Transition Plan

Public Right-of-Way

Le Sueur County, Minnesota

LESUR 154008 | September 2020

SEH

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Transition Plan

Public Right-of-Way
Le Sueur County, Minnesota

SEH No. LESUR 154008

September, 2020

I hereby certify that this report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Landscape Architect under the laws of the State of Minnesota.

Michael D. Horn, PLA

Date: September, 2020 License No.: 41906

Reviewed By: Chris Cavett, PE Date: September, 2020

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Executive Summary

Executive Summary

As a requirement of the American with Disabilities Act, Le Sueur County has completed a Draft Transition Plan for review. In addition to identifying applicable federal requirements, a Self-Evaluation is the primary focus of any transition plan. Knowing what facilities create barriers for safe pedestrian movement will allow Le Sueur County to constructively prioritize and plan for barrier removal projects by using established MnDOT thresholds of:

- New Construction – meeting all current design and ADA standards.
- Reconstruction – correcting all non-compliant curb ramp, sidewalks and driveways, improvement to address sidewalk gaps within the existing network and provide APS and APS readiness where needed.
- Alteration Projects – projects that meet the alteration threshold set by the DOJ/FHWA Technical Assistance document TM 18-04-OP-01. See Appendix F for the complete document.

Overall, Le Sueur County has been proactive in making Pedestrian Access Routes (PAR) accessible as projects are planned and constructed. The following is a brief synopsis of the self-evaluation of the facilities in the public right-of-way (ROW).

Pedestrian Ramps

Pedestrian Ramps provide a transition between the street and the PAR. There are a total of 430 pedestrian/roadway intersections. A breakdown of the rating are;

- Compliant – 87 (20%) meet current accessibility standards.
- Minor Barrier – 86 (20%) exceed slope standards by a minimal ½%.
- Major Barrier – 205 (48%) exceed slope standards beyond ½%, and have poor condition ratings.
- Non-Present Ramp – 52 (12%) of sidewalk facilities do not have any ramp present.

Pedestrian Crossings

Pedestrian Crossings are considered part of the PAR and shall meet the requirements for width, running slope, and cross slope. Of the total 234 crossing;

- 121 (52%) are compliant
- 113 (48%) are non-compliant. Of the non-compliant crossings,
    - 44 (19%) have a running slope above 5% up to 6.9% and cross slope above 2% up to 3.0%.
    - 69 (29%) create a major barrier and should be included during a reconstruction project or a project that meet the threshold for alterations, or alternant crossings identified if roadway slope is excessive.

Executive Summary (continued)

Sidewalks

Sidewalks are the longitudinal elements of the PAR. All sidewalks in the city right-of-way were evaluated, of the total, 25,999 linear feet (LF) of sidewalks were identified as having a barrier.

- 1,948 LF (7%) were identified as having a minor barrier
- 1,502LF (6%) were identified as having a minor barrier, mostly a cross slope above 2%, but less than 3% (see appendix F)
- 22,549 LF (87%) of sidewalks were identified as major barriers, cross slope or missing segments.

ADA Parking

Only 5 on-street ADA parking spaces were identified, none of these sites included the required access isle to allow transfer to and from a vehicle.

Next Steps

The next step will be to make long range plans to remove barriers in priority areas, and as state and local roadway improvements are planned and constructed. Routine updating of the provided GIS data will keep this transition plan current and relevant in addition to providing the public the assurance that Le Sueur County continues to value its pedestrian network in the Public Right of Way.

Maps will be provided via a published web link that show level of compliance and a synopsis of the data is included in Appendix B.

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Transition Plan

Public Right-of-Way

Prepared for Le Sueur County, Minnesota

Introduction

Transition Plan Need and Purpose

The Americans with Disabilities Act (ADA), enacted on July 26, 1990, is a civil rights law prohibiting discrimination against individuals on the basis of disability. ADA consists of five titles outlining protections in the following areas:

1. Employment
2. State and local government services
3. Public accommodations
4. Telecommunications
5. Miscellaneous Provisions

Title II of ADA pertains to the programs, activities and services public entities provide. As a provider of public transportation services and programs, Le Sueur County must comply with this section of the Act as it specifically applies to public service agencies. Title II of ADA provides that, "…no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity." (42 USC. Sec. 12132; 28 CFR. Sec. 35.130)

As required by Title II of ADA, 28 CFR. Part 35 Sec. 35.105 and Sec. 35.150, Le Sueur County has conducted a self-evaluation of its facilities within public rights of way and has developed this Transition Plan detailing how the organization will ensure that all of those facilities are accessible to all individuals.

ADA and its Relationship to Other Laws

Title II of ADA is companion legislation to two previous federal statutes and regulations: the Architectural Barriers Acts of 1968 and Section 504 of the Rehabilitation Act of 1973.

The Architectural Barriers Act of 1968 is a Federal law that requires facilities designed, built, altered or leased with Federal funds to be accessible. The Architectural Barriers Act marks one of the first efforts to ensure access to the built environment.

Section 504 of the Rehabilitation Act of 1973 is a Federal law that protects qualified individuals from discrimination based on their disability. The nondiscrimination requirements of the law apply to employers and organizations that receive financial assistance from any Federal department or

agency. Title II of ADA extended this coverage to all state and local government entities, regardless of whether they receive federal funding or not.

Agency Requirements

Under Title II, the Le Sueur County must meet these general requirements:

- Must operate their programs so that, when viewed in their entirety, the programs are accessible to and useable by individuals with disabilities (28 C.F.R. Sec. 35.150).
- May not refuse to allow a person with a disability to participate in a service, program or activity simply because the person has a disability (28 C.F.R. Sec. 35.130 (a).
- Must make reasonable modifications in policies, practices and procedures that deny equal access to individuals with disabilities unless a fundamental alteration in the program would result (28 C.F.R. Sec. 35.130(b) (7).
- May not provide services or benefits to individuals with disabilities through programs that are separate or different unless the separate or different measures are necessary to ensure that benefits and services are equally effective (28 C.F.R. Sec. 35.130(b)(iv) & (d).
- Must take appropriate steps to ensure that communications with applicants, participants and members of the public with disabilities are as effective as communications with others (29 C.F.R. Sec. 35.160(a).
- Must designate at least one responsible employee to coordinate ADA compliance [28 CFR Sec. 35.107(a)]. This person is often referred to as the "ADA Coordinator." The public entity must provide the ADA coordinator's name, office address, and telephone number to all interested individuals [28 CFR Sec. 35.107(a)].
- Must provide notice of ADA requirements. All public entities, regardless of size, must provide information about the rights and protections of Title II to applicants, participants, beneficiaries, employees, and other interested persons [28 CFR Sec. 35,106]. The notice must include the identification of the employee serving as the ADA coordinator and must provide this information on an ongoing basis [28 CFR Sec. 104.8(a)].
- Must establish a grievance procedure. Public entities must adopt and publish grievance procedures providing for prompt and equitable resolution of complaints [28 CFR Sec. 35.107(b)]. This requirement provides for a timely resolution of all problems or conflicts related to ADA compliance before they escalate to litigation and/or the federal complaint process.
- This document has been created to specifically cover accessibility within the public rights of way and does not include information on Olivia’s programs, practices, or building facilities not related to public rights of way.

Self-Evaluation

Overview

Le Sueur County is required, under Title II of the Americans with Disabilities Act (ADA) and 28CFR35.105, to perform a self-evaluation of its current transportation infrastructure policies, practices, and programs. This self-evaluation will identify what policies and practices impact accessibility and examine how Le Sueur County implements these policies. The goal of the self-evaluation is to verify that, in implementing Le Sueur County’s policies and practices, the department is providing accessibility and not adversely affecting the full participation of individuals with disabilities.

The self-evaluation also examines the condition of Le Sueur County's Pedestrian Circulation Route/Pedestrian Access Route) (PCR/PAR) and identifies potential need for PCR/PAR infrastructure improvements. This will include the sidewalks, curb ramps and crossings and ADA parking stalls that are located within Le Sueur County's public rights of way. Any barriers to accessibility identified in the self-evaluation and the remedy to the identified barrier are set out in this transition plan.

