries are expected since Thrush Park is the only park within 1,000 feet of the project and it is approximately 900 feet from the existing Flats Industrial Track right-of-way.

3.4 Air Quality

Cuyahoga County is classified as nonattainment (moderate) for PM-10, maintenance (moderate) for ozone and maintenance for CO. All of the proposed construction is within the part of Cuyahoga County that is nonattainment for SO_2. Only minor impacts to air quality are expected as a result of the new main line construction and connection realignments of the proposed project. The operation of heavy equipment would be the primary source of pollutant emissions during construction activities. Such pollutants vary by the source and include:

- Particulate matter, volatile organic compounds (VOCs), carbon monoxide (CO), and nitrogen oxide (NO) resulting from the combustion of diesel fuel, and
- Fugitive dust along the right-of-way and unimproved roads resulting from the operation of heavy equipment.

During the construction phase, grading, excavation and placement of ballast and subgrade could result in a temporary increase of fugitive dust. However, with appropriate mitigation measures, such effects are expected to be minimal. Mitigation measures would include spraying

road surfaces with a water truck or covering truck beds with tarps as necessary. Emissions from construction and maintenance equipment engines would be localized and temporary during the construction period and during maintenance activities. Emissions from construction and maintenance equipment are not expected to reduce air quality.

3.5 Noise

Noise levels in the project area are expected to increase temporarily during construction. Temporary noise increases would be caused by operation of vehicles and heavy machinery used for grading, rail construction and similar activities. The impacts would only be of short-term duration, occurring from approximately 7 a.m. to 5 p.m. and only during the expected construction period. Since construction noise would occur during daylight hours and would be short-term, noise impacts from construction are not expected to be significant.

3.6 Historic and Cultural Resources

No documented archaeological sites or historic properties are on or near the proposed construction site.

3.7 Transportation and Safety

3.7.1 Grade Crossings

The proposed new main line construction and connection realignment would require the construction of a new double main line bridge over Train Ave. 50 feet south to accommodate the realignment of the Cloggsville Connection. The bridges at Clark Ave. and West 56th St. would be rehabilitated or replaced. No at-grade crossings are along the proposed new main line construction and connection realignment nor would any result from the proposed new main line construction and connection realignments. Since there are no at-grade crossings along the proposed route, no vehicular delays would result from the construction of the proposed connection.

3.7.2 Hazardous Waste Sites

As discussed in Section 2.6.2, a review of the EDR database report and the results of a Phase I environmental site assessment indicated that there were four TSD facilities, one CERCLIS, one SWF, seven Ohio hazardous waste sites, five RCRA Corrective Action

(CORRACTS) sites, and 64 LUST sites within one-half mile of the proposed construction and realignment corridor. No other hazardous waste sites or known environmental conditions, e.g., NPL, CERCLIS, RCRIS-TSD, ERNS, SPL (SHWS), LUST or SWF/LF, Ohio Spills were identified in the vicinity of the proposed new main line construction and connection realignment. These findings are not uncommon for old industrial areas, and do not indicate the existence of hazardous waste sites within the proposed project site.

The EDR database search revealed 22 unmappable sites within the city limits of Cleveland. These sites could not be located because of poor address or geocoding information provided to the state and/or Federal databases. Three of the 22 unmappable sites were underground storage tanks (UST) within one-half mile of the proposed main line construction and connection realignments.

Any hazardous waste sites identified within the project area during construction would be addressed in accordance applicable federal and state regulations.

3.8 Community Demographics

There would be no significant adverse environmental effects as a result of the construction of the proposed connection, and consequently no adverse environmental impacts to the surrounding residents.

3.8.1 Potential Impacts to Minority Groups

As shown in Figure III-8 below, U.S. Census data indicates that the area surrounding the proposed new main line contains a lower percentage of minority residents than does the Nickel Plate route from Cleveland (Cloggsville) to Vermilion, or all the other NS segments in the Cleveland area. These data indicate that construction of the proposed new main line and connection realignments would not have a high or disparate impact on minority groups. This conclusion is further supported by the absence of significant environmental impacts related to the proposed Cloggsville Connection.

Figure III-8
Minority Composition of the Area Surrounding the Proposed Project in the City of Cleveland, the Route Through Lakewood and All NS Line Segments in the Cleveland Area*

NS Line Segment	Total Population within 1,000 feet of tracks	Share of Population with Minority Status
Vermilion to Cleveland (Cloggsville) via Lakewood	12,762	25%
Cleveland (Cloggsville) to CP-190	11,455	22%
All NS line segments in the City of Cleveland	60,035	35%

* Figures are based on the results of the 1990 U.S. Census.

3.8.2 Potential Impacts to Low Income Groups

Data on economic levels in the area indicate that the population of the relevant census block for Cleveland (Cloggsville) to CP-190 is more prosperous than that of the City as a whole (see Figure III-9). Census data indicate that the percentage of people living below the federal poverty level in the vicinity of the new main line construction and connection realignments is lower than the route through Lakewood or the total of all NS line segments in the Cleveland area. These data indicate that construction of the proposed new main line and connection realignments would not have a high or disparate impact on low income groups. This conclusion is further supported by the absence of significant environmental impacts related to the proposed new main line and connection realignments.

Figure III-9
Demographic Information on Populations Surrounding the Proposed Project in the City of Cleveland, the Route through Lakewood and All NS Line Segments in the Cleveland Area*

NS Line Segment	Total Population within 1,000 feet of tracks	Share of Population Classified as Low Income
Vermilion to Cleveland (Cloggsville) via Lakewood	12,762	42%
Cleveland (Cloggsville) to CP-190	11,455	32%
All NS line segments in the City of Cleveland	60,035	39%

* Figures are based on the 1990 U S. Census

4.0 REFERENCES

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United States Fish and Wildlife Service, National Wetlands Inventory map of Cleveland South, Ohio, 1977.

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United States Geological Survey Quadrangle Map of Cleveland South, Ohio, 1984

PART IV

VERMILION DOUBLE CONNECTION CONSTRUCTION

PART IV - VERMILION DOUBLE CONNECTION CONSTRUCTION

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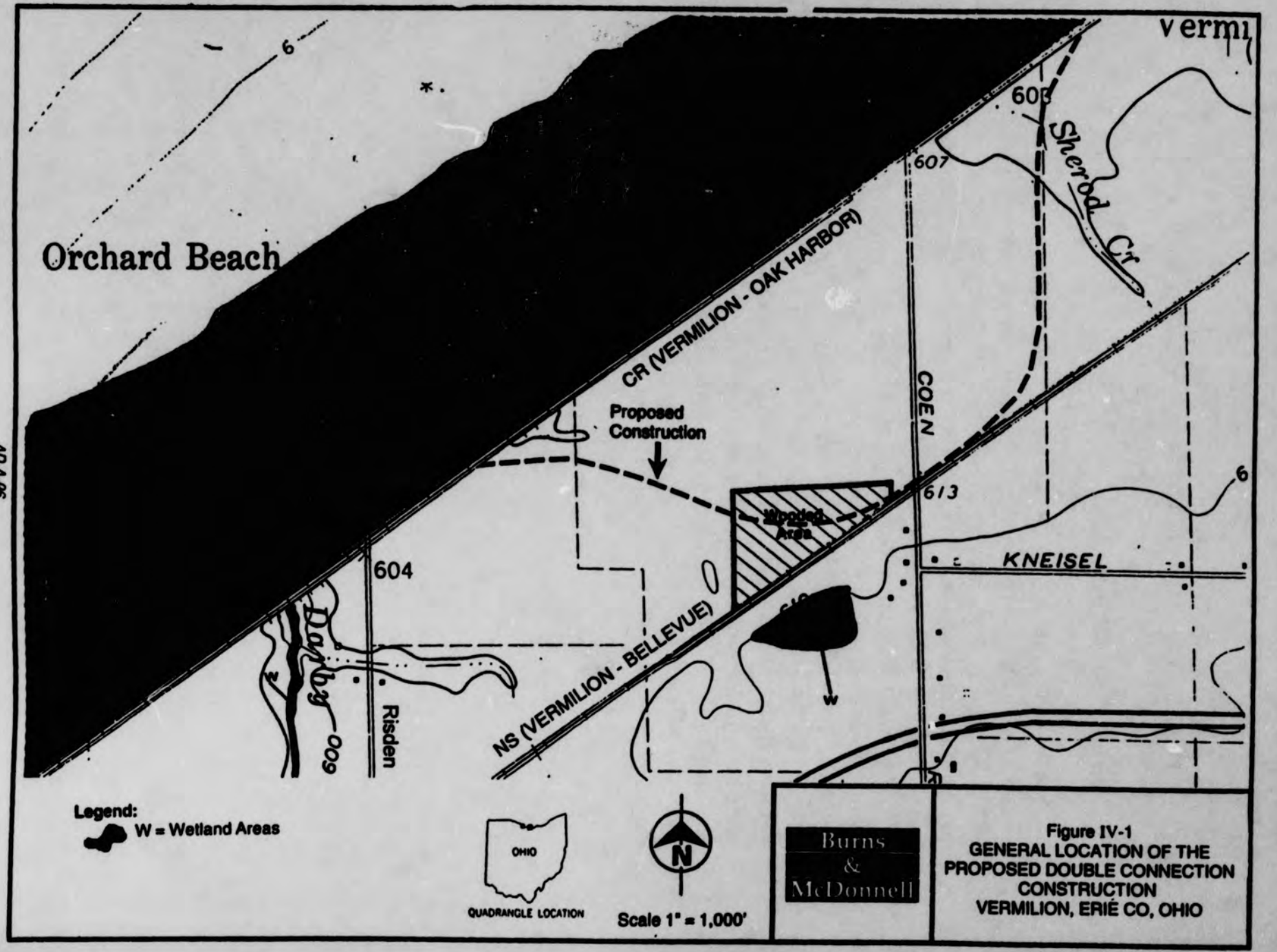
PART IV - VERMILION DOUBLE CONNECTION CONSTRUCTION

1.0 PROJECT DESCRIPTION

This section provides an analysis of the potential environmental impacts associated with the proposed construction of a double connection between the existing Vermilion to Oak Harbor (DEIS segment number N-294) and Vermilion to Bellevue (DEIS segment number N-072) rail lines near Vermilion, 40 miles west of Cleveland, in a rural area of Erie County, Ohio (see Figure IV-1). The proposed double connection would allow trains to switch onto either line in both east and west directions. A single connection at Vermilion was proposed in the original NS Operating Plan and was analyzed in the Draft Environmental Impact Statement (DEIS) issued December 12, 1997 (see Figure IV-2). The single connection would have allowed trains traveling east on the Conrail line from Toledo, Ohio to be routed onto the NS Nickel Plate line to Cleveland and would have allowed trains traveling west on the Nickel Plate to be routed onto the Conrail line to Toledo. However, the proposed single connection would not allow westbound trains on the Conrail line to be routed to the Nickel Plate and would not allow eastbound trains on the Nickel Plate to be routed to the Conrail line. These latter routings are essential to the revised Cloggsville Connection mitigation proposal, thus requiring a double connection to be constructed at Vermilion as part of NS' mitigation proposal. The proposed double connection alignment, as presented herein, would allow trains to cross over either rail line segment from both directions, and would facilitate rerouting NS train traffic through Greater Cleveland and vicinity.

As part of the DEIS, a thorough environmental assessment has been performed with respect to the single connection at Vermilion proposed in the original NS Operating Plan. Federal, state and local agencies were contacted for comments on the single connection configuration and follow-up contacts are currently in progress for the double connection under the revised Cloggsville Connection mitigation proposal.

The proposed design of the double connection at Vermilion includes approximately 7,950 feet of new rail line and would require approximately 18.3 acres, all of which would be used for track. Of this total, approximately 6,150 feet would be on new railroad right-of-way, requiring the acquisition of approximately 14.1 acres of land. The proposed construction site is surrounded by cropland and Conrail and NS rail lines. The Conrail rail line from Vermilion to Oak Harbor will be operated by NS post-Transaction.


Orchard Beach
CR (VERMILION - OAK HARBOR)
NS (VERMILION - BELLEVUE)
Proposed Construction
COEN
KNEISEL
Sherod Cr
Danby
Risden
Wooded Area
604
607
613
6
Legend:
W = Wetland Areas
OHIO
QUADRANGLE LOCATION
N
Scale 1" = 1,000'
Burns & McDonnell
Figure IV-1
GENERAL LOCATION OF THE PROPOSED DOUBLE CONNECTION CONSTRUCTION
VERMILION, ERIE CO, OHIO
AD-4-96

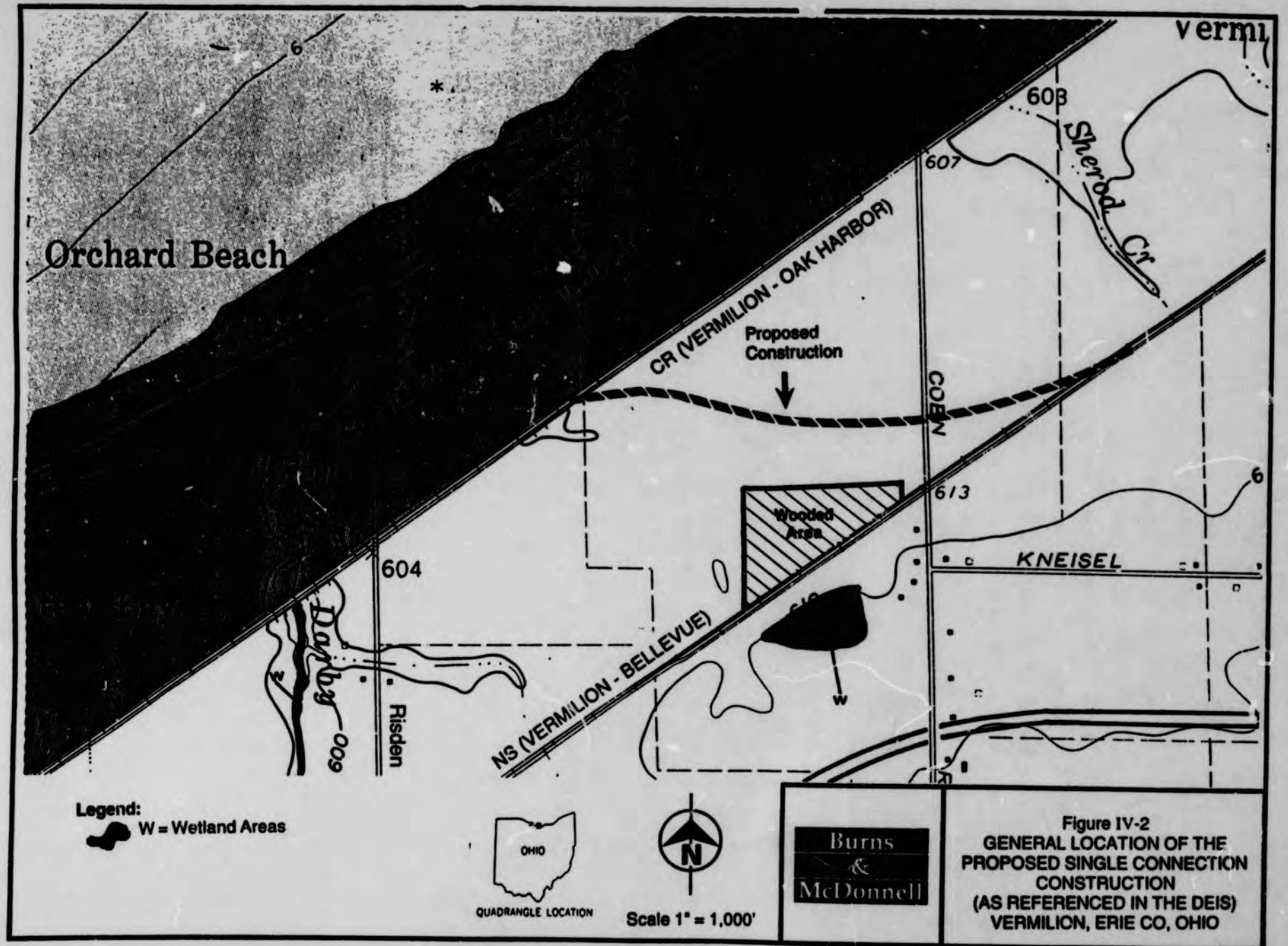


Figure IV-2
GENERAL LOCATION OF THE PROPOSED SINGLE CONNECTION CONSTRUCTION
(AS REFERENCED IN THE DEIS)
VERMILION, ERIE CO, OHIO

AD-A-97

The proposed action would connect two parallel tracks that are approximately 2,100 feet apart. The connection begins approximately 450 feet east of Risden Rd. and diverges from the Conrail Vermilion to Oak Harbor line, turning south toward the at-grade crossing of Coen Rd. and the NS Vermilion to Bellevue line. The new connecting line connects to the NS line approximately 500 feet west of the at-grade crossing of Coen Rd., and follows existing NS tracks for approximately 975 feet, crossing Coen Rd. The line then diverges north from the NS tracks approximately 475 feet east of Coen Rd., connecting with the Conrail Vermilion to Oak Harbor line approximately 2,000 feet east of Coen Rd.

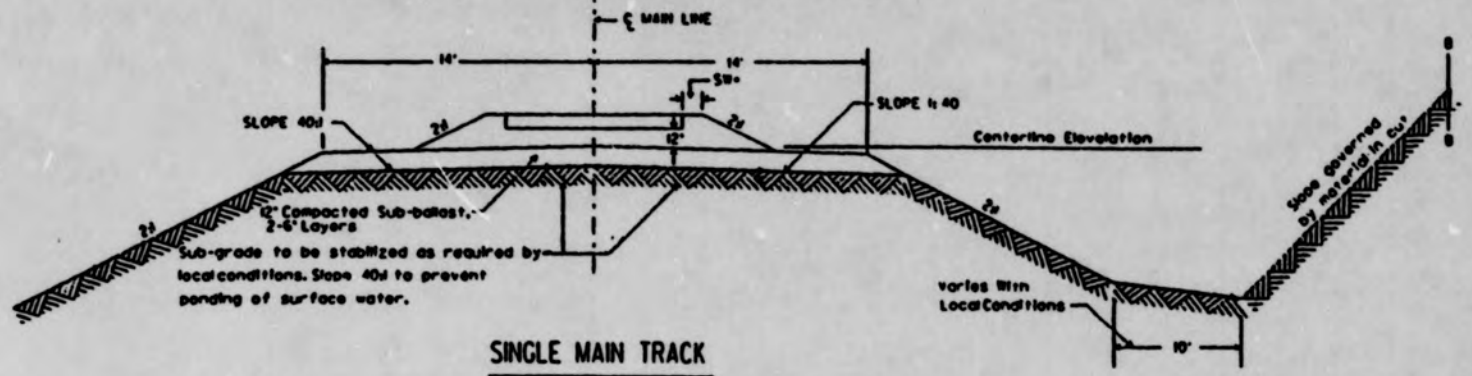
1.1 Construction

The proposed construction site is located approximately 0.5 mile west of Vermilion in a rural area of Erie County, Ohio. No modifications to existing structures are anticipated for construction of this proposed railroad connection. The design includes approximately 7,950 feet of new rail and would require the acquisition of approximately 14.1 acres of new railroad right-of-way. The proposed construction site is rural, consisting primarily of cropland, strips of non-native grasses, scrub brush and deciduous trees adjacent to the existing rail right-of-way. There is also one woodlot, one narrow wetland area and a small intermittent stream which would be crossed. The area is bordered on the north by Conrail double tracks (to be operated by NS post-Transaction) and on the south by NS single tracks. Land to the east and west is primarily cropland.

The proposed construction would affect one property. Approximately 11 acres from fields currently in corn, wheat and soybean crop production and approximately 3.2 acres of a woodlot would be affected. No other modifications would be required.

NS' construction specifications and procedures meet or exceed the practices recommended by the American Railway Engineering Association (AREA). The entire length of the proposed connection would involve new construction. Recycled rail may be used where applicable. New ties, subgrade, subballast, and ballast materials would be used for the roadbed. A typical cross-section is provided in Figure IV-3. The design specifications for the project are set out in Figure IV-4 below.

TYPICAL ROADBED SECTION



SINGLE MAIN TRACK

FILL SECTION

CUT SECTION

SHOULDER WIDTH (SW')

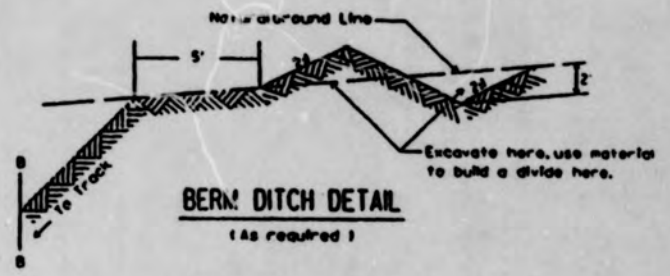
BALLAST WIDTH FROM END OF TIE TO EDGE EDGE OF SLOPE

	Jointed Rail	Welded Rail
SW (Inside of Curve)	0'	6'
SW (Outside of Curve)	6'	12'
SW (Tangent both sides)	0'	6'

(1) Sub-grade may be stabilized with lime, lime-fly ash, cement or stone.

(2) Tamping of ballast must not disturb compacted sub-ballast.

(3) Top of sub-grade is to be crowned.



BERM DITCH DETAIL

(As required)

Burns & McDonnell

Figure IV-3
TYPICAL CROSS-SECTION

SOURCE: Typical Roadbed Section, Norfolk Southern.

AD-A-99

Figure IV-4
Design Specifications for the Proposed Double Connection Near Vermilion, Ohio

Maximum train speed	40 miles/hour
Maximum curvature	4 degrees
Maximum grade	0 percent
Minimum weight of rail	136 pounds per yard
Tie length	8 feet, 6 inches
Grade of ties	4 and 5
Ties per mile	3,168
Ballast depth	12 inches
Minimum subballast depth	12 inches
Minimum subgrade width	32 feet
Minimum depth of ditches	1 foot, 0 inches
Maximum side slopes	2 feet horizontal by 1 foot vertical
Maximum cut	0 feet
Maximum fill	7 feet

The topography along the proposed rail line is nearly level. The existing Conrail and NS rail lines are elevated approximately 5-7 feet above the land which would be crossed by the double connection. The proposed rail line would require a minor amount of fill to elevate the rail line up to the level of the existing lines. Upon final design, an appropriate sized culvert would be installed at the crossing of Sherod Creek to maintain flow of the intermittent stream. Also, appropriate drainage culverts would be installed to maintain drainage flows through the area crossed by the proposed rail line.

Grading activities would consist of:

- removal and disposal of vegetative and non-vegetative debris
- excavation and compaction of existing material as required to achieve desired subgrade elevation in cut sections
- placement and compaction of borrow material as required to achieve desired subgrade elevation in fill sections
- placement of a compacted subballast layer upon finished subgrade

- recontouring of property and ditches as required to ensure drainage, and
- seeding and mulching of all areas in which existing ground is disturbed.

The proposed project would impact approximately 18.3 acres of land and would require a NPDES storm water discharge construction permit. The threshold limit for requiring a NPDES storm water discharge construction permit is impact to 5 or more acres. The right-of-way width for the proposed construction would be 100 feet, centered on the rail line in most areas. The proposed rail line would cross one intermittent stream, Sherod Creek, which is approximately 3-5 feet in width at the crossing. No roads would be crossed and no residences would be moved.

The exact labor force required and the duration of the construction have not been determined, but the project is expected to require 10 to 15 people and up to 3 to 5 months to complete. It is expected that work would be done during normal working hours. Borrow material for the project would be obtained from local sources and hauled to the construction site by rail or truck. It is planned that a majority of the construction activities would be performed by qualified contractors working for NS. The project would be advertised in recognized trade journals and bids solicited in accordance with NS' Corporate Standard Procedures.

Portions of the track and signal work would be done by NS' existing maintenance and construction crews from its Maintenance of Way and Structures (MW&S) and Signal and Electrical Department. No new NS positions are anticipated to be created specifically for this project.

Based on preliminary site visits, construction of the proposed double connection at Vermilion would not require raising or relocating any electrical distribution lines.

1.2 Operation

NS estimates an average of 11.6 trains per day on the portion of the proposed rail line connection east of Coen Rd. and 0.9 train per day on the portion of the proposed rail line west of Coen Rd. These movements would consist primarily of general merchandise and would transport all types of freight over the double connection. Train movements on the line could occur seven days a week during the day or night. Dispatching of trains would be dependent upon train availability and traffic on the area rail system.

2.0 EXISTING ENVIRONMENT

This chapter contains information on the existing environment of the proposed project site and the surrounding vicinity. Information regarding the natural and human resources within and adjacent to the project area is included in this section. This narrative is based on literature review, field reconnaissance, and consultations with Federal, state and local agencies.

2.1 Land Use

2.1.1 Existing Land Uses

Erie County is approximately 67 percent agricultural. About 15 percent of the county is woodland (USDA Soil Conservation Service, 1971). The proposed construction area is primarily agricultural. The site is bordered on the north by the Conrail double track (DEIS segment number N-294) and on the east by unincorporated portions of Erie County near the City of Vermilion. The south side is the NS single track (DEIS segment number N-072) and the west side is Risden Road. Land uses directly adjacent to the proposed site include rail and highway uses, utility rights-of-way, cropland and residences. The area of the proposed construction site is currently zoned light industrial west of Coen Rd. and rural residential east of it.

Land in the rights-of-way contains grasses and gravel ballast. Other features include overhead communication lines bordering a portion of the northern edge of the NS right-of-way and overhead electric distribution lines bordering the southern edge of the same right-of-way. An overhead electrical distribution line borders the west edge of Coen Rd. and an overhead electrical service line borders the east edge. Two underground fiber optic communication lines border the northern edge of the Conrail right-of-way.

2.1.2 Physiography

The topography in the construction area is relatively level, with an elevation range of 600 to 610 feet above mean sea level (USGS, 1979). The existing Conrail and NS lines are elevated approximately 5-7 feet above the adjacent land. Drainage ditches and culverts are present along both sets of tracks to allow water to flow away from the elevated rail bed. Normal annual precipitation is adequate for all crops suited to the temperature and length of the growing season in the area. Average annual precipitation for Erie, Ohio is 34.15 inches of rainfall and 29 inches of snowfall. The area climate is relatively cold in winter with an average temperature of 33

degrees Fahrenheit and moderately warm and humid in the summer, with an average daily high temperature of 81 degrees Fahrenheit (USDA Soil Conservation Service, 1971).

2.1.3 Soils

The proposed project site would cover three soil associations: Del-Rey-Lenawee association (somewhat poorly drained to very poorly drained), Allis-Fries association (very poorly drained to somewhat poorly drained), and Mahoning-Bogart-Haskins-Jimtown association (somewhat poorly drained to moderately well drained). Soil classifications include Alexandria silt loam, Allis silty clay loam, Bennington silt loam, Cardington silt loam, Del Rey silt loam, Haskins loam, Lenawee silty clay loam, Mahoning silt loam, Mahoning silt loam with shale substratum, Mermill silt loam, and Shinrock silt loam. Sixty-seven percent of land in Erie County is farmland.

The soil in the proposed construction area is disturbed; approximately 60 percent of the land is cultivated cropland and the rest consists of weeds, grasses and woody vegetation and is not considered prime farmland.

2.1.4 Coastal Zone

The proposed project area is not in a coastal zone. A coastal zone is located adjacent to the site on the north side of the existing Conrail rail lines (see Figure IV-1). This coastal zone extends north to Lake Erie.

2.2 Water Resources

A description of groundwater and surface water resources in the proposed project vicinity is provided in this section.

2.2.1 Groundwater

Surficial aquifers are the principle sources of potable water in the northeastern half of Erie County, Ohio. They vary in thickness and consist of coarse gravel and sand. Wells along streams and rivers have a depth between 25 and 200 feet and will yield 100 to 500 gallons per minute (USGS, Groundwater Atlas of the U.S., #10, 1995). In the vicinity of the proposed

construction site, ground water generally flows from southern recharge areas toward northern discharge areas.

2.2.2 Surface Water

Based on review of U.S. Geological Survey topographic maps and observations made during the site visit, it was determined that the proposed Vermilion double connection construction would be within 1,300 feet of Darby Creek and would cross Sherod Creek. Darby Creek is approximately 5-10 feet wide, located approximately 1,300 feet west of the western terminus of the proposed project. Darby Creek has a riparian zone approximately 10-15 feet wide which contains low-growing shrubs, deciduous trees and wetland plant species. A small intermittent stream is located on the north side of the NS track and drains across Risden Rd. toward Darby Creek. Wetland vegetation was observed along the intermittent stream edges.

Sherod Creek is an intermittent stream located approximately 1,625 feet east of the existing Conrail crossing at Coen Rd. It is approximately 3-5 feet in width and flows north out of the project area through a culvert under the Vermilion to Oak Harbor track. The stream contains a small riparian area which has low-growing shrubs, deciduous trees and wetland plant species near the proposed crossing, primarily in the vicinity of the culvert.

National Wetland Inventory (NWI) maps indicate a palustrine scrub-shrub wetland located along Darby Creek and a palustrine emergent wetland located adjacent to the southern edge of the existing NS rail bed. These two wetlands are outside of the area affected by the proposed double connection. In addition, field observations identified two potential wetlands not shown on the NWI maps. There is a narrow palustrine emergent wetland located adjacent to the southern edge of the existing Conrail rail bed just west of Coen Rd. This wetland is also outside the area affected by the double connection. There is a second narrow palustrine emergent wetland located adjacent to the eastern edge of Coen Rd. abutting the northern edge of the existing NS rail bed. This wetland is adjacent to the existing NS track approximately midway between the two connection points east and west.

Federal Emergency Management Agency (FEMA) maps for the area show that the proposed project is not within the 100-year floodplain.

2.3 Biological Resources

2.3.1 Vegetation

Corn and soybeans are the major crops grown in Erie County. Secondary crops grown in Erie County include wheat, oats, and hay. Roadside vegetation, fence-rows, and windbreaks consist of weeds, grasses, deciduous trees, and shrubs.

The proposed construction site and the surrounding vicinity consist mainly of cropland. Areas of sparse vegetation, consisting of weedy annuals and various grasses, were observed. Woody vegetation, consisting of low-growing shrubs and deciduous forest species, is limited to narrow strips between agricultural fields, riparian areas associated with Darby Creek and Sherod Creek and sporadic areas adjacent to the Conrail double track and NS single track right-of-way. A wooded area of approximately 14 acres was observed, located approximately 300 feet west of the Coen Rd. at-grade crossing of the NS line. This woodland area consists of shrubs and deciduous trees, and abuts the existing NS rail lines on the north side. Deciduous trees that are expected to be in the wooded area include pin oak *(Quercus palustrus)*, northern red oak *(Quercus rubra)*, white oak *(Quercus alba)*, white ash *(Fraxinus americana)*, and eastern cottonwood *(Populus deltoides)*. Other than the cropland and small wooded area, vegetation on the proposed site consists of grasses and weeds such as the species found alongside the NS track: teasel *(Dipsacus sylvestris)*, Queen Anne's Lace *(Daucus carota)*, redtop (*Agrostis alba*), Timothy grass (*Pheleum pratense*), Kentucky bluegrass *(Poa pratensis)* and velvet grass *(Holcus lanatus)*.

In summary, the project area and vicinity has limited biological diversity. Similar vegetation is abundant throughout the region.

2.3.2 Wildlife

Wildlife habitat found on and adjacent to the proposed construction site is limited to the wooded area, riparian areas and to narrow strips of deciduous trees and shrubs adjacent to the existing Conrail and NS rail rights-of-way. These areas provide suitable habitat for a limited variety of insects, birds, and mammals. Wildlife species that were seen during a site visit were the blue jay (*Cyanocitta cristata*), American robin (*Turdis migratorius*), European starling (*Sturnus vulgaris*), field sparrow (*Spizella pusilla*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), and red-tailed hawk (*Buteo camaicensis*). Wildlife

species that are expected to be found in this rural setting are the American goldfinch (*Carduelis tristis*), American kestrel (*Falco sparverius*), white-tailed deer (*Odecoileus virginianus*), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), eastern cottontail (*Sylvilagus floridanus*), striped skunk, (*Mephitis mephitis*), house mouse (*Mus musculus*) and deer mouse (*Peromyscus maniculatus*).