Summary

In June of 2020, SEH conducted an inventory of pedestrian facilities within the public right of way. MnDOT design guidelines for accessible ROW facilities were used as the benchmark for all measurements. Non-compliant facilities are divided into two categories, major barriers and minor barriers. Facilities labeled as a major barriers represent an unpassable obstacle for many pedestrians with disabilities, while facilities labeled as a minor barrier may still be negotiated by pedestrians with disabilities. It may be one measurable aspect of the facility that is out of compliance with the current standards.

Maps and associated data point locations will be provided via a published web link and will include:

Pedestrian Ramps: All existing were measured and evaluated based on the curb cut width, gutter slope, presence of truncated domes, ramp slope, and presence of a landing.

Pedestrian Crossings: Marked crossing were measured and evaluated based on alignment of crossing, width, and cross slope and running slope.

Sidewalk Barriers: All existing sidewalks were evaluated and measured based on cross slope, and driveway and alley cross slopes, and vertical discontinuances; usually due to frost heaving, tree roots, and obstacles like utility poles, hydrants or street signs.

Parking Facilities: Marked accessible spaces were measured for cross slope, running slope and condition. (The accessible route from the parking spaces was not included in this evaluation as it would be typically included in the assessment of the adjacent facility or public building).

Policies and Practices

ADA Coordinator

Requests for accessibility improvements can be submitted to the ***County Engineer***, located at 88 S. Park Avenue, Le Center, MN 56057 or by phone at 507-357-2251.

Public Outreach

Le Sueur County recognizes that public participation is an important component in the development of this document. Input from the community will be solicited during an advertised Public Hearing at a scheduled County Meeting. Public input will be used to help define priority areas for improvements within its jurisdiction during future County Public Meetings, Hearings and Presentations. Public Comments will be copied and compiled in Appendix C.

Previous Practices

Since the adoption of the ADA, Le Sueur County has endeavored to provide accessible pedestrian features as part of capital improvement projects. As additional information was made available as to the methods and standards for providing accessible pedestrian features, Le Sueur County updated the County's procedures to accommodate these methods.

Practices

Le Sueur County's goal is to continue to provide accessible pedestrian design features as part of the county's capital improvement projects. Le Sueur County utilizes current MnDOT standards for design and construction of the local pedestrian facilities. These standards and procedures will be kept up to date with nationwide and local best management practices.

Le Sueur County will consider and respond to all accessibility improvement requests. All accessibility improvements that have been deemed reasonable will be scheduled consistent with transportation priorities. Le Sueur County will coordinate with external agencies to ensure that all new or altered pedestrian facilities within its jurisdiction are ADA compliant to the maximum extent feasible.

Grievance Procedure

Under the Americans with Disabilities Act, each agency is required to publish its responsibilities in regards to the ADA. A draft of this public notice is provided in Appendix D. If users within the Right of Way and related services believe the Le Sueur County has not provided reasonable accommodation, they have the right to file a grievance.

In accordance with 28 CFR 35.107(b), The Le Sueur County has developed a grievance procedure for the purpose of the prompt and equitable resolution of citizens' complaints, concerns, comments, and other grievances. This grievance procedure is outlined in Appendix D.

Implementation Schedule

Methodology

The Le Sueur County will utilize two methods for upgrading pedestrian facilities to the current ADA standards.

- The first and most comprehensive of the two methods are the scheduled street reconstruction projects or alteration projects that meet the MN DOT threshold. All pedestrian facilities impacted by these projects will be upgraded to current ADA accessibility standards.
- The second method is the stand alone sidewalk and ADA accessibility improvement project. These projects will be incorporated into the future Capital Improvement Program (CIP) updates on a case by case basis as determined by county staff. Schedule

Pedestrian Ramps that are identified as a major barrier or that are in a high pedestrian area will be scheduled as funds allow. Priority selection of major barrier corrections will be reviewed and considered by the ***County Engineer*** based on funding, geography and consideration of likely future roadway improvements.

All major and minor barriers will be reviewed on a case by case basis when adjacent roadway improvements are scheduled. Appropriateness of ADA improvements based on the proposed roadway improvement will be reviewed and considered at the discretion of the ***County Engineer***. For example: It may be determined that correcting a minor barrier during a basic roadway maintenance project (i.e., overlay project) is too invasive and cost prohibitive for only a minor variable correction and that it would be more appropriate to make such a correction during a future roadway reconstruction improvement.

Budget

To quantify the magnitude of cost for improvements, the costs illustrated below are based on stand-alone project cost. It is more likely that these barrier removal projects would be done in conjunction with other street projects or lumped together resulting in better pricing through economy of scale. See Appendix E for unit cost breakdown.

Pedestrian Ramps with a Major Barrier (Based on 2020 Dollars)

153 x $5,000 = $1,715,000 over 30 years, would equate to $57,167/Year.

Pedestrian Crossing should be corrected at the time of the next scheduled roadway improvement project.

Sidewalks Barrier removal cost vary depending on the type of barrier. Total sidewalk barrier removal cost is estimated at $1,494,943. Over 30 years this is $49,831 per year.

On street ADA parking is achievable with curb removal and replacement to include an access isle, however off-street options is preferred if available. Only 5 on-street ADA parking spaces were identified, if not relocated to an off-street location, an access isle should be added at the next scheduled roadway improvement project.

Monitor the Progress

This document will continue to be updated as conditions evolve. The appendices in this document will be updated periodically, while the main body of the document will be updated as needed with a future update schedule to be developed at that time. With each main body update, a public comment period will be established to continue the public outreach.

Appendix A

Map Data (Provided via a published web link)

Pedestrian Ramps
Pedestrian Crossings
Sidewalk Barriers
Public Parking Facilities

Appendix B

Data Summary

Appendix C

Public Comments

Appendix D

Grievance Procedure

Appendix E

Opinion of Probable Cost

Building a Better World for All of Us®

Sustainable buildings, sound infrastructure, safe transportation systems, clean water, renewable energy and a balanced environment. Building a Better World for All of Us communicates a companywide commitment to act in the best interests of our clients and the world around us.

We're confident in our ability to balance these requirements.

SEH

Appendix B

Data Summary

Number in Evaluation	Landing Slope	Ramp Running Slope	Ramp Cross Slope					Condition Rating	Gutter Rating	Total	Percentage	Rating
430	0-2%	0-8.3%	0-2%					1-3	1-3	87	20%	1
	2.1-2.5%	8.4-9.5	2.1-2.5%					1-3	1-3	86	20%	2
	2.6% or more	9.6 or more	2.6% or more					4	4	205	48%	3
	Ramp	Not	Present							52	12%	4