2.3.3 Threatened and Endangered Species

The U.S. Fish and Wildlife Service (USFWS) and the Ohio Department of Natural Resources (DNR) were contacted regarding threatened and endangered species within the area of the proposed rail line construction at Vermilion. It was determined that there are three animal and one plant species Federally-listed as threatened or endangered known to occur in Erie County. These include the Indiana bat (*Myotis sodalis*), bald eagle (*Haliaeetus leucocephalus*), Scioto madtom (*Noturus trautmani*), and Lakeside daisy (*Hymonoxys herbacea*). Based on field observations it appears that the 14 acre wooded area could potentially contain summer habitat for the endangered Indiana bat. Summer habitat includes deciduous trees with exfoliating bark and crevices which can be used for roosting. No threatened or endangered species were observed at the proposed construction site during a site visit.

2.3.4 Parks, Forests, Preserves, Refuges and Sanctuaries

No parks, forests, preserves or refuges are in or within 1,000 feet of the project area. Sherod Park is located approximately 1,250 north of the project area near Lake Erie.

2.4 Air Quality

According to 40 CFR 81, Erie County is in attainment with the National Ambient Air Quality Standards (NAAQS). Current sources of emissions in the project area include locomotives, vehicles and farm machinery.

2.5 Noise

Rail, automobile and truck traffic are the primary sources of noise within the area of the proposed rail line construction. Average Daily Traffic (ADT) data collected for roads in the project vicinity were provided by the Ohio Department of Transportation (DOT). The ADT data for U.S. Highway 6, which is located 1,350 feet north of the crossing of the existing Conrail line

and Coen Rd., averaged 5,205 vehicles per day. State Rd. 2, which is located 1,700 feet south of the crossing of the NS Vermilion to Bellevue line and Coen Rd., averaged 15,730 vehicles per day. A total of 52.3 trains per day (freight and passenger trains) presently use the Conrail double line from Vermilion to Oak Harbor. Approximately 15.6 trains per day (freight trains) operate over the NS single line from Vermilion to Bellevue.

No residences are located within the Ldn 65 noise contour of the proposed construction site. No schools, churches, hospitals, nursing homes, retirement homes, libraries or other residences are within 500 feet of the proposed construction site.

2.6 Historic and Cultural Resources

A literature and records review portion of a Phase I Historic and Cultural Resources survey was completed for the proposed double connection. A site survey was not possible because landowner access was not granted. (The proposed double connection is still in the planning stage, and land acquisition has yet to occur.) However, a complete site survey and records review was completed for the prior single connection alignment as proposed in the original NS Operating Plan. No historic or cultural resources were identified in the area for the single connection project. A check of the records at the Ohio State Historic Preservation office revealed no existing or eligible National Register of Historic Properties sites or recorded archaeological sites in the vicinity of the proposed single connection construction.

2.7 Transportation and Safety

The existing transportation network consists of southwest-northeast Conrail (DEIS segment number N-294) and NS (DEIS segment number N-072) rail lines that cross both Risden and Coen Rds. Other roads in the proposed project vicinity include U.S. Highway 6, State Rd. 2, and several local roads. A total of 52.3 trains per day (freight and passenger trains) use the Conrail double line and approximately 15.6 trains per day (freight trains) operate over the NS single line.

2.7.1 Grade Crossings

There are two at-grade crossings at Coen Rd. and two at-grade crossings at Risden Rd. in the vicinity of the proposed project area. Both of these secondary, two-lane roads are crossed by existing Conrail and NS lines and have warning lights and gates at all four crossings. No ADT

data was available for Risden and Coen Rds., so ADT is provided for the nearest area roads below:

- U.S. Highway 6, which is located 1,350 feet north of the crossing of the Conrail line and Coen Rd., averaged 5,205 vehicles per day.
- State Rd. 2, which is located 1,700 feet south of the crossing of the NS line and Coen Rd., averaged 15,730 vehicles per day.

ADT data for Risden and Coen Rd. is expected to be less than those provided for U.S. Highway 6 and State Rd. 2.

2.7.2 Hazardous Waste Sites

Review of environmental databases by Environment Data Resources, Inc. (EDR) did not identify any hazardous waste sites on the following lists: National Priorities List (NPL); Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS); Treatment, Storage, or Disposal Sites (TSDS); Corrective Action Reports (CORRACTS); Emergency Response Notification System (ERNS); Ohio State Priority List (SPL); Ohio Leaking Underground Storage Tanks (LUST); Ohio Underground Storage Tanks (UST); Ohio State Hazardous Waste Sites (SHWS) or Ohio State Inventory of Solid Waste Facilities/Landfills (SWF/LF) or other sites of environmental concern in the vicinity of the proposed rail line construction. The EDR database search revealed four unmappable sites. A site survey revealed that none of these four sites are within a one-mile radii from the proposed construction. No evidence of any hazardous waste sites was observed within the proposed construction area during the site visit.

2.8 Community Demographics

As seen in Figure IV-5 below, the area surrounding the proposed connection, i.e. the relevant census tracts, have a substantially lower percentage of minority residents than Erie County does on average. The project area is on the dividing line between U.S. Census Bureau tracts 401 and 402, which were both referenced for analysis. Data on economic levels in the area indicate that the population within the relevant census tracts is more prosperous than the county as a whole. Census data indicate that the percentage of people living below the Federal poverty level in the census tracts is slightly lower than the county average and median household incomes in the same area are higher than the county average.

Figure IV-5
1990 Racial and Economic Composition of Erie County and the Area Surrounding the Proposed Double Connection

Proposed Vermilion Double Connection			
Classification	**Erie County**	**Census Tract 401**	**Census Tract 402**
Population	76,779	5,712	3,822
Total Minority	7,801	149	6
Percent Minority	10.16%	2.61%	0.16%
Median Income	$30,470	$36,312	$38,300
Per Capita Income	$13,833	$14,989	$16,648
Percent Income < Poverty Level	8.99%	7.27%	3.82%
Source: US Census Bureau, 1990 Census Data			

No residences or other sensitive noise receptors are within the existing Ldn 65 dBA contour for the proposed connection.

3.0 POTENTIAL ENVIRONMENTAL IMPACTS OF THE VERMILION DOUBLE CONNECTION

This chapter provides a description of the potential environmental impacts of the proposed double connection at Vermilion. As part of the DEIS, a thorough environmental assessment has been performed with respect to the connection at Vermilion proposed in the original NS Operating Plan. Federal, state and local agencies were contacted for comments on the single connection configuration and follow-up contacts are currently in progress for the proposed double connection under the revised Cloggsville Connection mitigation proposal.

3.1 Land Use

The proposed Vermilion double connection would result in minimal impacts to land use. Approximately 14.1 acres of land would be acquired for the double connection, all of which would be used for right-of-way. The properties for which NS is negotiating rights to allow the proposed construction and operation are disturbed areas and cropland. The land that would be converted to rail use from outside existing rights-of-way is approximately 60 percent cropland. The remaining 40 percent contains deciduous trees, weeds and grasses typical of disturbed areas. Temporary construction impacts to adjacent farmland from excavation, such as mixing of soil profiles or soil compaction, are expected to be minor due to the small amount of land affected and because construction would be limited to the proposed new railroad right-of-way. The proposed construction would not conflict with adjacent land uses, electric utility lines or zoning.

No construction activities would occur within a designated coastal zone. The proposed connection would not be within the 100-year floodplain.

3.2 Water Resources

A description of potential impacts to groundwater and surface water resources in the project vicinity is provided in this section.

3.2.1 Groundwater

The construction of the proposed double connection would not have adverse impacts on groundwater resources. Only a small amount of fuels and oils would be present on the site during construction activities. Any potential leaks or spills could involve only small amounts.

Any spill or contaminant release would be reported and cleaned up in accordance with all Federal and state statutes and regulations.

3.2.2 Surface Water

Sherod Creek, an intermittent stream, would be crossed by the proposed connection east of Coen Rd. Construction techniques would be utilized for the crossing of Sherod Creek to allow sufficient drainage of the stream during high water flow periods. Storm water drainage patterns are not anticipated to be altered by the proposed project. Potential impacts from soil erosion resulting from cleared vegetation and disturbed soil would be insignificant because Best Management Practices (BMPs) would be used to control runoff and soil erosion. Additionally, the construction would be performed in compliance with the Ohio EPA Storm Water NPDES Permit, which is required for construction of the proposed connection. NS would restore disturbed areas of soil through reseeding, according to the NPDES permit.

NWI maps and field observations identified three wetlands outside the area affected by construction of the double connection. A fourth wetland is adjacent to the east edge of Coen Rd. and the northern edge of the existing NS rail bed. This wetland is approximately midway between the east and west connections to the NS rail line. The portion of the NS rail line adjacent to this wetland would not be affected by the construction of the double connection, and no impacts to the wetland are anticipated from the proposed project.

3.3 Biological Resources

The following sections present potential impacts to wildlife and vegetation within the project area.

3.3.1 Vegetation

The proposed action would affect cropland, a riparian area associated with Sherod Creek, a woodlot and narrow strips of weedy, grassy vegetation characteristic of disturbed wooded areas, and woody vegetation bordering the existing Conrail and NS rights-of-way. Approximately 60 percent of the project area is cropland and 40 percent of the project area consists of weeds, grasses and woody vegetation. NS would reseed disturbed areas outside the subgrade slope of the new proposed connection.

Loss of farmland within the right-of-way would be insignificant since it comprises only a small percentage of the land currently in agricultural production in the project vicinity.

3.3.2 Wildlife

No adverse impacts to wildlife are anticipated. The proposed construction site is small and contains only limited wildlife habitat. Wildlife within the project area would be subject to sporadic disturbance because of noise and human activity generated during construction activities, and subsequent train operations and maintenance activities. The minimal loss of habitat due to this proposed construction would be insignificant compared with the wildlife habitat available in the surrounding area.

Construction of the proposed double connection may temporarily displace local terrestrial wildlife because of increased noise from construction equipment and the presence of humans. However, such disturbances would be temporary and are not anticipated to cause a major permanent redistribution of resident species. The width of the right-of-way and the low height of rail should not pose a barrier to the movement of wildlife. Some mortality of small animals may result during construction due to compaction of burrows and encounters with heavy equipment. Incidental train/animal collisions could result in mortality to some species.

The railroad right-of-way would require approximately 14.1 acres outside of NS' existing property. This area is primarily cropland. On NS property, rail right-of-way would include a maximum of 3.2 acres of potential wildlife habitat. These areas contain low-quality wildlife habitat. Following construction, all cleared areas outside the right-of-way subgrade slope would be reseeded with grasses or other vegetation. Overall, minimal impact to wildlife would occur.

3.3.3 Threatened and Endangered Species

There is a slight potential for two threatened and endangered species to utilize portions of the project area. Telephone conversations with the USFWS have identified the need for a survey for potential Indiana bat summer habitat at the 14 acre woodlot area. The survey would assess the type of habitat and provide a subjective determination on the quality of habitat for use by the Indiana bat. The USFWS also recommends a seasonal mitigation approach to avoid potential impacts to summer roosting habitat by limiting construction to the time period between September 16 to April 14. This seasonal mitigation avoids the time frame of April 15 to September 15 when Indiana bats could potentially use the woodlot as summer roosting habitat.

In addition, the USFWS recommends a telephone contact be made with both USFWS and ODNR to ascertain whether there are known bald eagle nesting locations in the vicinity of the proposed project prior to construction. No threatened or endangered species were observed during site visits, nor are any such species known to occur on-site.

A survey for potential Indiana bat summer habitat should be performed prior to construction. Also, the Ohio DNR should be contacted prior to construction to verify locations of bald eagle nesting locations in the project vicinity and any potential impacts to the bald eagle. Based on the predominantly agricultural land use and generally low quality of wildlife habitat in the proposed project area, the potential impact to threatened and endangered species is minimal.

3.3.4 Parks, Forests, Preserves, Refuges and Sanctuaries

There would be no impacts to parks, forests, preserves, refuges, conservation areas or sanctuaries from the construction of the proposed connection.

3.4 Air Quality

Erie County is an air quality attainment area. Only minor impacts to air quality are expected as a result of the construction of the proposed project. The operation of heavy equipment would be the primary source of pollutant emissions during construction activities. Such pollutants vary by the source as described below:

- Particulate matter, volatile organic compounds (VOCs), carbon monoxide (CO), and nitrogen oxide (NOx) resulting from the combustion of diesel fuel.

- Fugitive dust along the right-of-way and unimproved roads resulting from the operation of heavy equipment.

Air quality impacts due to construction are expected to be minimal. During the construction phase, grading, excavation and placement of ballast and subgrade could result in a temporary increase of fugitive dust. However, with appropriate mitigation measures, such effects are expected to be minimal. Mitigation measures would include spraying road surfaces with a water truck or covering truck beds with tarps as necessary. Emissions from construction and maintenance equipment engines would be localized and temporary during the construction period and during maintenance activities. They are not expected to reduce air quality.

3.5 Noise

Noise levels in the proposed project area are expected to temporarily increase during construction. Temporary noise increases would be caused by operation of vehicles and heavy machinery during grading, rail construction, etc. The impacts would only be short-term, occurring from approximately 7:00 a.m. to 5:00 p.m. No residences or other sensitive noise receptors would be within the Ldn 65 dBA contour of the proposed connection. Since construction noise would occur during daylight hours and would be short-term in nature, and because of the rural nature of the project area, noise impacts from construction are not expected to be significant.

3.6 Historic and Cultural Resources

A historic and cultural resources review is currently in progress for the proposed double connection. A literature and records review portion of a Phase I survey was completed for the proposed alignment. A site survey was not possible because landowner access was not granted. However, a complete site survey and records review was completed for the single connection alignment as proposed in the NS original Operating Plan. Based on the literature and records review there is an isolated site on the east side of Coen Rd. In addition, west of Coen Rd. there is terrain which may be suitable for historic and cultural resources. A site survey must be completed prior to construction in order to fullfill requirements of the Section 106 process.

3.7 Transportation and Safety

3.7.1 Grade Crossings

The proposed double connection would not require any new at-grade crossings to be constructed. Nor would it require any existing at-grade crossings to be expanded.

The single connection proposed in NS' original Operating Plan would have required the construction of a new at-grade crossing where the connection would have crossed Coen Rd. By contrast, the proposed double connection utilizes the existing at-grade crossing on the Nickel Plate line at Coen Rd.

3.7.2 Hazardous Waste Sites

Review of the EDR database indicated that no hazardous waste sites, e.g., NPL, CERCLIS, RCRIS-TSDS, CORRACTS, ERNS, SHWS, LUST, UST, SWF/LF, SPL or SHWS were identified in the vicinity of the proposed rail line construction. The database search revealed four unmappable sites. A site survey revealed that none of these four sites are within a one-mile radii from the proposed construction.

During a site visit, no evidence of potential hazardous waste sites in the project area was observed. No hazardous waste sites are expected to be impacted by the proposed project.

3.8 Community Demographics

No significant adverse effects which have a high and disproportionate impact on minority and low-income communities are expected as a result of the proposed double connection. The population in the area of the proposed construction has a lower percentage of minority residents than the county as a whole. Further, data on economic levels in the area indicate that the population of the two relevant census tracts is more prosperous than that of the county as a whole. Moreover, since there would be no significant adverse environmental effects as a result of the construction and operation of the proposed double connection, concerns about potentially significant adverse environmental consequences would be eliminated, regardless of the composition of the surrounding population.

3.9 Summary and Conclusions

As shown above, potential environmental impacts related to the construction of the proposed double connection are insignificant or nonexistent. The proposed project is not expected to have any significant adverse impact on land use, water resources, biological resources, or air quality (Figure IV-6). Nor would the proposed project have significant adverse impacts on safety or cultural resources. Any noise increases during construction would be limited to normal work hours and would only occur during the construction period. There would not be any significant environmental impacts on any group regardless of race or economic status as a result of the proposed project. Consequently, there would not be any high and disproportionate environmental justice impacts as a result of the construction of the proposed double connection. This conclusion is further supported by the absence of significant environmental impacts related to the proposed double connection.

Figure IV-6
Summary of Potential Environmental Impacts
Proposed Double Connection at Vermilion, Ohio

Vermilion, Ohio		
Impact Type	**Environmental Assessment Criteria**	**Evaluation of Criteria**
Land Use	Length of Proposed Double Connection New Right-of-Way Required Effect on Prime Farmland Effect on Coastal Zone Management Areas Effect on Parks, Forest Preserves, Refuges and Sanctuaries	7,950 feet 6,150 feet None None None
Water Resources	Effect on Groundwater Effect on Surface Water Effect on Wetlands	None None None
Biological Resources	Loss of Critical Habitat Effect on Threatened and Endangered Species	None None
Air Quality	Impact to Air Quality Due to Construction	None
Noise	Potentially Affected Sensitive Noise Receptors Within Ldn 65 Noise Contour	None
Transportation and Safety	Train Movement Over Connection (east of Coen Rd.) Train Movement Over Connection (west of Coen Rd.) New or Expanded Grade Crossings Effect on Transportation of Hazardous Materials	11.6 trains/day 0 9 trains/day None None
Cultural Resources	Effect on Sites Listed on the NRHP Effect on Sites Potentially Eligible for Listing on the NRHP Effect on Archaeological Sites	None None None
Energy	Change in Fuel Consumption Due to Construction Change in Fuel Consumption Due to Operation (gallons per year saved) Effect on Transportation of Energy Resources and Recyclable Commodities Overall Energy Efficiency Rail to Motor Carrier Diversions	Negligible 1.3 million* None Improved None
Environmental Justice	High and Disproportionate Impact on Minority and Low-Income Groups	None

*System-wide

4.0 REFERENCES

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Federal Emergency Management Agency (FEMA), 1991. *Panel 85 of 110, Community-Panel Number 390153 0085 B.* Flood Insurance Rate Map, County of Erie, OH.

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ATTACHMENT B
NS LETTER TO SEA REGARDING THE SUPPLEMENTAL ENVIRONMENTAL REPORT

On April 27, 1998, NS submitted a letter regarding the Supplemental Environmental Report, "NS Mitigation Proposal for Train Frequencies in Greater Cleveland and Vicinity" (included in this Addendum as Attachment A) that it submitted to SEA on April 16, 1998. This letter responds to SEA's request for additional information about modifications to train traffic on 16 rail line segments that would result from the proposed mitigation measure mentioned above. The attached letter provides additional information on the highway/rail at-grade crossing safety and traffic delay analysis for the 16 rail line segments.

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Correction letter

NORFOLK SOUTHERN

CENTRAL ADMINISTRATIVE UNIT
RECD:
DOCUMENT # 4-28-98 9:51:42AM

Norfolk Southern Corporation
1500 K Street, N W , Suite 375
Washington, D C 20005
202 383-4166
202 383-4425 (Direct)
202 383-4018 (Fax)

Bruno Maestri
System Director
Environmental Protection

ADMINISTRATIVELY CONFIDENTIAL

Washington, D.C. - April 27, 1998

BY HAND

Ms. Elaine K. Kaiser
Chief
Section of Environmental Analysis
Surface Transportation Board
1925 K Street, N.W.
Washington, D.C 20423-0001

Re: Finance Docket No. 33388: CSX and NS - Control and Acquisition of Conrail

Subject: Response to April 16, 1998 Letter

SEA#: NS-R-0048

Dear Ms. Kaiser

In response to your letter of April 16, 1998, Norfolk Southern (NS) has contacted Mr. Michael Dalton in order to obtain clarification of SEA's information needs Mr Dalton informed us that some of the information specified in the letter has already been obtained and/or incorporated by SEA in its FEIS preparation efforts. Specifically, he stated that SEA no longer requires any additional information from NS with respect to either the relocation of a TCS facility to Sandusky, OH (the subject of April 3 and April 8, 1998 submittals and earlier correspondence from NS to SEA) or Canadian Pacific haulage rights on the Detroit to Chicago rail corridor (the subject of an April 8, 1998 submittal and earlier correspondence from NS to SEA) Moreover, SEA requires, with respect to the proposed mitigation for Greater Cleveland/Cloggsville (the subject of an April 12, 1998 submittal from NS to SEA and our April

16, 1998 submittal of an environmental report on the Cloggsville Connection mitigation proposal), only a portion of the information indicated in your letter. That information is described and provided for SEA's use below.

Additional Information Requested by SEA on Environmental Impacts Related to NS' Rerouting Mitigation Proposal for the Greater Cleveland Area

In accordance with the directions from Mr. Dalton, NS is providing information on analysis of grade crossing safety and delay information for the line segments affected by NS' proposed modification of train traffic routes as a potential mitigation measure in the Greater Cleveland area.

Affected NS Line Segments

Rail traffic changes on 16 NS line segments would occur as a result of the above-mentioned mitigation proposal. Some line segments would experience an increase in traffic levels from those presented in the Applicants' Environmental Report, while other line segments would experience a decrease in traffic levels. These line segments, the change in traffic relative to 1995 base case conditions and whether these traffic level changes meet the thresholds, as defined in the DEIS, to merit analysis for grade crossing safety (increase of eight or more trains per day) and delay (increase that meets or exceeds the STB's threshold for air quality analysis) analysis are listed in Table 1.

Table 1
Line Segments with Train Traffic Changes Under the NS Rerouting Mitigation Proposal for Greater Cleveland Area

ID#	Line Segment Description	Change in Number of Trains/Day from 1995 base case levels	Meets DEIS Threshold for Grade Crossing Safety Analysis?	Meets DEIS Threshold for Grade Crossing Delay Analysis?
N-095	Rochester, PA to Youngstown, OH	-5.5	No	No
N-082	Youngstown to Ashtabula, OH	+1.5	No	No
N-075	Ashtabula to Cleveland (Cloggsville), OH	+13.0	Yes	Yes
N-080	Cleveland (Cloggsville) to Vermilion, OH	+0.4	No	No
N-285	Rochester, PA to Alliance, OH	-1.0	No	No
N-084	Alliance to White, OH	+14.3	Yes	Yes
N-081	White to Cleveland (CP-181), OH	+27.8	Yes	Yes
N-293C	Cleveland (CP-181) to CP-190, OH	+5.1	No	Yes
N-293B	CP-190 to Berea, OH	+14.7	Yes	Yes
N-074E	Cleveland (Cloggsville) to CP-190, OH	+11.8	Yes	Yes
N-293A	Berea, to Vermilion, OH	+6.7	No	Yes
N-072	Vermilion to Bellevue	+10.4	Yes	Yes
N-079	Bellevue to Oak Harbor	+18.5	Yes	Yes
N-294	Vermilion to Oak Harbor	-5.9	No	No
n/a	Vermilion Connection west of Coen Road	+0.9	No	No
n/a	Vermilion Connection east of Coen Road	+11.6	Yes	Yes

Data for Proposed Mitigation for Greater Cleveland/Cloggsville
April 27, 1998

Grade Crossing Methodology

The same standard FRA method used in the DEIS (at pages B-22 and B-23 of Volume 5A) to predict the number of accidents at a crossing based on data on the characteristics and the reported collision history for the crossing has been applied here by NS. The relevant crossing characteristics and reported collision history for each affected crossing were obtained from FRA's crossing grade inventory and 1992 through 1996 accident history. More recent ADT information for some grade crossings was received from the Public Utilities Commission of Ohio (PUCO) on April 23, 1998. This more recent ADT information was used in the grade crossing safety analysis where available. The grade crossing safety data is presented in attached Table 2.

The FRA developed this method as a way for state agencies to rank crossings by accident frequency in order to identify crossings that potentially qualify for safety improvements appropriate to state-wide needs. The procedure is not intended to single out crossings on a national basis without considering the many other factors, including criteria appropriate to the individual state, which may influence accident rates and decisions as to safety improvements.

Traffic Delay Methodology

To analyze highway/rail at-grade crossing delays, NS applied the DEIS criteria for line segments that would exceed the STB's environmental analysis thresholds for air quality analysis and roadways that have ADTs of 5,000 or greater. In Section C.4.3 of Volume 5A of the DEIS, SEA included five delay calculations: blocked crossing time per train, crossing delay per stopped vehicle, number of vehicles delayed per day, maximum vehicle queue, and average delay for all vehicles. In their Supplemental Errata to the DEIS dated February 2, 1998, SEA provided a correction to the crossing delay per stopped vehicle formula. In Appendix NS-2 of NS' Comments on the DEIS, NS presented a different equation (developed by Stanford Research Institute for the FRA) for calculating the crossing delay per stopped vehicle. NS believes the

Stanford Research Institute ("SRI") formula presented in NS' comments on the DEIS will provide a more accurate reflection of the crossing delay per stopped vehicle. However, NS recognizes that SEA may prefer the formula presented in the DEIS. Therefore, the data supplied herein includes the results of both means (SEA's Supplemental Errata version and SRI's version) of calculating the crossing delay per stopped vehicle. The grade crossing delay data using the SRI formula for crossing delay per stopped vehicle are presented in attached Table 3. The crossing delay per stopped vehicle data using the Supplemental Errata formula are presented in attached Table 4. The same data sources (FRA and PUCO) used for the grade crossing safety analysis were used for the grade crossing delay analysis.

The following rail line segments met the DEIS trains per day threshold for grade crossing delay analysis but either do not cross any roads at-grade or do not have any at-grade crossings with an ADT of 5,000 vehicles per day or higher.

- N-081 - White to Cleveland (no at-grade crossings with an ADT of 5,000 or greater)
- N-074E - Cleveland (Cloggsville) to CP-190 (no at-grade crossings)
- N-293C - Cleveland (CP-181) to CP-190 (no at-grade crossings)
- Vermilion connection east of Coen Road (no at-grade crossings)

Please let us know if you require any additional information or explanation

Sincerely yours,

W J Hamilton /for

Bruno Maestri
System Director
Environmental Protection

Data for Proposed Mitigation for Greater Cleveland/Cloggsville
April 27, 1998

cc: Michael Dalton
John Morton
William Novak
Michael Johnson
Steven Lee
Constance Sadler
Andrew Plump
Mary Gabrielle Sprague
W.C. Wooldridge
A. G. Jordan
J. A. Allman
C. J. Wehrmeister
W. J. Harris
R L Crawford
Julie Sanford
Suzanne Burrows

Table 2

Highway/Rail At-Grade Crossing Accident Frequency

County	FRA ID	Street Name	Present Safety Device	ADT	Number of Roadway Lanes	Maximum Speed	Total Accidents 1992-1996	Total Trains Per Day		Accidents Per Year		
								Pre-Transaction	Post-Transaction	Pre-Transaction	Post-Transaction	Change
N-072 - VERMILION TO BELLEVUE												
ERIE	472308V	STATE STREET	Gate	5330	2	60	0	15.6	26.0	0.029	0.035	0.006
ERIE	472312K	COEN ROAD	Gate	420	2	60	0	15.6	26.0	0.016	0.019	0.003
ERIE	472313S	RISDEN ROAD	Gate	390	2	60	0	15.6	26.0	0.015	0.019	0.004
ERIE	472315F	BARNES ROAD	Passive	340	2	60	0	15.6	26.0	0.046	0.055	0.010
ERIE	472316M	STANLEY ROAD	Passive	110	2	60	0	15.6	26.0	0.033	0.041	0.008
ERIE	472318B	JOPPA ROAD	Gate	270	2	60	0	15.6	26.0	0.014	0.017	0.003
ERIE	472320C	FRAILEY ROAD	Gate	290	2	60	0	15.6	26.0	0.014	0.018	0.004
ERIE	472321J	DARROW ROAD	Gate	570	2	60	0	15.6	26.0	0.017	0.021	0.004
ERIE	472322R	SMOKEY ROAD	Passive	100	2	60	0	15.6	26.0	0.032	0.040	0.008
ERIE	472323X	STATE ROUTE 61	Flasher	2430	2	60	0	15.6	26.0	0.043	0.051	0.008
ERIE	472325L	BARROWS ROAD	Flasher	760	2	60	0	15.6	26.0	0.030	0.037	0.007
ERIE	472328G	JEFFRIES ROAD	Gate	270	2	60	0	15.6	26.0	0.014	0.017	0.003
ERIE	472329N	WEIKEL ROAD	Passive	110	2	60	0	15.6	26.0	0.033	0.041	0.008
ERIE	472334K	HOOVER ROAD	Passive	140	2	60	0	15.6	26.0	0.036	0.044	0.008
ERIE	472341V	STRECKER ROAD	Flasher	420	2	60	0	15.6	26.0	0.025	0.031	0.006
ERIE	472344R	THOMAS ROAD	Passive	130	2	60	0	15.6	26.0	0.035	0.043	0.008
ERIE	472345X	RANSOM ROAD	Gate	250	2	60	0	15.6	26.0	0.014	0.017	0.003
ERIE	472348T	PATTEN TRACT ROAD	Passive	540	2	60	0	15.6	26.0	0.051	0.062	0.010
ERIE	472351B	STATE ROUTE 99	Gate	2300	2	25	1	15.6	26.0	0.076	0.086	0.010
HURON	481638A	CENTER ST	Gate	670	2	25	0	15.6	26.0	0.020	0.024	0.004
N-075 - ASHTABULA TO CLEVELAND (CLOGGSVILLE)												
ASHTABULA	471985U	GARY AVENUE	Gate	810	2	35	0	13.0	26.0	0.017	0.023	0.006
ASHTABULA	471986B	JEFFERSON AVENUE*	Flasher	1154	2	35	0	13.0	26.0	0.032	0.042	0.010
ASHTABULA	471988P	WEST 52ND STREET	Gate	2590	2	35	0	13.0	26.0	0.023	0.030	0.007
ASHTABULA	471989W	WEST AVENUE	Gate	8000	2	35	0	13.0	26.0	0.030	0.038	0.008
ASHTABULA	471990R	NATHAN AVENUE	Flasher	1310	2	35	2	13.0	26.0	0.142	0.168	0.026
ASHTABULA	471991X	SAMUEL AVENUE*	Flasher	459	2	60	0	13.0	26.0	0.024	0.031	0.007
ASHTABULA	471992E	WOODMAN AVENUE	Gate	4330	2	60	1	13.0	26.0	0.074	0.087	0.013
ASHTABULA	471993L	SANBORN ROAD*	Flasher	1812	2	60	1	13.0	26.0	0.094	0.113	0.019
ASHTABULA	471997N	STATE ROUTE 45	Gate	4930	2	60	0	13.0	26.0	0.027	0.034	0.007
ASHTABULA	471998V	DEPOT ROAD*	Flasher	916	2	60	1	13.0	26.0	0.081	0.098	0.017
ASHTABULA	472001J	BROWN ROAD*	Passive	291	1	60	1	13.0	26.0	0.106	0.129	0.023
ASHTABULA	472004E	MYERS ROAD	Gate	740	2	60	0	13.0	26.0	0.017	0.022	0.005