Object ID	Landing Slope NL=No Landing	Ramp Running Slope	Ramp Cross Slope	Vertical Discontinuity	Ramp Width	Truncated Domes Present?	Dome width match path width?	Condition Rating	Gutter Rating	Is Curb Ramp Fully Compliant?	Comments	Rating
17	0.1	2.4	1.4	no	8	yes	yes	2 – Good	2 – Good	yes		1
6	0.1	0.8	1.7	no	8	yes	yes	2 – Good	2 – Good	yes		1
108	0.1	4	0.5	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
115	0.1	0.7	2	no	6	yes	yes	2 – Good	1 – Excellent	yes		1
57	0.2	5	0.1	no	16	yes	yes	1 – Excellent	1 – Excellent	yes		1
9	0.2	2.2	0.5	no	8	yes	yes	2 – Good	2 – Good	yes		1
11	0.2	7.1	0.6	no	8	yes	yes	2 – Good	2 – Good	yes		1
121	0.2	1.2	0.2	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
100	0.2	7.2	0.2	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
109	0.2	5	0.5	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
107	0.2	7.7	0.7	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
120	0.2	1.2	0.8	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
56	0.2	2.4	0.2	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
67	0.2	4	0.2	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
60	0.2	5	0.2	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
65	0.2	6	0.2	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
61	0.2	7.5	0.2	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
112	0.3	6.2	0.3	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
127	0.3	3	0.5	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
117	0.3	7	0.8	yes	6	yes	yes	3 – Fair	1 – Excellent	no	construction error	1
12	0.4	2.3	2	no	8	yes	yes	2 – Good	2 – Good	yes		1
99	0.4	7.1	0.4	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
114	0.4	6	2	no	6	yes	yes	2 – Good	1 – Excellent	yes		1
337	0.4	4	0.1	no	5	yes	yes	2 – Good	2 – Good	yes		1
13	0.5	2.3	0.4	no	8	yes	yes	2 – Good	2 – Good	yes	Gravel on ramp	1
66	0.5	6	0.5	no	5	yes	yes	1 – Excellent	3 – Fair	yes	Poor drainage and debris	1
63	0.5	3	0.3	no	10	yes	yes	1 – Excellent	1 – Excellent	yes		1
68	0.5	5	0.4	no	10	yes	yes	1 – Excellent	1 – Excellent	yes		1
382	0.5	5	1	no	10	yes	yes	2 – Good	2 – Good	yes		1
14	0.5	0.2	1	no	8	yes	yes	2 – Good	2 – Good	yes		1
15	0.5	0.4	1.1	no	8	yes	yes	2 – Good	2 – Good	yes		1
16	0.5	1.2	1.1	no	8	yes	yes	2 – Good	2 – Good	yes		1
113	0.5	0.3	0.2	no	6	yes	yes	2 – Good	1 – Excellent	yes		1
123	0.5	5	0.2	no	6	yes	yes	2 – Good	1 – Excellent	yes		1
22	0.5	1.5	0.7	no	6	yes	yes	2 – Good	2 – Good	yes		1
423	0.5	8	0.1	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1

Number in Evaluation	Landing Slope	Ramp Running Slope	Ramp Cross Slope					Condition Rating	Gutter Rating	Total	Percentage	Rating
430	0-2%	0-8.3%	0-2%					1-3	1-3	87	20%	1
	2.1-2.5%	8.4-9.5	2.1-2.5%					1-3	1-3	86	20%	2
	2.6% or more	9.6 or more	2.6% or more					4	4	205	48%	3
	Ramp	Not	Present							52	12%	4

Object ID	Landing Slope NL=No Landing	Ramp Running Slope	Ramp Cross Slope	Vertical Discontinuity	Ramp Width	Truncated Domes Present?	Dome width match path width?	Condition Rating	Gutter Rating	Is Curb Ramp Fully Compliant?	Comments	Rating
425	0.5	3	1	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
424	0.5	7.2	1	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
421	0.5	4.5	1.5	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
148	0.5	6	0.4	no	6	yes	no	2 – Good	2 – Good	no	Age	1
98	0.6	6.5	1.6	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
105	0.6	6.5	1.8	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
69	0.6	7	0.3	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
126	0.7	3	0.4	no	6	yes	yes	2 – Good	2 – Good	yes		1
331	0.7	7.8	2	no	5	yes	yes	2 – Good	2 – Good	yes		1
387	0.7	7.5	1	yes	4	yes	no	3 – Fair	3 – Fair	no	construction error	1
289	0.8	3	1	no	4	yes	no	2 – Good	2 – Good	no	construction error	1
20	0.9	1.1	0.3	no	8	yes	yes	2 – Good	2 – Good	yes		1
8	0.9	3.3	1.2	no	8	yes	yes	2 – Good	2 – Good	yes		1
94	0.9	6	1.6	no	6	yes	yes	2 – Good	2 – Good	yes		1
116	0.9	3	0.7	no	6	yes	yes	3 – Fair	2 – Good	yes		1
71	0.9	7	0.6	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
383	1	4	1	no	10	yes	yes	2 – Good	2 – Good	yes		1
431	1	2	1	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
122	1	4	1	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
125	1	2.2	1.2	no	6	yes	yes	2 – Good	1 – Excellent	yes		1
124	1	7	1.6	no	6	yes	yes	2 – Good	1 – Excellent	yes		1
130	1	6	2	no	6	yes	yes	2 – Good	2 – Good	yes		1
333	1	2.1	0.4	no	5	yes	yes	2 – Good	2 – Good	yes		1
146	1	4.4	0.4	no	5	yes	no	2 – Good	2 – Good	no	Age	1
174	1	5	2		5	no		3 – Fair	3 – Fair	no	Age	1
175	1	3	1	no	4	no		2 – Good	2 – Good	no	Age	1
10	1.2	3.5	0.3	no	8	yes	no	2 – Good	2 – Good	yes		1
147	1.2	6	1	no	4	yes	no	2 – Good	2 – Good	no	Age	1
419	1.3			no	10	yes	yes	1 – Excellent	1 – Excellent	yes		1
266	1.4	5	0.4	yes	4	yes	yes	2 – Good	4 – Fair	yes	Poor drainage and debris	1
428	1.5	8	0.5	no	16	yes	yes	1 – Excellent	1 – Excellent	yes		1
21	1.5	4.5	1.3	no	8	yes	yes	2 – Good	2 – Good	yes		1
55	1.5	4.5	0.2	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
422	1.5	4	0.5	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
73	1.5	6.5	0.5	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
328	1.5	6.5	2	no	5	yes	yes	2 – Good	2 – Good	yes		1

Number in Evaluation	Landing Slope	Ramp Running Slope	Ramp Cross Slope					Condition Rating	Gutter Rating	Total	Percentage	Rating
430	0-2%	0-8.3%	0-2%					1-3	1-3	87	20%	1
	2.1-2.5%	8.4-9.5	2.1-2.5%					1-3	1-3	86	20%	2
	2.6% or more	9.6 or more	2.6% or more					4	4	205	48%	3
	Ramp	Not	Present							52	12%	4

Object ID	Landing Slope NL=No Landing	Ramp Running Slope	Ramp Cross Slope	Vertical Discontinuity	Ramp Width	Truncated Domes Present?	Dome width match path width?	Condition Rating	Gutter Rating	Is Curb Ramp Fully Compliant?	Comments	Rating
367	1.5	8	1	no	5	no		2 – Good	3 – Fair	no	Age	1
318	1.5	3	1	no	4	yes	no	2 – Good	2 – Good	no	construction error	1
429	1.5	8	1	no	13	yes	yes	1 – Excellent	1 – Excellent	no	Landing to south	1
96	1.6	5	1	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
97	1.7	4.2	0.6	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
145	1.7	3.8	2	no	5	yes	no	2 – Good	2 – Good	no	Age	1
4	1.8	2.1	0.2	no	8	yes	yes	2 – Good	2 – Good	yes		1
5	2	3.5	0.5	no	8	yes	yes	2 – Good	3 – Fair	yes	Poor bit placement	1
381	2	1	1	no	10	yes	yes	2 – Good	2 – Good	yes		1
102	2	4.5	0.2	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
104	2	4	0.7	no	6	yes	yes	1 – Excellent	1 – Excellent	yes		1
128	15	1.5	0.5	no	6	yes	yes	2 – Good	1 – Excellent	yes		1
62	NL	7.5	0.5	no	5	yes	yes	1 – Excellent	1 – Excellent	yes		1
36	NL										Under construction	1
37	NL										Under construction	1
111	0.2	1.4	0.4	no	6	yes	yes	4 – Poor	1 – Excellent	no	Gravel debris	2
58	0.5	7	0.2	no	5	yes	yes	4 – Poor	1 – Excellent	no	Poor drainage and debris	2
64	0.5	8.5	1.2	no	8	yes	yes	1 – Excellent	1 – Excellent	no	Slightly out of spec	2
119	0.5	9.2	0.3	no	5	yes	no	2 – Good	1 – Excellent	no	Slope	2
319	1	6	2.5	no	4	yes	no	2 – Good	2 – Good	no	construction error	2
18	1	0.4	2.4	yes	8	yes	yes	3 – Fair	4 – Poor	no	Poor Bit Edge	2
151	1.1	9	1.7	yes	5	no		3 – Fair	3 – Fair	no	Age	2
215	1.5	5	0.5	no	4	yes	no	2 – Good	2 – Good	no	Width	2
95	1.8		2.2	no	17	yes	yes	2 – Good	2 – Good	no	Cross slope	2
139	2	5.5	2	yes		no		3 – Fair	4 – Poor	no	Age	2
300	2	9	1	yes	4	no		3 – Fair	3 – Fair	no	Age	2
137	2.2	4.2	1.2	no	6	yes	yes	2 – Good	1 – Excellent	no	Age	2
103	2.5	5	1.5	no	6	yes	yes	1 – Excellent	1 – Excellent	no		2
322	NL	6.5	1.5	no	5	yes	yes	2 – Good	2 – Good	yes		2
91	NL	5	1.5	yes	6	yes	no	3 – Fair	3 – Fair	no	Age	2
134	NL	7	0.6	no	5	yes	no	2 – Good	2 – Good	no	Age	2
88	NL	7	1.1		4	no		3 – Fair	3 – Fair	no	Age	2
87	NL	6	2	no		no		3 – Fair	3 – Fair	no	Age	2
391	NL	4	0.5	yes	12	no		3 – Fair	3 – Fair	no	Age	2
178	NL	8	0.2	no	5	yes	no	2 – Good	2 – Good	no	Age	2
177	NL	7	1	no	5	yes	no	2 – Good	2 – Good	no	Age	2