Table 2

Highway/Rail At-Grade Crossing Accident Frequency

County	FRA ID	Street Name	Present Safety Device	ADT	Number of Roadway Lanes	Maximum Speed	Total Accidents 1992-1996	Total Trains Per Day		Accidents Per Year		
								Pre-Transaction	Post-Transaction	Pre-Transaction	Post-Transaction	Change
ASHTABULA	472005L	CENTENNIAL ROAD	Gate	2020	2	60	0	13.0	26.0	0.022	0.028	0.006
ASHTABULA	472007A	SHERMAN STREET	Gate	2110	2	60	0	13.0	26.0	0.022	0.028	0.006
ASHTABULA	472008G	BROADWAY AVENUE	Gate	7320	2	60	0	13.0	26.0	0.029	0.038	0.009
ASHTABULA	472009N	EAGLE AVENUE*	Flasher	1098	2	60	0	13.0	26.0	0.031	0.041	0.010
ASHTABULA	472010H	CHESTNUT STREET	Gate	120	2	60	0	13.0	26.0	0.010	0.014	0.004
ASHTABULA	472011P	WEST STREET	Gate	260	2	60	0	13.0	26.0	0.013	0.017	0.004
ASHTABULA	472012W	WALTER/MAIN ROAD	Gate	230	2	60	1	13.0	26.0	0.049	0.057	0.008
LAKE	472013D	COUNTY LINE ROAD	Gate	2810	2	60	0	13.0	26.0	0.023	0.030	0.007
LAKE	472015S	BATES ROAD	Gate	510	2	60	0	13.0	26.0	0.015	0.020	0.005
LAKE	472017F	LAKE STREET	Gate	8810	2	60	0	13.0	26.0	0.031	0.039	0.008
LAKE	472018M	DAYTON ROAD	Gate	890	2	60	0	13.0	26.0	0.018	0.023	0.005
LAKE	472023J	WOOD ROAD	Gate	101	2	60	0	13.0	26.0	0.010	0.013	0.003
LAKE	472024R	TOWNLINE ROAD	Gate	1120	2	60	0	13.0	26.0	0.019	0.024	0.005
LAKE	472025X	DAVIS ROAD	Gate	570	2	60	0	13.0	26.0	0.016	0.021	0.005
LAKE	472026E	MAIN STREET*	Flasher	1590	2	60	1	13.0	26.0	0.091	0.110	0.019
LAKE	472027L	MAPLE*	Flasher	997	2	60	0	13.0	26.0	0.030	0.040	0.010
LAKE	472028T	SHEPARD ROAD	Flasher	1360	2	60	0	13.0	26.0	0.034	0.044	0.010
LAKE	472030U	LANE ROAD	Gate	1250	2	60	0	13.0	26.0	0.019	0.025	0.006
LAKE	472031B	PARK ROAD*	Flasher	1784	2	60	0	13.0	26.0	0.036	0.047	0.011
LAKE	472032H	MADISON AVENUE	Gate	3590	2	60	0	13.0	26.0	0.025	0.032	0.007
LAKE	472033P	RIVERSIDE DRIVE*	Flasher	2781	2	60	0	13.0	26.0	0.042	0.053	0.011
LAKE	472035D	BANK ST	Gate	2320	2	30	0	13.0	26.0	0.022	0.029	0.007
LAKE	472036K	STATE STREET	Gate	2990	2	30	0	13.0	26.0	0.024	0.031	0.007
LAKE	472039F	LIBERTY ST	Gate	7580	2	30	0	13.0	26.0	0.030	0.038	0.008
LAKE	472040A	CHESTNUT STREET	Gate	5980	2	30	0	13.0	26.0	0.028	0.036	0.008
LAKE	472044C	MENTOR AVENUE	Gate	19260	4	60	0	13.0	26.0	0.044	0.055	0.011
LAKE	472045J	JACKSON STREET	Gate	5230	2	60	1	13.0	26.0	0.076	0.090	0.014
LAKE	472046R	HEISLEY ROAD	Gate	6360	2	60	0	13.0	26.0	0.028	0.036	0.008
LAKE	472048E	HOPKINS ROAD	Gate	5460	2	60	0	13.0	26.0	0.027	0.035	0.008
LAKE	472263R	PATTERSON DRIVE	Gate	250	2	60	0	13.0	26.0	0.013	0.017	0.004
LAKE	472050F	STATION STREET	Gate	2100	2	60	0	13.0	26.0	0.022	0.028	0.006
LAKE	472051M	MAPLE STREET*	Flasher	857	2	60	0	13.0	26.0	0.029	0.038	0.009
LAKE	472052U	HART STREET	Gate	2850	2	60	0	13.0	26.0	0.024	0.030	0.006
LAKE	472055P	PELTON STREET	Gate	4380	2	60	0	13.0	26.0	0.026	0.034	0.008
LAKE	472056W	ERIE STREET	Gate	8570	2	60	0	13.0	26.0	0.030	0.039	0.009

Table 2

Highway/Rail At-Grade Crossing Accident Frequency

County	FRA ID	Street Name	Present Safety Device	ADT	Number of Roadway Lanes	Maximum Speed	Total Accidents 1992 1996	Total Trains Per Day		Accidents Per Year		
								Pre-Transaction	Post-Transaction	Pre-Transaction	Post-Transaction	Change
LAKE	472060L	CHURCH STREET*C152	Flasher	702	2	50	0	13.0	26.0	0.027	0.036	0.009
LAKE	472062A	BEILDER RD	Gate	2965	2	60	0	13.0	26.0	0.024	0.031	0.007
LAKE	472064N	E. 305TH/RUSH RD.	Gate	6164	4	60	0	13.0	26.0	0.035	0.044	0.009
LAKE	472068R	LLOYD ROAD	Gate	7400	2	60	0	13.0	26.0	0.029	0.038	0.009
LAKE	472070S	DEPOT RD	Flasher	20	2	35	1	13.0	26.0	0.041	0.046	0.005
CUYAHOGA	472089J	CHARDON ROAD	Gate	47?0	4	60	0	13.0	26.0	0.033	0.042	0.009
CUYAHOGA	472093Y	DILLE ROAD	Gate	15430	2	60	0	13.0	26.0	0.035	0.044	0.009
CUYAHOGA	472097B	WAYSIDE ROAD	Gate	3770	2	35	0	13.0	26.0	0.025	0.032	0.007
CUYAHOGA	472098H	LONDON ROAD	Gate	5310	2	35	0	13.0	26.0	0.027	0.035	0.008
N-081 - WHITE TO CLEVELAND (CP-181)												
CUYAHOGA	524226K	AETNA	Gate	2560	2	40	2	14.5	42.3	0.124	0.156	0.032
CUYAHOGA	524223P	BESSEMER	Gate	2680	2	40	0	14.5	42.3	0.027	0.040	0.013
CUYAHOGA	524190E	EAST 26TH ST	Gate	3500	2	20	0	14.5	42.3	0.024	0.033	0.009
N-084 - ALLIANCE TO WHITE												
STARK	503008V	PATTERSON	Gate	5150	2	40	0	28.4	42.7	0.040	0.046	0.006
STARK	503010W	WALNUT	Flasher	470	2	40	2	28.4	42.7	0.154	0.170	0.016
STARK	503011D	PARK AVE	Flasher	460	2	40	0	28.4	42.7	0.038	0.044	0.006
STARK	503012K	KEYSTONE	Flasher	620	2	40	1	28.4	42.7	0.041	0.048	0.006
STARK	503013S	UNION	Gate	4420	2	40	0	28.4	42.7	0.039	0.044	0.005
STARK	503014Y	VINE ST	Gate	450	2	40	0	28.4	42.7	0.023	0.027	0.004
STARK	503015F	GASKILL	Gate	1240	2	60	0	28.4	42.7	0.029	0.034	0.005
STARK	503016M	ROCKHILL	Gate	1510	2	60	0	28.4	42.7	0.031	0.035	0.004
STARK	503018B	FLORIDA AVE	Passive	230	2	60	0	28.4	42.7	0.052	0.060	0.008
STARK	503019H	GREENBOWER RD	Passive	500	2	60	0	28.4	42.7	0.063	0.071	0.009
STARK	503020C	MAIN ST	Passive	30	1	60	1	28.4	42.7	0.086	0.096	0.010
PORTAGE	503021J	GERMAN CHURCH	Passive	20	2	60	0	28.4	42.7	0.026	0.031	0.005
PORTAGE	503022R	IRON ST.	Gate	3160	2	60	0	28.4	42.7	0.036	0.041	0.005
PORTAGE	503025L	WATERLOO RD	Gate	1350	2	60	0	28.4	42.7	0.030	0.035	0.005
PORTAGE	503028G	STROUP	Gate	320	2	60	0	28.4	42.7	0.021	0.025	0.004
PORTAGE	503029N	MOFF RD	Passive	30	2	60	0	28.4	42.7	0.029	0.035	0.006
PORTAGE	503030H	WILKES RD	Gate	110	2	60	0	28.4	42.7	0.016	0.019	0.003
PORTAGE	503031P	INDUSTRY RD	Gate	270	2	60	0	28.4	42.7	0.020	0.024	0.004
PORTAGE	503568C	HATTRICK RD	Gate	360	2	60	0	28.4	42.7	0.022	0.026	0.004
PORTAGE	503566N	NEW MILFORD	Gate	960	2	60	0	28.4	42.7	0.028	0.032	0.004

AD-B-11

Table 2

Highway/Rail At-Grade Crossing Accident Frequency

County	FRA ID	Street Name	Present Safety Device	ADT	Number of Roadway Lanes	Maximum Speed	Total Accidents 1992-1996	Total Trains Per Day		Accidents Per Year		
								Pre-Transaction	Post-Transaction	Pre-Transaction	Post-Transaction	Change
PORTAGE	503565G	LYNN RD	Gate	380	2	60	0	28.8	42.7	0.022	0.026	0.004
PORTAGE	503564A	SANDYLAKE RD	Gate	470	2	60	0	28.4	42.7	0.023	0.027	0.004
PORTAGE	503558W	LAKE ST	Gate	940	2	60	0	28.4	42.7	0.027	0.032	0.005
SUMMIT	524556G	E. HIGHLAND RD	Gate	4140	2	50	0	28.4	42.7	0.038	0.044	0.006
SUMMIT	503033D	TWINSBURG	Gate	1140	2	50	0	28.4	42.7	0.029	0.033	0.004
SUMMIT	503034K	HINES HILL RD	Gate	950	2	50	0	28.4	42.7	0.028	0.032	0.004
SUMMIT	503541T	STOW RD	Gate	6390	2	60	1	28.4	42.7	0.102	0.112	0.010
N-293B - CP-190 TO BEREA												
CUYAHOGA	523941R	FRONT ST	Gate	004930	2	50	0	52.4	67.1	0.048	0.052	0.004
CUYAHOGA	523940J	SHELDON RD	Gate	005060	2	35	0	52.4	67.1	0.048	0.052	0.004
CUYAHOGA	523937B	EASTLAND RD	Gate	007690	2	35	0	52.4	67.1	0.052	0.056	0.004
N-079 - BELLEVUE TO OAK HARBOR												
SANDUSKY	473673T	CR 292	Passive	330	2	50	1	7.7	26.2	0.090	0.127	0.037
SANDUSKY	473672L	CR 177	Flasher	1390	2	20	1	7.7	26.2	0.077	0.107	0.030
SANDUSKY	473671E	CR 302	Passive	400	2	20	0	7.7	26.2	0.028	0.047	0.019
SANDUSKY	473669D	MT. PLEASANT RD.	Gate	1870	2	20	0	7.7	26.2	0.017	0.028	0.011
SANDUSKY	473668W	KILBOURNE	Gate	9330	2	20	2	7.7	26.2	0.120	0.157	0.037
SANDUSKY	473667P	YORK ST	Passive	450	2	20	0	7.7	26.2	0.029	0.048	0.019
SANDUSKY	473697G	CR 236	Passive	740	2	50	0	7.7	26.2	0.040	0.063	0.023
SANDUSKY	473696A	WOODLAND	Flasher	4220	2	50	0	7.7	26.2	0.039	0.059	0.020
SANDUSKY	473693E	SPRING ST	Gate	1280	2	35	0	7.7	26.2	0.016	0.025	0.010
SANDUSKY	473692X	AMANDA ST	Flasher	1230	2	35	0	7.7	26.2	0.026	0.042	0.016
SANDUSKY	473691R	NELSON ST	Passive	250	2	35	0	7.7	26.2	0.027	0.045	0.018
SANDUSKY	473690J	GEORGE ST.	Gate	720	2	35	1	7.7	26.2	0.051	0.067	0.016
SANDUSKY	473688H	VINE ST.	Flasher	830	2	35	0	7.7	26.2	0.023	0.038	0.015
SANDUSKY	473687B	MAIN ST.	Gate	7230	2	35	0	7.7	26.2	0.024	0.038	0.013
SANDUSKY	473686U	MAPLE ST.	Flasher	3180	2	35	0	7.7	26.2	0.036	0.055	0.019
SANDUSKY	473685M	CHURCH ST	Flasher	610	2	35	0	7.7	26.2	0.021	0.034	0.014
SANDUSKY	473684F	DUANE ST	Flasher	1800	2	35	0	7.7	26.2	0.030	0.047	0.017
SANDUSKY	473683Y	EAST ST	Passive	410	2	35	0	7.7	26.2	0.031	0.051	0.020
SANDUSKY	473681K	CR 260	Passive	250	2	50	1	7.7	26.2	0.086	0.121	0.035
SANDUSKY	473680D	CR 175	Gate	710	2	50	0	7.7	26.2	0.013	0.022	0.009
SANDUSKY	473679J	COBLEY RD	Passive	120	1	50	0	7.7	26.2	0.023	0.040	0.017
SANDUSKY	473678C	CR 270	Passive	140	2	50	0	7.7	26.2	0.024	0.042	0.018

Table 2

Highway/Rail At-Grade Crossing Accident Frequency

County	FRA ID	Street Name	Present Safety Device	ADT	Number of Roadway Lanes	Maximum Speed	Total Accidents 1992-1996	Total Trains Per Day		Accidents Per Year		
								Pre-Transaction	Post-Transaction	Pre-Transaction	Post-Transaction	Change
SANDUSKY	473711A	STATE	Gate	19380	4	35	0	7.7	26.2	0.038	0.055	0.017
SANDUSKY	473709Y	HAYES AVE	Gate	2743	4	35	1	7.7	26.2	0.070	0.094	0.024
SANDUSKY	473707K	BUCHANAN ST	Flasher	2140	2	50	0	7.7	26.2	0.031	0.049	0.018
SANDUSKY	473706D	SMITH RD	Gate	1240	2	50	0	7.7	26.2	0.015	0.025	0.010
SANDUSKY	473705W	FINEFROCK RD	Passive	670	2	50	0	7.7	26.2	0.039	0.062	0.023
SANDUSKY	473704P	CR 198	Gate	740	2	50	0	7.7	26.2	0.014	0.022	0.009
SANDUSKY	473703H	STATE ROUTE 19	Flasher	1350	2	50	0	7.7	26.2	0.027	0.044	0.017
SANDUSKY	473702B	CR 212	Passive	250	2	50	0	7.7	26.2	0.029	0.049	0.020
SANDUSKY	473700M	CR 220	Passive	90	1	50	0	7.7	26.2	0.021	0.037	0.016
SANDUSKY	473698N	CR 224	Passive	37	2	50	0	7.7	26.2	0.016	0.028	0.012
OTTAWA	473754T	WATER ST	Gate	7530	2	35	0	7.7	26.2	0.024	0.038	0.014
OTTAWA	473752E	PORTAGE RIVER RD	Passive	930	2	50	0	7.7	26.2	0.043	0.067	0.024
OTTAWA	473750R	CULLMON RD.	Passive	100	2	50	0	7.7	26.2	0.022	0.038	0.016
OTTAWA	473747H	ELMORE EAST RD	Passive	200	2	50	0	7.7	26.2	0.027	0.046	0.019
OTTAWA	473745U	BLOOM RD	Passive	100	1	50	0	7.7	26.2	0.022	0.038	0.016
SANDUSKY	473731L	SR 19	Flasher	3470	2	50	0	7.7	26.2	0.036	0.056	0.019
SANDUSKY	473730E	LINDSEY RD	Passive	10	2	50	0	7.7	26.2	0.010	0.019	0.008
SANDUSKY	473728D	BOOKTOWN RD	Passive	540	2	50	0	7.7	26.2	0.037	0.059	0.022
SANDUSKY	473726P	FANGBONER RD	Passive	210	2	50	0	7.7	26.2	0.028	0.047	0.019
SANDUSKY	473719E	PORT CLINTON/FRONT	Gate	2710	2	35	0	7.7	26.2	0.019	0.030	0.011
SANDUSKY	473717K	SAND ST	Passive	70	2	35	0	7.7	26.2	0.018	0.031	0.014
SANDUSKY	473716J	NORTH ST	Passive	80	2	35	1	7.7	26.2	0.066	0.091	0.025
SANDUSKY	473742Y	CR 89	Passive	30	1	50	0	7.7	26.2	0.015	0.026	0.012
SANDUSKY	473740K	CR 153	Passive	130	2	50	0	7.7	26.2	0.024	0.041	0.017
SANDUSKY	473739R	CR 143	Passive	80	2	50	0	7.7	26.2	0.020	0.036	0.015
SANDUSKY	473734G	CR 127	Passive	170	2	50	0	7.7	26.2	0.026	0.044	0.018
SANDUSKY	473665B	SOUTHWEST ST	Gate	2250	2	50	0	7.7	26.2	0.018	0.029	0.011

* More recent ADT information received from the Public Utilities Commission of Ohio on April 23, 1998.

AD&-13

TABLE 3
HIGHWAY/RAIL AT-GRADE CROSSING VEHICLE DELAYS AND QUEUES
(using Stanford Research Institute's formula for calculating Average Delay/Vehicle)

					Pre-Acquisiton							Post-Acquisition						
FRA ID	Street Name	Number of Roadway Lanes	ADT	Train Speed (mph)	Train Length (feet)	Trains Per Day	Total Blocked Time/ Train (min)	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)	Train Length (feet)	Trains Per Day	Total Blocked Time/ Train (min)	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)
N-075-ASHTABULA TO CLEVELAND (CLOGGSVILLE)																		
471989W	West Ave.	2	8000	35	4869	13.0	2.1	1.3	150.3	16.6	3.0	5000	26.0	2.1	1.4	306.7	17.0	6.3
472008G	Broadway Ave. (SR 534)	2	7320	60	4869	13.0	1.4	1.0	94.0	10.4	1.6	5000	26.0	1.4	1.0	191.2	10.6	3.2
472017F	Lake St. (SR 528)	2	8810	60	4869	13.0	1.4	1.0	113.1	12.5	1.6	5000	26.0	1.4	1.0	230.2	12.7	3.2
472039F	Liberty St.	2	7580	60	4869	13.0	1.4	1.0	97.3	10.8	1.6	5000	26.0	1.4	1.0	198.0	11.0	3.2
472040A	Chestnut St.	2	5980	60	4869	13.0	1.4	1.0	76.8	8.5	1.6	5000	26.0	1.4	1.0	156.2	8.7	3.2
472044C	Mentor Ave. (U.S. 20)	4	19260	60	4869	13.0	1.4	1.0	247.3	13.7	1.6	5000	26.0	1.4	1.0	503.2	13.9	3.2
472045J	Jackson St.	2	5230	60	4869	13.0	1.4	1.0	67.1	7.4	1.6	5000	26.0	1.4	1.0	136.6	7.6	3.2
472046R	Heisley Rd.	2	6360	60	4869	13.0	1.4	1.0	81.7	9.0	1.6	5000	26.0	1.4	1.0	166.2	9.2	3.2
472048E	Hopkins Rd.	2	5460	60	4869	13.0	1.4	1.0	70.1	7.8	1.6	5000	26.0	1.4	1.0	142.6	7.9	3.2
472056W	Erie St.	2	8570	50	4869	13.0	1.6	1.1	124.3	13.8	1.9	5000	26.0	1.6	1.1	253.2	14.0	4.0
472064N	E. 305th/Rush Rd.	4	6164	60	4869	13.0	1.4	1.0	79.1	4.4	1.6	5000	26.0	1.4	1.0	161.0	4.5	3.2
472066R	Lloyd Rd. (SR 633)	2	7400	60	4869	13.0	1.4	1.0	95.0	10.5	1.6	5000	26.0	1.4	1.0	193.3	10.7	3.2
472093Y	Dille Rd.	2	15430	50	4869	13.0	1.6	1.1	223.8	24.8	1.9	5000	26.0	1.6	1.1	455.9	25.2	4.0
472098H	London Rd.	2	5310	35	4869	13.0	2.1	1.3	99.8	11.0	3.0	5000	26.0	2.1	1.4	203.6	11.3	6.3
N-084-ALLIANCE TO WHITE																		
503008V	Patterson	2	5150	40	5600	28.4	2.1	1.3	212.4	10.8	6.7	5000	42.7	1.9	1.3	293.3	9.9	8.6
503541T	Stow Rd-CR106	2	6390	60	5600	28.4	1.6	1.1	196.7	10.0	4.0	5000	42.7	1.4	1.0	274.2	9.2	5.3
N-293B-CP-190 TO BEREA																		
523941R	Front ST*	2	10834	50	5600	52.4	1.8	1.2	697.9	19.2	9.2	5000	67.1	1.6	1.1	826.1	17.7	10.2
523940J	Shuldon Rd*	2	6580	50	5600	52.4	1.8	1.2	424.5	11.7	9.2	5000	67.1	1.6	1.1	501.7	10.8	10.2
523937B	Eastland Rd*	2	11026	50	5600	52.4	1.8	1.2	711.3	19.5	9.2	5000	67.1	1.6	1.1	840.7	18.0	10.2
N-293A-BEREA TO VERMILION																		
524040W	Division St. or Main St.	2	5630	50	5600	52.4	1.8	1.2	363.2	10.0	9.2	5000	59.1	1.6	1.1	378.1	9.2	9.0
523851S	Clive St.*	2	6693	50	5600	52.4	1.8	1.2	431.7	11.9	9.2	5000	59.1	1.6	1.1	449.5	11.0	9.0
523850K	Abbe Rd.*	2	5527	50	5600	52.4	1.8	1.2	356.5	9.8	9.2	5000	59.1	1.6	1.1	371.2	9.0	9.0
523846V	SR 83*	2	9889	50	5600	52.4	1.8	1.2	637.9	17.5	9.2	5000	59.1	1.6	1.1	664.1	16.2	9.0
523844G	Chestnut Ridge*	2	5528	50	5600	52.4	1.8	1.2	356.6	9.8	9.2	5000	59.1	1.6	1.1	371.3	9.0	9.0
523840E	Stearns Rd.	2	7395	50	5600	52.4	1.8	1.2	477.0	13.1	9.2	5000	59.1	1.6	1.1	496.6	12.1	9.0
NA	Mapleway	2	NA	50	5600	52.4	1.8	1.2	NA	NA	9.2	5000	59.1	1.6	1.1	NA	NA	9.0
NA	Brookside	2	NA	50	5600	52.4	1.8	1.2	NA	NA	9.2	5000	59.1	1.6	1.1	NA	NA	9.0
523836P	Columbia Rd. (SR 252)*	2	14216	50	5600	52.4	1.8	1.2	917.0	25.2	9.2	5000	59.1	1.6	1.1	954.7	23.3	9.0
NA	Lewis Rd.	2	NA	50	5600	52.4	1.8	1.2	NA	NA	9.2	5000	59.1	1.6	1.1	NA	NA	9.0

NA = ADT not available

* More recent ADT information received from the Public Utilities Commission of Ohio on April 23, 98.

TABLE 3
HIGHWAY/RAIL AT-GRADE CROSSING VEHICLE DELAYS AND QUEUES
(using Stanford Research Institute's formula for calculating Average Delay/Vehicle)

					Pre-Acquisition							Post-Acquisition						
FRA ID	Street Name	Number of Roadway Lanes	ADT	Train Speed (mph)	Train Length (feet)	Trains Per Day	Total Blocked Time/ Train (min)	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)	Train Length (feet)	Trains Per Day	Total Blocked Time/ Train (min)	Average Delay/ Veh. (min)	Number of Vehicles Delayed Per Day	Maximum Vehicle Queue	Average Delay for all Vehicles (sec/veh)
N-072-VERMILION TO BELLEVUE																		
472308V	STATE STREET	2	5330	60	4869	15.6	1.4	1.0	82.1	7.6	1.87	5000	26	1.4	1.0	139.3	7.7	3.2
N-079-BELLEVUE TO OAK HARBOR																		
473754T	WATER ST	2	7530	50	4869	7.7	1.6	1.1	64.7	12.1	1.14	5000	26.2	1.6	1.1	224.2	12.3	4.0
473711A	STATE	4	19380	30	4869	7.7	2.3	1.5	242.9	22.7	2.21	5000	26.2	2.4	1.5	844.1	23.2	7.8
473687B	MAIN ST	2	7230	30	4869	7.7	2.3	1.5	90.6	16.9	2.21	5000	26.2	2.4	1.5	314.9	17.3	7.8
473668W	KILBOURNE	2	9330	30	4869	7.7	2.3	1.5	117.0	21.9	2.21	5000	26.2	2.4	1.5	406.4	22.3	7.8

AD-8-15

Table 4
HIGHWAY AT-GRADE CROSSING VEHICLE DELAYS
(using the DEIS formula)

FRA ID	Street Name	ADT	Pre- Transaction		Post-Transaction	
			Average Delay/Veh. (min)	Average Delay for all Vehicles (sec/veh)	Average Delay/Veh. (min)	Average Delay for all Vehicles (sec/veh)
N-075-ASHTABULA TO CLEVELAND (CLOGGSVILLE)						
471989W	West Ave.	8000	1.4	3.1	1.4	6.4
472008G	Broadway Ave. (SR 534)	7320	0.9	1.4	0.9	2.9
472017F	Lake St. (SR 528)	8810	1.0	1.5	1.0	3.0
472039F	Liberty St.	7580	0.9	1.4	0.9	2.9
472040A	Chestnut St.	5980	0.9	1.3	0.9	2.7
472044C	Mentor Ave. (U.S. 20)	19260	1.6	2.5	1.6	5.1
472045J	Jackson St.	5230	0.8	1.3	0.9	2.7
472046R	Heisley Rd.	6360	0.9	1.3	0.9	2.8
472048E	Hopkins Rd.	5460	0.8	1.3	0.9	2.7
472056W	Erie St.	8570	1.1	1.9	1.1	3.9
472064N	E. 305th/Rush Rd.	6164	0.9	1.3	0.9	2.8
472068R	Lloyd Rd. (SR 633)	7400	0.9	1.4	0.9	2.9
472093Y	Dille Rd.	15430	1.5	2.5	1.5	5.2
472098H	London Rd.	5310	1.2	2.8	1.3	5.8
N-084-ALLIANCE TO WHITE						
503008V	Patterson	5150	1.2	6.1	1.1	7.7
503541T	Stow Rd-CR106	6390	1.0	3.5	0.9	4.6
N-293B-CP-190 TO BEREA						
523941R	Front St*	10834	1.3	10.0	1.2	10.9
523940J	Sheldon Rd*	6580	1.1	8.5	1.0	9.2
523937B	Eastland Rd*	11026	1.3	10.1	1.2	11.0
N-293A-BEREA TO VERMILION						
524040W	Division St. or Main St.	5630	1.1	8.2	1.0	7.9
523851S	Olive St.*	6693	1.1	8.5	1.0	8.2
523850K	Abbe Rd.*	5527	1.1	8.2	1.0	7.8
523846V	SR 83*	9889	1.2	9.6	1.1	9.2
523844G	Chestnut Ridge*	5528	1.1	8.2	1.0	7.8
523840E	Stearns Rd.	7395	1.1	8.7	1.0	8.4
NA	Mapleway	NA	NA	NA	NA	NA
NA	Brookside	NA	NA	NA	NA	NA
523836P	Columbia Rd. (SR 252)*	14216	1.5	11.7	1.4	11.2
NA	Lewis Rd.	NA	NA	NA	NA	NA

NA = ADT not available

* More recent ADT information received from the Public Utilities Commission of Ohio on April 23, 98

Table 4
HIGHWAY AT-GRADE CROSSING VEHICLE DELAYS
(using the DEIS formula)

FRA ID	Street Name	ADT	Pre-Transaction		Post-Transaction	
			Average Delay/Veh. (min)	Average Delay for all Vehicles (sec/veh)	Average Delay/Veh. (min)	Average Delay for all Vehicles (sec/veh)
N-072-VERMILION TO BELLEVUE						
472308V	STATE STREET	5330	0.8	1.55	0.9	2.7
N-079-BELLEVUE TO OAK HARBOR						
473754T	WATER ST	7530	1.0	1.06	1.0	3.7
473711A	STATE	19380	2.7	4.01	2.7	14.2
473687B	MAIN ST.	7230	1.5	2.23	1.5	7.9
473668W	KILBOURNE	9330	1.6	2.41	1.6	8.6

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ATTACHMENT C
NS REVISED MITIGATION PLAN
PASSENGER AND FREIGHT RAIL SAFETY EFFECTS

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ATTACHMENT C
NS REVISED MITIGATION PROPOSAL
PASSSENGER and FREIGHT RAIL SAFETY EFFECTS

Rail Line Segments				Traffic: Passenger Rail				Traffic: Freight Rail				Safety: Freight Rail			Safety: Passenger Rail			Hazardous Materials		
Segment ID #	Between	And	Miles	Total / day	Amtrak / day	Commuter Mon-Fri	Commuter Sat-Sun	Pre- Trains / day	Post- Trains / day	Change Trains / day	Change MGT %	Percent Increase in Reportable Freight Train Accidents	Pre-Acquisition Interval between Train Accidents Per Mile (years)	Post-Acquisition Interval between Train Accidents Per Mile (years)	Post Acquisition % Increase in Passenger Train Accidents	Pre-Acquisition Interval between Passenger Collisions (years)	Post-Acquisition Interval between Passenger Collisions (years)	Percent Increase in Reportable Mainline Hazardous Material Releases	Pre-Acquisition Interval between Mainline Hazardous Material Releases (years)	Post-Acquisition Interval between Mainline Hazardous Material Releases (years)
N-072	Vermilion	Bellevue	26	0	0	0	0	15.6	26.0	10.4	55%	71%	290	169	--	--	--	56.9%	12,216	7,787
N-074	Cleveland (Cloggsville)	Shortline Jct (CP-190)	7	0	0	0	0	2.0	13.8	11.8	3871%	578%	2,572	380	--	--	--	20317.8%	1,565,892	7,669
N-075	Ashtabula	Cleveland (Cloggsville)	50	0	0	0	0	13.0	26.0	13.0	115%	106%	349	169	--	--	--	265.3%	15,169	4,153
N-079	Oak Harbor	Bellevue	27	0	0	0	0	7.7	26.2	18.5	169%	256%	597	168	--	--	--	655.0%	35,624	4,718
N-080	Cleveland	Vermilion	37	0	0	0	0	13.5	13.9	0.4	10%	4%	336	324	--	--	--	-30.1%	12,245	17,520
N-081	White	Cleveland (CP-181)	11	2	2	0	0	12.5	40.3	27.8	207%	219%	407	128	222%	14,451	4,482	239.2%	13,373	3,943
N-082	Youngstown	Ashtabula	59	0	0	0	0	11.7	13.2	1.5	13%	10%	383	347	--	--	--	-39.2%	46,438	76,379
N-084	Alliance	White	46	2	2	0	0	26.4	40.7	14.3	39%	50%	187	124	54%	1,636	1,061	41.5%	7,955	2,795
N-095	Rochester	Youngstown	39	0	0	0	0	12.6	7.1	(5.5)	-45%	-45%	306	561	--	--	--	-39.6%	43,754	72,407
N-293ab	Cleveland (CP-181)	CP-190	12	4	4	0	0	48.4	53.5	5.1	3%	7%	101	94	11%	1,503	1,360	-35.7%	1,537	2,390
N-293c	CP-190	Berea	5	4	4	0	0	48.4	63.1	14.7	19%	27%	101	79	30%	3,607	2,767	-17.2%	1,537	1,856
N-293d	Berea	Vermilion (2)	26	4	4	0	0	48.4	55.1	6.7	5%	10%	101	91	14%	694	609	-24.4%	1,537	2,033
N-285	Rochester	Alliance	57	2	2	0	0	37.9	36.9	(1.0)	-5%	-6%	129	137	-3%	920	945	-38.4%	1,836	2,981
N-294	Vermilion	Oak Harbor	43	4	4	0	0	48.3	42.4	(5.9)	-15%	-15%	101	119	--	--	--	-30.9%	1,564	2,263

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ATTACHMENT D
REVISED MITIGATION PLAN
ADDITIONAL NOISE ANALYSIS

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ATTACHMENT D
NS REVISED MITIGATION PROPOSAL*
RAIL LINE SEGMENTS THAT MEET STB THRESHOLDS FOR NOISE ANALYSIS