Number in Evaluation	Landing Slope	Ramp Running Slope	Ramp Cross Slope					Condition Rating	Gutter Rating	Total	Percentage	Rating
430	0-2%	0-8.3%	0-2%					1-3	1-3	87	20%	1
	2.1-2.5%	8.4-9.5	2.1-2.5%					1-3	1-3	86	20%	2
	2.6% or more	9.6 or more	2.6% or more					4	4	205	48%	3
	Ramp	Not	Present							52	12%	4

Object ID	Landing Slope NL=No Landing	Ramp Running Slope	Ramp Cross Slope	Vertical Discontinuity	Ramp Width	Truncated Domes Present?	Dome width match path width?	Condition Rating	Gutter Rating	Is Curb Ramp Fully Compliant?	Comments	Rating
181	NL	6.5	1.5	yes	5	no		3 – Fair	2 – Good	no	Age	2
366	NL	7	1.5	no	4	no		2 – Good	2 – Good	no	Age	2
280	NL	1	2	no	4	yes	no	2 – Good	2 – Good	no	Age	2
292	NL	6	2	no	4	yes	no	2 – Good	2 – Good	no	Age	2
286	NL	8	2	no	4	yes	no	2 – Good	2 – Good	no	Age	2
332	NL	8	1	no	4	no		3 – Fair	2 – Good	no	Age	2
160	NL	3.1	2	no	4	yes	no	3 – Fair	2 – Good	no	Age	2
359	NL	4	1	yes	4	no		3 – Fair	2 – Good	no	Age	2
346	NL	6.5	1	no	4	no		3 – Fair	3 – Fair	no	Age	2
315	NL	8	0.5	yes	4	no		3 – Fair	3 – Fair	no	Age	2
281	NL	8	1	yes	4	yes	no	3 – Fair	3 – Fair	no	Age	2
75	NL	7	1.4	yes	4	no		3 – Fair	3 – Fair	no	Age	2
376	NL	8	2	yes	4	no		3 – Fair	3 – Fair	no	Age	2
384	NL	7	1.5	no		no		2 – Good	2 – Good	no	Age	2
362	NL	1	1	no		no		3 – Fair	3 – Fair	no	Age	2
377	NL	5	2	yes	8	yes	no	3 – Fair	2 – Good	no	construction error	2
138	NL	3.3	1	yes	6	yes	yes	3 – Fair	1 – Excellent	no	construction error	2
385	NL	6.5	1.5	no	5	yes	no	3 – Fair	3 – Fair	no	construction error	2
268	NL	6	1.5	yes	5	yes	yes	3 – Fair	3 – Fair	no	construction error	2
252	NL	7	0.1	no	4	yes	no	2 – Good	2 – Good	no	construction error	2
364	NL	8	0.5	no	4	yes	no	2 – Good	2 – Good	no	construction error	2
320	NL	6	1	no	4	yes	no	2 – Good	2 – Good	no	construction error	2
248	NL	7	1.5	no	4	yes	no	2 – Good	2 – Good	no	construction error	2
350	NL	4	2	no	4	yes	no	2 – Good	2 – Good	no	construction error	2
247	NL	6	2	no	4	yes	no	2 – Good	2 – Good	no	construction error	2
243	NL	8.1	1	yes	4	yes	no	2 – Good	2 – Good	no	construction error	2
260	NL	7.7	2	no	4	yes	no	3 – Fair	2 – Good	no	construction error	2
241	NL	8	0.2	yes	4	yes	no	3 – Fair	2 – Good	no	construction error	2
244	NL	6	2	yes	4	yes	no	3 – Fair	2 – Good	no	construction error	2
251	NL	7.5	2.5	no	4	yes	no	3 – Fair	3 – Fair	no	construction error	2
267	NL	6	1.5	yes	4	yes	yes	3 – Fair	3 – Fair	no	construction error	2
355	NL	11	2.5	no	4	no		3 – Fair	3 – Fair	no	Age	2
149	NL	8.5	1	no	6	yes	no	3 – Fair	3 – Fair	no	Age	2
136	NL	8.5	1.5	yes	5	yes	yes	3 – Fair	3 – Fair	no	Age	2
84	NL	8.9	1	no	4	no		2 – Good	2 – Good	no	Age	2
86	NL	9	1.1	no	4	no		3 – Fair	3 – Fair	no	Age	2

Number in Evaluation	Landing Slope	Ramp Running Slope	Ramp Cross Slope					Condition Rating	Gutter Rating	Total	Percentage	Rating
430	0-2%	0-8.3%	0-2%					1-3	1-3	87	20%	1
	2.1-2.5%	8.4-9.5	2.1-2.5%					1-3	1-3	86	20%	2
	2.6% or more	9.6 or more	2.6% or more					4	4	205	48%	3
	Ramp	Not	Present							52	12%	4