Rail Line Segment			Train and Rail Data Pre		Train and Rail Data Post			Pre-Aquisition Distance to 65 Ldn (ft.)		Post-Aquisition Distance to 65 Ldn (ft.)						65 dBA Ldn	65 dBA Ldn	70 dBA Ldn
Segment ID #	Between	And	Psgr. Trn.	Frt. Trn.	Frt. Trn.	Change in Trn.	Change in Ldn (dBA)	Wayside 65 Ldn Distance (ft)	Xing 65 Ldn Dist. (ft)	Wheel SEL	Horn SEL	Wayside 65 Ldn Distance (ft)	Xing 65 Ldn Dist. (ft)	Wayside 70 Ldn Dist. (ft)	Xing 70 Ldn Dist. (ft)	Pre Total Rec.	Post Total Rec.	Post Total Rec.
N-072	Vermillion	Bellevue	0	15.6	26.0	10.4	2.2	235	449	100	108	243	602	118	330	171	234	NA
N-074	Cloggsville	Shortline Jt.	0	2.0	13.8	11.8	8.4	65	116	100	108	163	396	80	218	2	70	20
N-075	Ashtabula	Cleveland	0	13.0	26.0	13.0	3.0	210	399	100	108	243	602	118	330	743	1616	NA
N-079	Oak Harbor	Bellevue	0	7.7	26.2	18.5	5.3	151	282	100	108	244	605	119	332	232	549	68
N-080	Cleveland	Vermillion	0	13.5	13.9	0.4	0.1	215	409	100	108	164	398	80	219	0	0	NA
N-081	White	Cleveland	2	12.5	40.3	27.8	4.6	205	388	100	108	319	804	155	440	30	80	NA
N-082	Youngstown	Ashtabula	0	11.7	13.2	1.5	0.5	196	372	100	108	159	384	77	212	0	0	NA
N-084	Alliance	White	2	26.5	40.7	14.2	1.8	327	637	100	108	321	810	156	442	0	0	NA
N-095	Rochester	Youngstown	0	12.6	7.1	-5.5	-2.5	206	391	100	108	108	255	52	142	0	0	NA
N-285	Rochester	Alliance	4	48.4	53.5	5.1	0.4	477	948	100	108	381	970	185	529	0	0	NA
N-293 a&b	Cleveland	CP-190	4	48.4	53.5	5.1	0.4	477	948	100	108	381	970	185	529	0	0	NA
N-293c	CP-190	Berea	4	48.4	63.1	14.7	1.1	477	948	100	108	422	1082	206	589	0	0	NA
N-293d	Berea	Cleveland	4	48.4	55.1	6.7	0.5	477	948	100	108	388	989	189	539	0	0	NA
N-294	Oak Harbor	Bellevue	0	48.3	42.4	-5.9	-0.6	477	947	100	108	329	832	160	454	0	0	NA
N-501	Cloggsville	Shortline Jt.	0	2.0	13.8	11.8	8.4	65	116	100	108	163	396	80	218	0	0	0
															Total	1178	2549	88

*based on 4/15/98 train per day data provided by NS in the Supplemental Environmental Report

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ATTACHMENT E
REVISED MITIGATION PLAN
NOISE CONTOUR MAPS

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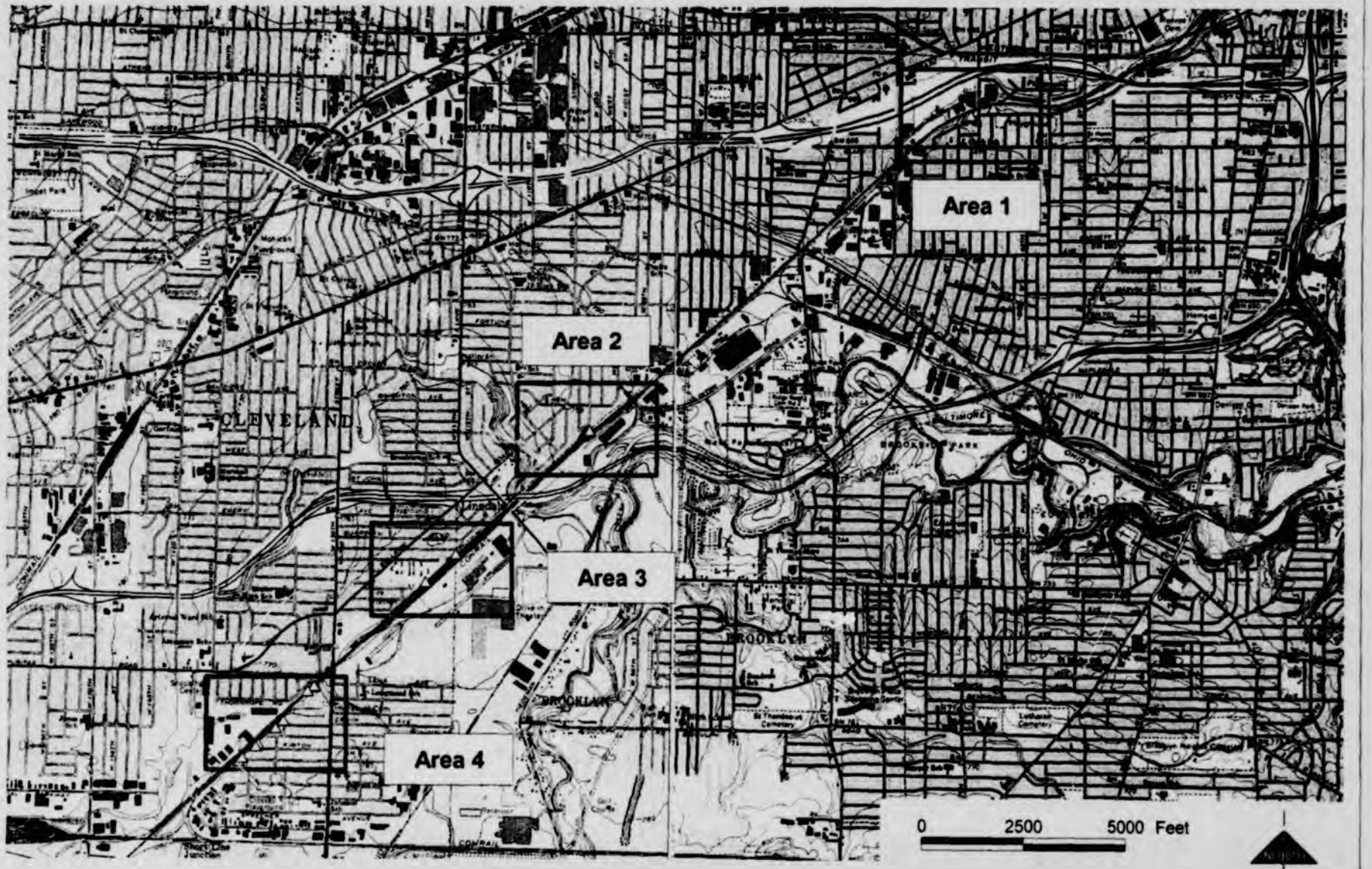


FIGURE AD-E-1 Key Map

CLEVELAND-TO-SHORT LINE JCT., N-074 Areas Where Receptors Are Within the 70dBA Ldn Wayside Noise Contour

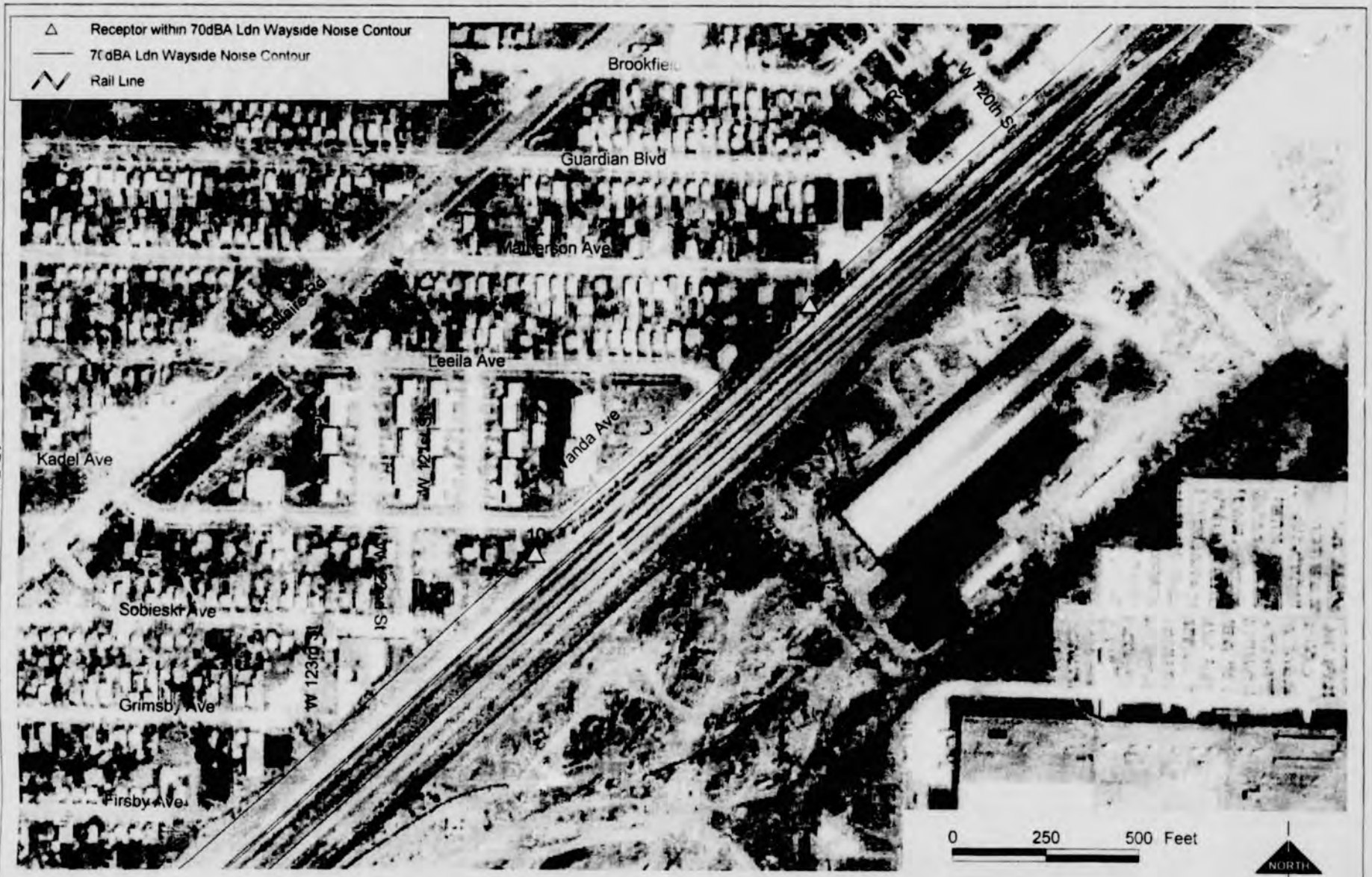
AD-E-4

FIGURE AD-E-2 Area 1

CLEVELAND-TO-SHORT LINE JCT., N-074 Receptors Within 70dBA Ldn Wayside Noise Contour

FIGURE AD-E-3 Area 2

CLEVELAND-TO-SHORT LINE JCT., N-074 Receptors Within 70dBA Ldn Wayside Noise Contour



AD-E-6

Proposed Conrail Acquisition | *Final Environmental Impact Statement*

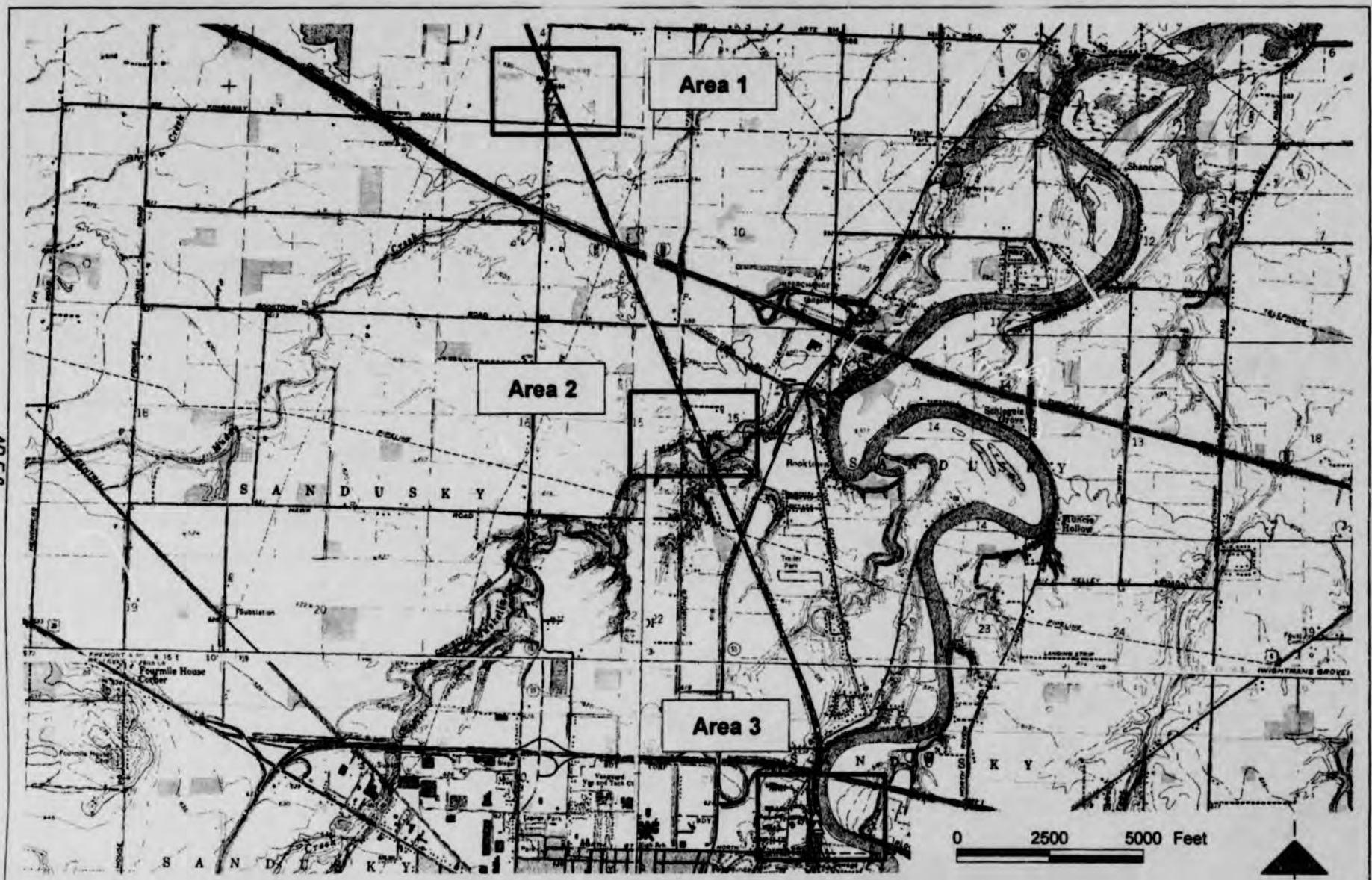
FIGURE AD-E-4 Area 3

CLEVELAND-TO-SHORT LINE JCT., N-074 Receptors Within 70dBA Ldn Wayside Noise Contour

AD-E-7

FIGURE AD-E-5 Area 4

CLEVELAND-TO-SHORT LINE JCT., N-074 Receptors Within 70dBA Ldn Wayside Noise Contour



AD-E-8

Proposed Conrail Acquisition

Final Environmental Impact Statement

FIGURE AD-E-6 Key Map

OAK HARBOR-TO-BELLEVUE, N-079 Areas Where Receptors Are Within the 70dBA Ldn Wayside Noise Contour