Object ID	Landing Slope NL=No Landing	Ramp Running Slope	Ramp Cross Slope	Vertical Discontinuity	Ramp Width	Truncated Domes Present?	Dome width match path width?	Condition Rating	Gutter Rating	Is Curb Ramp Fully Compliant?	Comments	Rating
392	NL	9	1	yes	10	no		3 – Fair	3 – Fair	no	Age	2
187	NL	9	1	no	5	yes	no	3 – Fair	3 – Fair	no	Age	2
188	NL	9	2	no	5	yes	no	3 – Fair	3 – Fair	no	Age	2
220	NL	8.5	2.2	yes	5	no		3 – Fair	3 – Fair	no	Age	2
373	NL	9	2	no	4	no		2 – Good	2 – Good	no	Age	2
157	NL	3	2.5	no	4	yes	no	2 – Good	2 – Good	no	Age	2
336	NL	9	1		4	no		3 – Fair	2 – Good	no	Age	2
386	NL	6.2	0.2	yes	4	no		4 – Poor	2 – Good	no	Age	2
183	NL	6.5	0.4	yes	4	no		4 – Poor	2 – Good	no	Age	2
378	NL	7	2	yes	4	no		4 – Poor	2 – Good	no	Age	2
357	NL	9	1	no	4	no		2 – Good	3 – Fair	no	Age	2
374	NL	8.5	1	no	4	no		3 – Fair	3 – Fair	no	Age	2
309	NL	8.5	0.7	yes	4	no		3 – Fair	3 – Fair	no	Age	2
76	NL	9.2	0.7	yes	4	no		3 – Fair	3 – Fair	no	Age	2
313	NL	8.5	1	yes	4	no		3 – Fair	3 – Fair	no	Age	2
371	NL	6	1.5	yes	4	no		3 – Fair	4 – Poor	no	Age	2
261	NL	4	2	no	4			4 – Poor	4 – Poor	no	Age	2
335	NL	9	1	no		no	no	3 – Fair	3 – Fair	no	Age	2
240	NL	9	1.6	no	5	yes	no	2 – Good	2 – Good	no	construction error	2
255	NL	5	2.5	no	4	yes	no	2 – Good	1 – Excellent	no	construction error	2
254	NL	8.5	0.5	no	4	yes	no	2 – Good	2 – Good	no	construction error	2
271	NL	8.5	0.2	no	4	yes	yes	2 – Good	3 – Fair	no	construction error	2
369	NL	9.5	2.5	no	4	yes	no	3 – Fair	3 – Fair	no	construction error	2
257	NL	9	2.5	yes	4	yes	no	3 – Fair	3 – Fair	no	construction error	2
256	NL	7	2.1	no		yes	no	2 – Good	2 – Good	no	construction error	2
326	NL	5	1	no	12	yes	yes	2 – Good	2 – Good	no	No landing	2
327	NL	6.5	1	no	13	yes	yes	2 – Good	2 – Good	no	No landing	2
334	NL	4	1.1	no	5	yes	no	2 – Good	2 – Good	no	No landing	2
420	NL	8.2	0.5	no	4	yes	yes	2 – Good	2 – Good	no	No landing	2
106	0.2	1.2	0.2	no	6	yes	yes	4 – Poor	4 – Poor	no	Poor drainage	3
59	0.2	4	0.2	no	5	yes	yes	4 – Poor	4 – Poor	no	Poor drainage and debris	3
131	0.4	6	2	yes	3	no		4 – Poor	4 – Poor	no	Age	3
72	0.4	7	0.4	no	5	yes	yes	4 – Poor	4 – Poor	no	Poor drainage and debris	3
301	1	10	0.5	yes	4	no		3 – Fair	4 – Poor	no	Age	3
70	1	8	0.7	no	6	yes	yes	4 – Poor	4 – Poor	no	Poor drainage and debris	3
110	1.3	2	0.5	no	6	yes	yes	4 – Poor	4 – Poor	no	Gravel debris	3

Number in Evaluation	Landing Slope	Ramp Running Slope	Ramp Cross Slope					Condition Rating	Gutter Rating	Total	Percentage	Rating
430	0-2%	0-8.3%	0-2%					1-3	1-3	87	20%	1
	2.1-2.5%	8.4-9.5	2.1-2.5%					1-3	1-3	86	20%	2
	2.6% or more	9.6 or more	2.6% or more					4	4	205	48%	3
	Ramp	Not	Present							52	12%	4

Object ID	Landing Slope NL=No Landing	Ramp Running Slope	Ramp Cross Slope	Vertical Discontinuity	Ramp Width	Truncated Domes Present?	Dome width match path width?	Condition Rating	Gutter Rating	Is Curb Ramp Fully Compliant?	Comments	Rating
144	1.4	3.7	2.7	no	3	yes	no	3 – Fair	2 – Good	no	Age	3
224	1.4	7	4	yes	4	yes	no	3 – Fair	4 – Poor	no	construction error	3
172	1.5	5	3.2	no	5	no		3 – Fair	3 – Fair	no	Age	3
167	1.6	6.5	1.4	yes	4	yes	no	4 – Poor	3 – Fair	no	Age	3
26	1.6	4.2	3.3	yes	4	yes	no	3 – Fair	3 – Fair	no	construction error	3
164	1.7	11	5.5	yes	4	yes	no	3 – Fair	3 – Fair	no	Age	3
162	1.7	8.6	2.6	yes	4	yes	no	4 – Poor	3 – Fair	no	Age	3
27	1.8	1.1	3	no	4	yes	no	4 – Poor	1 – Excellent	no	Age	3
3	1.8	1.2	2.8	no	8	yes	no	2 – Good	2 – Good	no	Age	3
93	1.8	4.2	3.2	no	6	yes	yes	1 – Excellent	1 – Excellent	no	Cross slope	3
129	2	5	3	no	6	yes	yes	2 – Good	2 – Good	no	Cross slope	3
166	2.5	10	1.5	no	4	yes	no	3 – Fair	3 – Fair	no	Age	3
42	2.5	10.2	1.7	no	4	yes	no	2 – Good	1 – Excellent	no	construction error	3
101	2.5	4.5	2.7	no	6	yes	yes	1 – Excellent	1 – Excellent	no	Cross slope	3
7	2.6	3	0.8	no	8	yes	yes	2 – Good	2 – Good	yes		3
132	3	3	2.5	no	3	no		3 – Fair	4 – Poor	no	Age	3
43	3	7	7.8	no	4	yes	no	2 – Good	1 – Excellent	no	construction error	3
90	3.5	1.1		yes	6	yes	no	3 – Fair	3 – Fair	no	Age	3
140	3.5	5	1.7	yes	4	yes	no	3 – Fair	3 – Fair	no	Age	3
118	6	5.5	0.4	no	6	yes	yes	3 – Fair	1 – Excellent	no	Cross slope	3
19	7.1	0.3	7.5	yes	4	yes	no	3 – Fair	4 – Poor	no	Poor Bit Edge	3
2	8.5	8.5	2.2	NA	3	no		4 – Poor	3 – Fair	no	Pre dates td	3
74	9	10	7	yes	6	no	no	4 – Poor	4 – Poor	no	Age	3
143	NL	9	5.5	no	5	yes	no	3 – Fair	2 – Good	no	Age	3
83	NL	10	0.5	no	4	no		2 – Good	2 – Good	no	Age	3
293	NL	13	1	yes	8	no		3 – Fair	3 – Fair	no	Age	3
316	NL	10.5	0.5	no	6	no		3 – Fair	3 – Fair	no	Age	3
45	NL	13	2.7	yes	6	no	NA	4 – Poor	4 – Poor	no	Age	3
46	NL	10.4	0.5	yes	5	no	NA	3 – Fair	3 – Fair	no	Age	3
142	NL	5.5	4	yes	5	yes	no	3 – Fair	3 – Fair	no	Age	3
141	NL	8.8	5	yes	5	yes	no	3 – Fair	3 – Fair	no	Age	3
135	NL	7.3	0.3	yes	5	yes	no	3 – Fair	4 – Poor	no	Age	3
186	NL	10	2	yes	5	yes	no	3 – Fair	4 – Poor	no	Age	3
158	NL	8	4	no	4	yes	no	2 – Good	2 – Good	no	Age	3
81	NL	6.5	5.5	no	4	yes	no	2 – Good	2 – Good	no	Age	3
80	NL	13	0.4	yes	4	yes	yes	2 – Good	2 – Good	no	Age	3

Number in Evaluation	Landing Slope	Ramp Running Slope	Ramp Cross Slope					Condition Rating	Gutter Rating	Total	Percentage	Rating
430	0-2%	0-8.3%	0-2%					1-3	1-3	87	20%	1
	2.1-2.5%	8.4-9.5	2.1-2.5%					1-3	1-3	86	20%	2
	2.6% or more	9.6 or more	2.6% or more					4	4	205	48%	3
	Ramp	Not	Present							52	12%	4

Object ID	Landing Slope NL=No Landing	Ramp Running Slope	Ramp Cross Slope	Vertical Discontinuity	Ramp Width	Truncated Domes Present?	Dome width match path width?	Condition Rating	Gutter Rating	Is Curb Ramp Fully Compliant?	Comments	Rating
156	NL	4	3	yes	4	yes	no	2 – Good	2 – Good	no	Age	3
28	NL	1.5	3.6	no	4	yes	no	3 – Fair	2 – Good	no	Age	3
159	NL	2.7	2.6	yes	4	yes	no	3 – Fair	2 – Good	no	Age	3
48	NL	8.5	3	no	4	no	NA	3 – Fair	3 – Fair	no	Age	3
23	NL	9.5	3.4	no	4	no	no	3 – Fair	3 – Fair	no	Age	3
163	NL	8	4.7	no	4	yes	no	3 – Fair	3 – Fair	no	Age	3
79	NL	8.2	0.2	yes	4	yes	no	3 – Fair	3 – Fair	no	Age	3
314	NL	12	1	yes	4	no		3 – Fair	3 – Fair	no	Age	3
82	NL	13	1	yes	4	yes	no	3 – Fair	3 – Fair	no	Age	3
34	NL	10	2.6	yes	4	no	no	3 – Fair	3 – Fair	no	Age	3
133	NL	7	3	yes	4	yes	no	3 – Fair	3 – Fair	no	Age	3
168	NL	4.5	3.5	yes	4	yes	no	3 – Fair	3 – Fair	no	Age	3
155	NL	12	3.5	yes	4	yes	no	3 – Fair	3 – Fair	no	Age	3
31	NL	22	10	yes	4	no		4 – Poor	3 – Fair	no	Age	3
35	NL	7	2.8	yes	4	no	no	3 – Fair	4 – Poor	no	Age	3
223	NL	6	0.8	yes	4	yes	no	4 – Poor	4 – Poor	no	Age	3
53	NL	12	1.4	yes	4	no	no	4 – Poor	4 – Poor	no	Age	3
39	NL	12	2	yes	4	no	no	4 – Poor	4 – Poor	no	Age	3
77	NL	10.8	1.5	no	3	no		3 – Fair	3 – Fair	no	Age	3
85	NL	5	2	yes	2	no		3 – Fair	2 – Good	no	Age	3
229	NL	8	1	yes	10	no		4 – Poor	4 – Poor	no	Age	3
372	NL	7.5	0.8	yes	8	no		4 – Poor	3 – Fair	no	Age	3
368	NL	8	1	yes	8	no		4 – Poor	4 – Poor	no	Age	3
406	NL	10	1	yes	8	no		4 – Poor	4 – Poor	no	Age	3
54	NL	8	2.7	yes	8	no		4 – Poor	4 – Poor	no	Age	3
185	NL	10	1	no	5	yes	no	2 – Good	2 – Good	no	Age	3
179	NL	10	1.3	no	5	yes	no	2 – Good	2 – Good	no	Age	3
356	NL	10.5	2	no	5	no		2 – Good	2 – Good	no	Age	3
270	NL	12.5	1.5	no	5	yes	yes	3 – Fair	3 – Fair	no	Age	3
154	NL	1	3.8	no	5	yes	no	3 – Fair	3 – Fair	no	Age	3
303	NL	10	0.2	yes	5	no		3 – Fair	3 – Fair	no	Age	3
345	NL	6.7	2	yes	5	yes	no	3 – Fair	4 – Poor	no	Age	3
415	NL	12	1	no	4	no		2 – Good	2 – Good	no	Age	3
282	NL	10	2	no	4	yes	no	2 – Good	2 – Good	no	Age	3
283	NL	11	2	no	4	yes	no	2 – Good	2 – Good	no	Age	3
287	NL	11	2	no	4	yes	no	2 – Good	2 – Good	no	Age	3

Number in Evaluation	Landing Slope	Ramp Running Slope	Ramp Cross Slope					Condition Rating	Gutter Rating	Total	Percentage	Rating
430	0-2%	0-8.3%	0-2%					1-3	1-3	87	20%	1
	2.1-2.5%	8.4-9.5	2.1-2.5%					1-3	1-3	86	20%	2
	2.6% or more	9.6 or more	2.6% or more					4	4	205	48%	3
	Ramp	Not	Present							52	12%	4

Object ID	Landing Slope NL=No Landing	Ramp Running Slope	Ramp Cross Slope	Vertical Discontinuity	Ramp Width	Truncated Domes Present?	Dome width match path width?	Condition Rating	Gutter Rating	Is Curb Ramp Fully Compliant?	Comments	Rating
263	NL	14	3	no	4	yes	no	2 – Good	2 – Good	no	Age	3
288	NL	12	4	no	4	yes	no	2 – Good	2 – Good	no	Age	3
354	NL	10	5	no	4	no		2 – Good	2 – Good	no	Age	3
413	NL	2	3	yes	4	no		4 – Poor	2 – Good	no	Age	3
184	NL	9	3	yes	4	no		4 – Poor	2 – Good	no	Age	3
417	NL	17	2	yes	4	no		2 – Good	3 – Fair	no	Age	3
349	NL	11	1.5	no	4	no		3 – Fair	3 – Fair	no	Age	3
92	NL	8	2	no	4	yes	no	3 – Fair	3 – Fair	no	Age	3
343	NL	6	3	no	4	no		3 – Fair	3 – Fair	no	Age	3
412	NL	8	3	no	4	no		3 – Fair	3 – Fair	no	Age	3
173	NL	9.5	3.1	no	4	no		3 – Fair	3 – Fair	no	Age	3
190	NL	10	4	no	4	no	no	3 – Fair	3 – Fair	no	Age	3
379	NL	17	7	no	4	no		3 – Fair	3 – Fair	no	Age	3
217	NL	14	1	yes	4	no		3 – Fair	3 – Fair	no	Age	3
390	NL	14	1	yes	4	no		3 – Fair	3 – Fair	no	Age	3
389	NL	15	1	yes	4	no		3 – Fair	3 – Fair	no	Age	3
296	NL	19	1	yes	4	no		3 – Fair	3 – Fair	no	Age	3
307	NL	20	1	yes	4	no		3 – Fair	3 – Fair	no	Age	3
180	NL	11	1.5	yes	4	no		3 – Fair	3 – Fair	no	Age	3
302	NL	11.5	1.5	yes	4	no		3 – Fair	3 – Fair	no	Age	3
388	NL	13	2	yes	4	no		3 – Fair	3 – Fair	no	Age	3
339	NL	7.9	3	yes	4	no		3 – Fair	3 – Fair	no	Age	3
165	NL	8	7	yes	4	yes	no	3 – Fair	3 – Fair	no	Age	3
330	NL	13	2		4	no		3 – Fair	3 – Fair	no	Age	3
370	NL	4	0.5	yes	4	no		4 – Poor	3 – Fair	no	Age	3
305	NL	13	1.5	yes	4	no		4 – Poor	3 – Fair	no	Age	3
294	NL	10	2	yes	4	no		4 – Poor	3 – Fair	no	Age	3
150	NL	5	2.5	yes	4	yes	no	4 – Poor	3 – Fair	no	Age	3
192	NL	9	3	yes	4	no		4 – Poor	3 – Fair	no	Age	3
304	NL	14	3	yes	4	no		4 – Poor	3 – Fair	no	Age	3
191	NL	8	4	yes	4	no	no	4 – Poor	3 – Fair	no	Age	3
152	NL	1	5	yes	4	no		4 – Poor	3 – Fair	no	Age	3
409	NL	5	5	yes	4	no		4 – Poor	3 – Fair	no	Age	3
161	NL	16	6	yes	4	yes	no	4 – Poor	3 – Fair	no	Age	3
239	NL	6	2	yes	4	no		2 – Good	4 – Poor	no	Age	3
401	NL	11	0.5	yes	4	no		3 – Fair	4 – Poor	no	Age	3

Number in Evaluation	Landing Slope	Ramp Running Slope	Ramp Cross Slope					Condition Rating	Gutter Rating	Total	Percentage	Rating
430	0-2%	0-8.3%	0-2%					1-3	1-3	87	20%	1
	2.1-2.5%	8.4-9.5	2.1-2.5%					1-3	1-3	86	20%	2
	2.6% or more	9.6 or more	2.6% or more					4	4	205	48%	3
	Ramp	Not	Present							52	12%	4