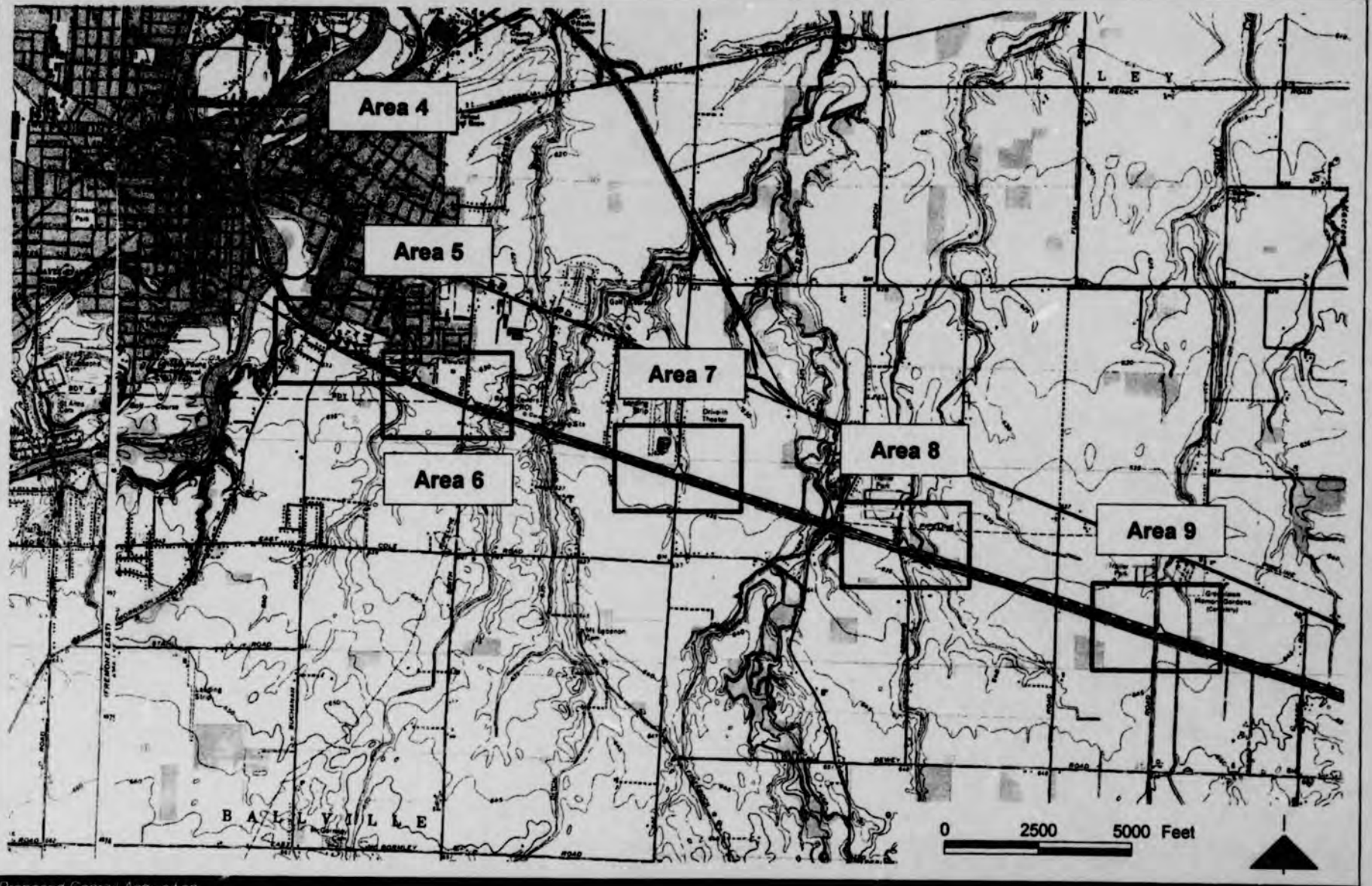


FIGURE AD-E-7 Key Map

OAK HARBOR-TO-BELLEVUE, N-079 Areas Where Receptors Are Within the 70dBA Ldn Wayside Noise Contour

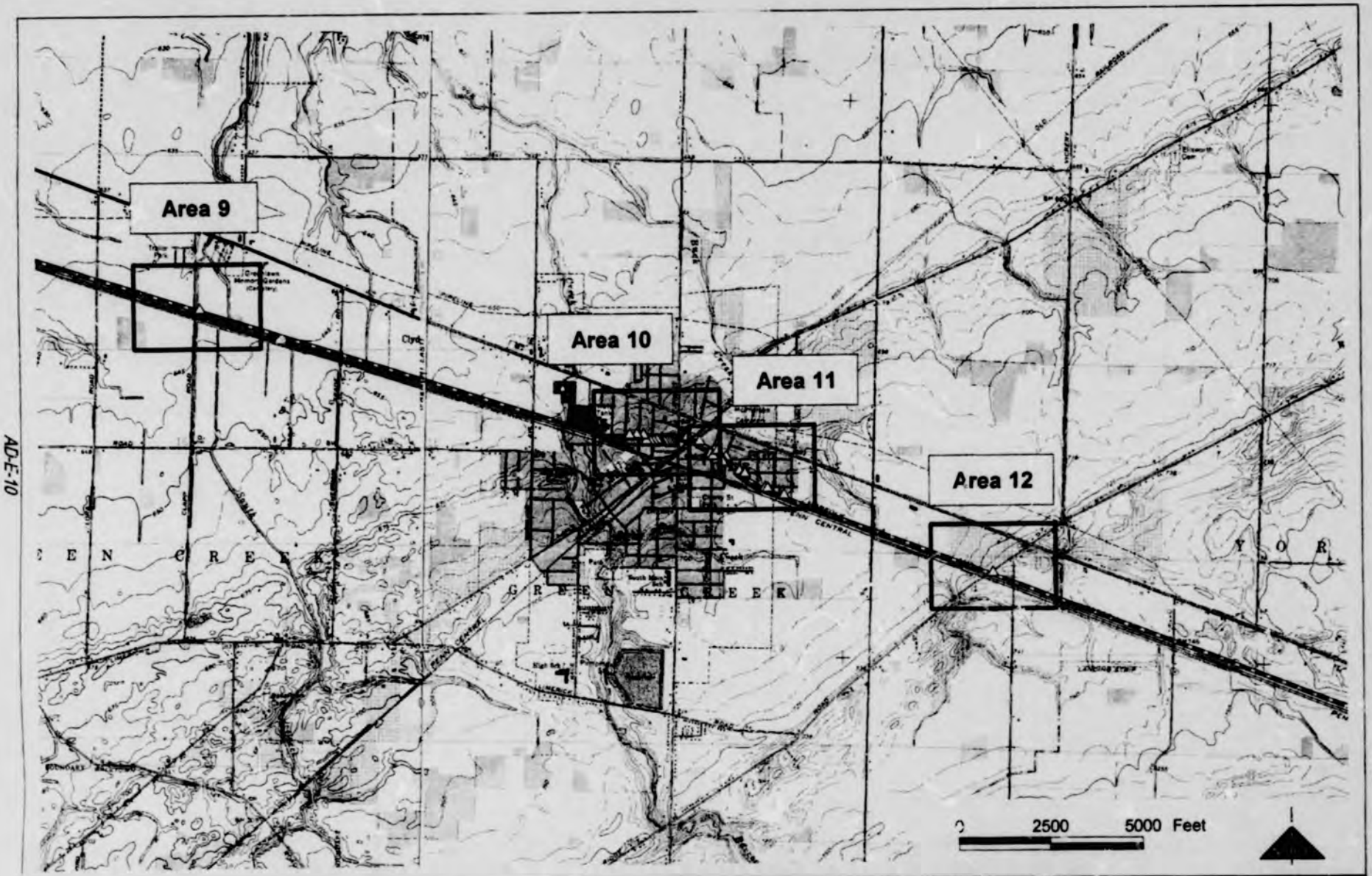


FIGURE AD-E-8 Key Map

OAK HARBOR-TO-BELLEVUE, N-079 Areas Where Receptors Are Within the 70dBA Ldn Wayside Noise Contour

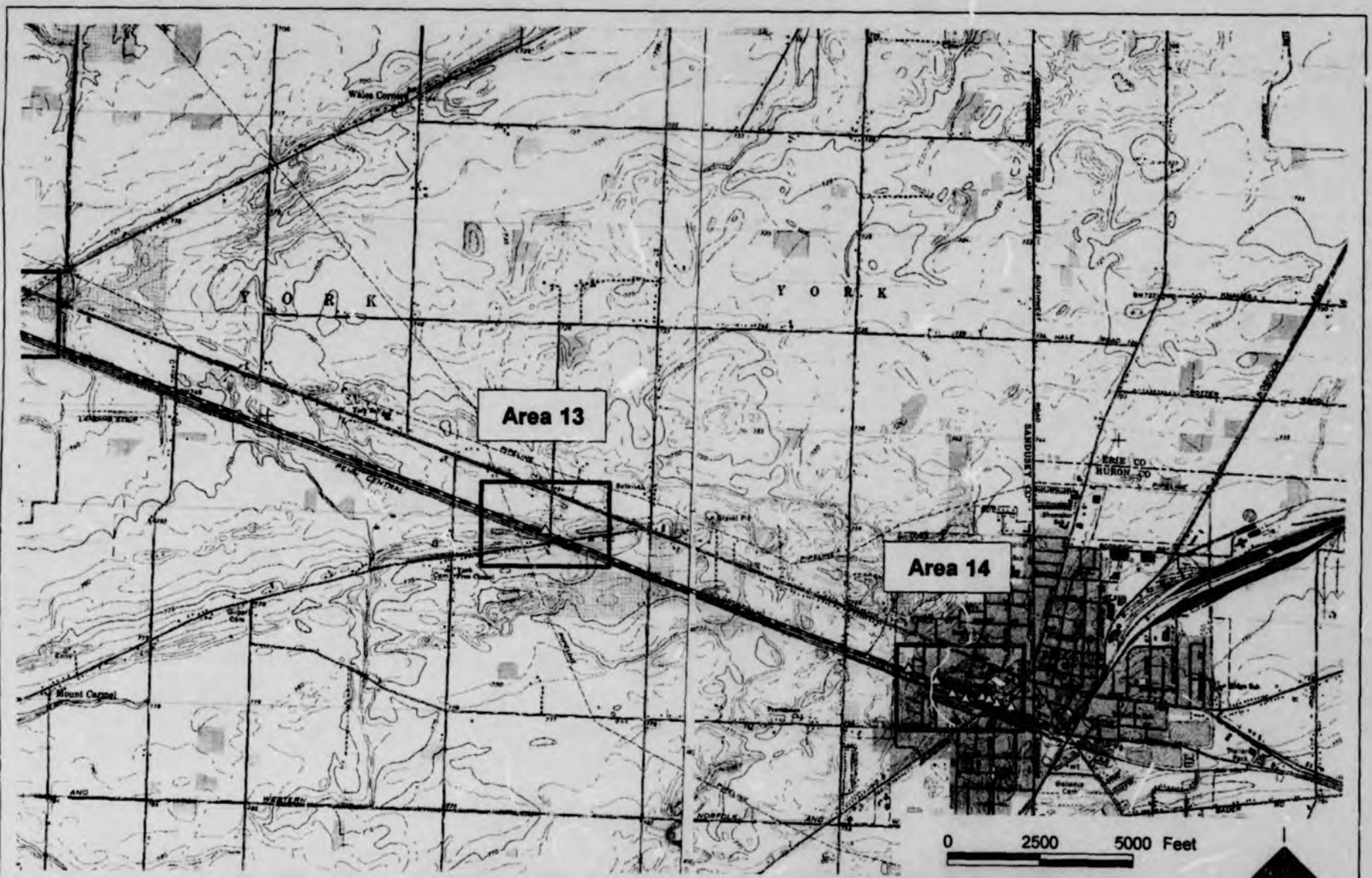


FIGURE AD-E-9 Key Map

OAK HARBOR-TO-BELLEVUE, N-079 Areas Where Receptors Are Within the 70dBA Ldn Wayside Noise Contour

FIGURE AD-E-10 Area 1

OAK HARBOR-TO-BELLEVUE, N-079 Receptors Within 70dBA ysida Noise Contour

FIGURE AD-E-11 Area 2

OAK HARBOR-TO-BELLEVUE, N-079 Receptors Within 70dBA Ldn Wayside Noise Contour

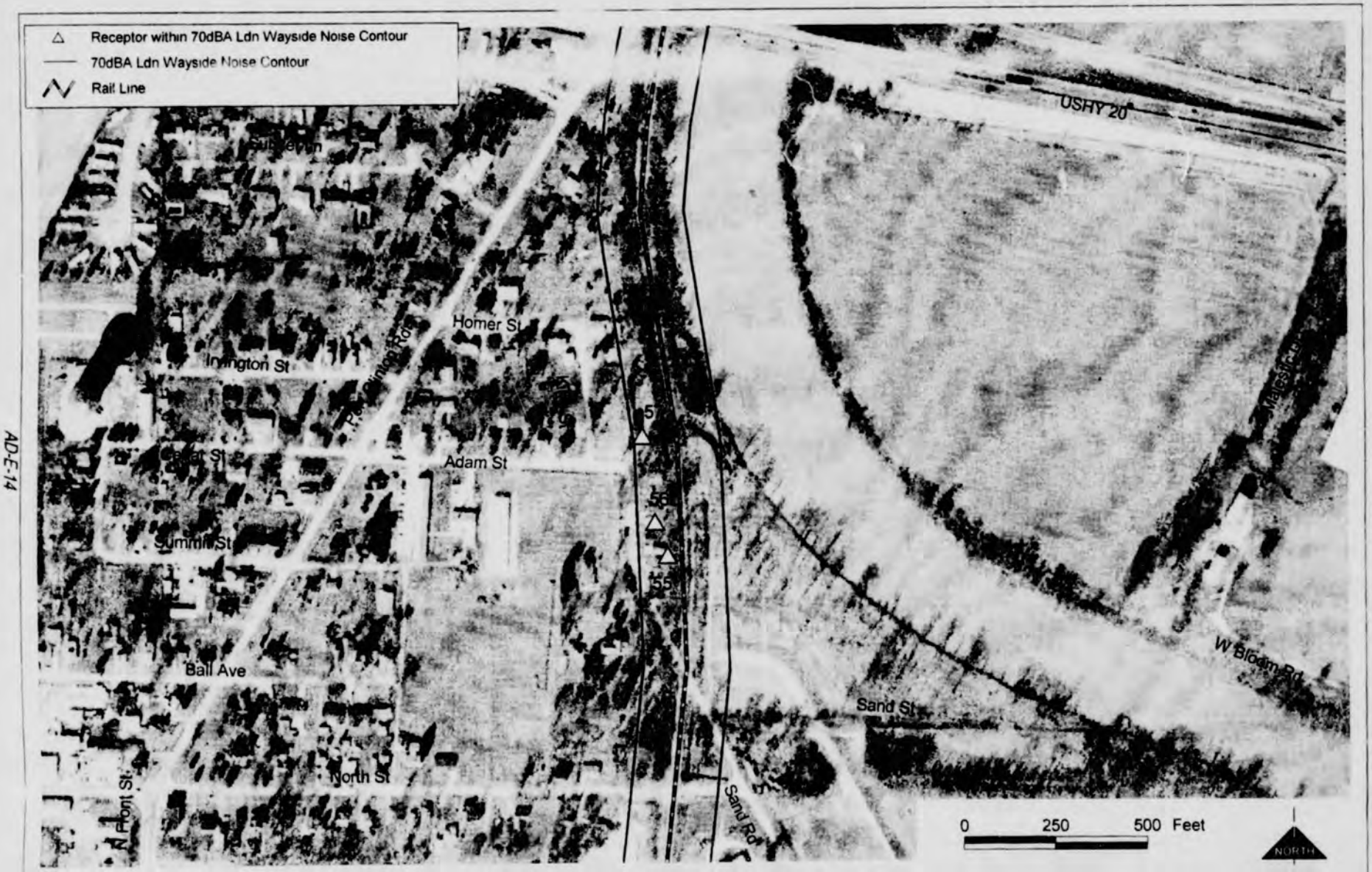


FIGURE AD-E-12 Area 3

OAK HARBOR-TO-BELLEVUE, N-079 Receptors Within 70dBA Ldn Wayside Noise Contour

FIGURE AD-E-13 Area 4

OAK HARBOR-TO-BELLEVUE, N-079 Receptors Within 70dBA Ldn Wayside Noise Contour