Object ID	Landing Slope NL=No Landing	Ramp Running Slope	Ramp Cross Slope	Vertical Discontinuity	Ramp Width	Truncated Domes Present?	Dome width match path width?	Condition Rating	Gutter Rating	Is Curb Ramp Fully Compliant?	Comments	Rating
400	NL	10	1	yes	4	no		3 – Fair	4 – Poor	no	Age	3
403	NL	9	1.5	yes	4	no		3 – Fair	4 – Poor	no	Age	3
273	NL	11.5	1.5	yes	4	no		3 – Fair	4 – Poor	no	Age	3
361	NL	10	2.5	yes	4	no		3 – Fair	4 – Poor	no	Age	3
311	NL	9	1	yes	4	no		4 – Poor	4 – Poor	no	Age	3
297	NL	12.5	1	yes	4	no		4 – Poor	4 – Poor	no	Age	3
222	NL	16	1	yes	4	no		4 – Poor	4 – Poor	no	Age	3
216	NL	17	1	yes	4	no		4 – Poor	4 – Poor	no	Age	3
312	NL	13	1.5	yes	4	no		4 – Poor	4 – Poor	no	Age	3
347	NL	4	2	yes	4	no		4 – Poor	4 – Poor	no	Age	3
230	NL	8	2	yes	4	no		4 – Poor	4 – Poor	no	Age	3
338	NL	8	2	yes	4	no		4 – Poor	4 – Poor	no	Age	3
221	NL	9	2	yes	4	no		4 – Poor	4 – Poor	no	Age	3
295	NL	18	2	yes	4	no		4 – Poor	4 – Poor	no	Age	3
399	NL	7	2.5	yes	4	no		4 – Poor	4 – Poor	no	Age	3
274	NL	9.3	3	yes	4	no		4 – Poor	4 – Poor	no	Age	3
265	NL	10	3	yes	4	no		4 – Poor	4 – Poor	no	Age	3
396	NL	12	3	yes	4	no		4 – Poor	4 – Poor	no	Age	3
344	NL	13	3	yes	4	no		4 – Poor	4 – Poor	no	Age	3
182	NL	6	4	yes	4	no	no	4 – Poor	4 – Poor	no	Age	3
410	NL	9	4	yes	4	no		4 – Poor	4 – Poor	no	Age	3
306	NL	4	5	yes	4	no		4 – Poor	4 – Poor	no	Age	3
153	NL	6	5	yes	4	no	no	4 – Poor	4 – Poor	no	Age	3
418	NL	10	1	no	3	no		2 – Good	2 – Good	no	Age	3
262	NL		11	no	3	no		2 – Good	2 – Good	no	Age	3
285	NL	12	4	yes	3	yes	no	2 – Good	2 – Good	no	Age	3
264	NL	8	1.2	no	3	yes	no	3 – Fair	2 – Good	no	Age	3
394	NL	9.5	1.5	no	3	no		3 – Fair	3 – Fair	no	Age	3
238	NL	6	2	no	3	no		3 – Fair	3 – Fair	no	Age	3
218	NL	18	2	no	3	no		3 – Fair	3 – Fair	no	Age	3
237	NL	9	3	no	3	no		3 – Fair	3 – Fair	no	Age	3
310	NL	10	2	yes	3	no		3 – Fair	3 – Fair	no	Age	3
219	NL	12	6	yes	3	no		3 – Fair	3 – Fair	no	Age	3
393	NL	3	38.5	yes	3	no		3 – Fair	3 – Fair	no	Age	3
395	NL	11	1	yes	3	no		4 – Poor	3 – Fair	no	Age	3
430	NL	7	3	yes	3	no		4 – Poor	3 – Fair	no	Age	3

Number in Evaluation	Landing Slope	Ramp Running Slope	Ramp Cross Slope					Condition Rating	Gutter Rating	Total	Percentage	Rating
430	0-2%	0-8.3%	0-2%					1-3	1-3	87	20%	1
	2.1-2.5%	8.4-9.5	2.1-2.5%					1-3	1-3	86	20%	2
	2.6% or more	9.6 or more	2.6% or more					4	4	205	48%	3
	Ramp	Not	Present							52	12%	4

Object ID	Landing Slope NL=No Landing	Ramp Running Slope	Ramp Cross Slope	Vertical Discontinuity	Ramp Width	Truncated Domes Present?	Dome width match path width?	Condition Rating	Gutter Rating	Is Curb Ramp Fully Compliant?	Comments	Rating
407	NL	5	0	yes	3	no		4 – Poor	4 – Poor	no	Age	3
232	NL	9	0.5	yes	3	no		4 – Poor	4 – Poor	no	Age	3
402	NL	10	0.5	yes	3	no		4 – Poor	4 – Poor	no	Age	3
201	NL	1	1	yes	3	no		4 – Poor	4 – Poor	no	Age	3
231	NL	12	1	yes	3	no		4 – Poor	4 – Poor	no	Age	3
235	NL	12	1	yes	3	no		4 – Poor	4 – Poor	no	Age	3
404	NL	14	1.5	yes	3	no		4 – Poor	4 – Poor	no	Age	3
233	NL	10	2	yes	3	no		4 – Poor	4 – Poor	no	Age	3
234	NL	8	3	yes	3	no		4 – Poor	4 – Poor	no	Age	3
236	NL	11	3	yes	3	no		4 – Poor	4 – Poor	no	Age	3
325	NL	12	3	yes	3	no		4 – Poor	4 – Poor	no	Age	3
408	NL	12	1.5	no	2	no		2 – Good	2 – Good	no	Age	3
324	NL	4	1.4	yes	2	no		4 – Poor	2 – Good	no	Age	3
416	NL	15	4	yes	2	no		2 – Good	3 – Fair	no	Age	3
329	NL	20	0.7	no	2	no		3 – Fair	3 – Fair	no	Age	3
426	NL	17	1.5	no	2	no		3 – Fair	3 – Fair	no	Age	3
427	NL	8	1		2	no		3 – Fair	3 – Fair	no	Age	3
414	NL	7	4	yes	2	no		3 – Fair	4 – Poor	no	Age	3
411	NL	11	0.5	yes	2	no		4 – Poor	4 – Poor	no	Age	3
405	NL	12	5	yes	2	no		4 – Poor	4 – Poor	no	Age	3
340	NL	12	3	yes		no		2 – Good	2 – Good	no	Age	3
341	NL	9	3	no		no		3 – Fair	2 – Good	no	Age	3
360	NL	10	2	no		no		3 – Fair	3 – Fair	no	Age	3
380	NL	5	4	yes		no		4 – Poor	4 – Poor	no	Age	3
78	NL	6.4	0.2	no	4	yes	yes	2 – Good	2 – Good	no	Age. No landing	3
200	NL	5	3	yes		no				no		3
169	NL	6	1.9	yes	5	yes	no	2 – Good	3 – Fair	no	CB inlet and age	3
32	NL	1.5	4.5	no	5	yes	no	2 – Good	2 – Good	no	construction error	3
246	NL	11	1.4	yes	4	yes	no	2 – Good	1 – Excellent	no	construction error	3
49	NL	12.6	0.1	no	4	yes	no	2 – Good	2 – Good	no	construction error	3
50	NL	13	1	no	4	yes	no	2 – Good	2 – Good	no	construction error	3
258	NL	12	2	no	4	yes	no	2 – Good	2 – Good	no	construction error	3
290	NL	4	3.1	no	4	yes	no	2 – Good	2 – Good	no	construction error	3
321	NL	8	4	no	4	yes	no	2 – Good	2 – Good	no	construction error	3
291	NL	6	5	no	4	yes	no	2 – Good	2 – Good	no	construction error	3
299	NL	8.8	3	yes	4	yes	no	2 – Good	2 – Good	no	construction error	3

Number in Evaluation	Landing Slope	Ramp Running Slope	Ramp Cross Slope					Condition Rating	Gutter Rating	Total	Percentage	Rating
430	0-2%	0-8.3%	0-2%					1-3	1-3	87	20%	1
	2.1-2.5%	8.4-9.5	2.1-2.5%					1-3	1-3	86	20%	2
	2.6% or more	9.6 or more	2.6% or more					4	4	205	48%	3
	Ramp	Not	Present							52	12%	4
Object ID	Landing Slope NL=No Landing	Ramp Running Slope	Ramp Cross Slope	Vertical Discontinuity	Ramp Width	Truncated Domes Present?	Dome width match path width?	Condition Rating	Gutter Rating	Is Curb Ramp Fully Compliant?	Comments	Rating
253	NL	15	2	no	4	yes	no	3 – Fair	2 – Good	no	construction error	3
272	NL	9.8	2.2	yes	4	yes	yes	2 – Good	3 – Fair	no	construction error	3
38	NL	10.4	1.1	no	4	yes	no	3 – Fair	3 – Fair	no	construction error	3
242	NL	8	2	no	4	yes	no	3 – Fair	3 – Fair	no	construction error	3
363	NL	8	4	no	4	yes	no	3 – Fair	3 – Fair	no	construction error	3
259	NL	9	0.5	yes	4	yes	no	3 – Fair	3 – Fair	no	construction error	3
226	NL	12	2	yes	4	yes	yes	3 – Fair	3 – Fair	no	construction error	3
269	NL	12	2	yes	4			3 – Fair	3 – Fair	no	construction error	3
298	NL	5	3	yes	4	yes	no	3 – Fair	3 – Fair	no	construction error	3
33	NL	16	2.7	no	4	yes	no	3 – Fair	4 – Poor	no	construction error	3
245	NL	11	25	yes	4	yes	no	3 – Fair	4 – Poor	no	construction error	3
249	NL	4	1	yes	4	yes	no	4 – Poor	4 – Poor	no	construction error	3
228	NL	14	1	yes	4	yes	no	4 – Poor	4 – Poor	no	construction error	3
227	NL	7.6	1.4	yes	4	yes	no	4 – Poor	4 – Poor	no	construction error	3
250	NL	5	2	yes	4	yes		4 – Poor	4 – Poor	no	construction error	3
317	NL	3.5	3	no		yes	no	2 – Good	2 – Good	no	construction error	3
25	NL	10.2	3.5	yes	5	yes	no	4 – Poor		no	No gutter	3
189	NL	5	6	yes	3	no		4 – Poor	4 – Poor	no		3
202											Ramp Not Present	4
203											Ramp Not Present	4
204											Ramp Not Present	4
196											Ramp Not Present	4
205											Ramp Not Present	4
206											Ramp Not Present	4
207											Ramp Not Present	4
208											Ramp Not Present	4
89											Ramp Not Present	4
24											Ramp Not Present	4
29											Ramp Not Present	4
30											Ramp Not Present	4
40											Ramp Not Present	4
41											Ramp Not Present	4
44											Ramp Not Present	4
47											Ramp Not Present	4
51											Ramp Not Present	4
52											Ramp Not Present	4

Number in Evaluation	Landing Slope	Ramp Running Slope	Ramp Cross Slope					Condition Rating	Gutter Rating	Total	Percentage	Rating
430	0-2%	0-8.3%	0-2%					1-3	1-3	87	20%	1
	2.1-2.5%	8.4-9.5	2.1-2.5%					1-3	1-3	86	20%	2
	2.6% or more	9.6 or more	2.6% or more					4	4	205	48%	3
	Ramp	Not	Present							52	12%	4

Object ID	Landing Slope NL=No Landing	Ramp Running Slope	Ramp Cross Slope	Vertical Discontinuity	Ramp Width	Truncated Domes Present?	Dome width match path width?	Condition Rating	Gutter Rating	Is Curb Ramp Fully Compliant?	Comments	Rating
170											Ramp Not Present	4
171											Ramp Not Present	4
176											Ramp Not Present	4
193											Ramp Not Present	4
194											Ramp Not Present	4
195											Ramp Not Present	4
197											Ramp Not Present	4
198											Ramp Not Present	4
199											Ramp Not Present	4
209											Ramp Not Present	4
210											Ramp Not Present	4
211											Ramp Not Present	4
212											Ramp Not Present	4
213											Ramp Not Present	4
214											Ramp Not Present	4
225											Ramp Not Present	4
275											Ramp Not Present	4
276											Ramp Not Present	4
277						no					Ramp Not Present	4
278											Ramp Not Present	4
279											Ramp Not Present	4
284											Ramp Not Present	4
308											Ramp Not Present	4
323											Ramp Not Present	4
342											Ramp Not Present	4
348											Ramp Not Present	4
351											Ramp Not Present	4
352											Ramp Not Present	4
353											Ramp Not Present	4
358											Ramp Not Present	4
365											Ramp Not Present	4
375											Ramp Not Present	4
397											Ramp Not Present	4
398											Ramp Not Present	4

Total in Evaluation		Number	Percentage	PAR Running Slope	PAR Cross Slope	Pavement Condition Rating	Rating
234		**121**	**52%**	**0-5%**	**0-2%**	**1-3**	**1**
		44	**19%**	**5.1-6.9%**	**2.1-3.0%**	**1-3**	**2**
		69	**29%**	**7.0% or more**	**3.1% or more**	**4**	**3**
		234					

Object ID	Marked Crossing	Crosswalk Width	Ramp in Crosswalk	PAR Running Slope	PAR Cross Slope	Pavement Condition Rating	Rating
60	yes	6	yes	1	0.1	1 – Excellent	**1**
37	yes	5	yes	1.1	0.2	1 – Excellent	**1**
65	yes	6	yes	2	0.2	1 – Excellent	**1**
68	yes	6	yes	3	0.3	1 – Excellent	**1**
70	yes	6	yes	1	0.4	1 – Excellent	**1**
58	yes	6	yes	3	0.5	1 – Excellent	**1**
59	yes	6	yes	3	0.5	1 – Excellent	**1**
61	yes	6	yes	3	0.5	1 – Excellent	**1**
47	no			4	0.5	1 – Excellent	**1**
53	no			1.5	0.7	1 – Excellent	**1**
57	yes	6	yes	1	1	1 – Excellent	**1**
49	no			1.8	1	1 – Excellent	**1**
133	yes	5	no	2	1	1 – Excellent	**1**
64	yes	6	yes	2	1	1 – Excellent	**1**
140	yes	5	yes	2	1	1 – Excellent	**1**
50	no			2	1	1 – Excellent	**1**
211	no			2	1	1 – Excellent	**1**
239	no			2	1	1 – Excellent	**1**
146	yes	5	no	2.5	1	1 – Excellent	**1**
138	yes	5	no	3	1	1 – Excellent	**1**
139	yes	5	no	3	1	1 – Excellent	**1**
237	yes	6	no	3	1	1 – Excellent	**1**
63	yes	6	yes	3	1	1 – Excellent	**1**
66	yes	6	yes	3	1	1 – Excellent	**1**
67	yes	6	yes	3	1	1 – Excellent	**1**
127	yes	5	yes	3	1	1 – Excellent	**1**
131	yes	5	yes	4	1	1 – Excellent	**1**
134	yes	5	yes	4	1	1 – Excellent	**1**
137	yes	5	yes	4	1	1 – Excellent	**1**
217	yes	6	yes	5	1	1 – Excellent	**1**
130	yes	5	yes	4	1.1	1 – Excellent	**1**
135	yes	5	no	1.2	1.5	1 – Excellent	**1**
56	yes	6	yes	2.5	1.5	1 – Excellent	**1**
77	yes	6	yes	3	1.5	1 – Excellent	**1**
71	yes	6	yes	2	2	1 – Excellent	**1**
236	yes	6	yes	3	2	1 – Excellent	**1**
128	yes	5	yes	5	2	1 – Excellent	**1**
8	no			0	0.2	2 – Good	**1**
2	yes	8	yes	0.5	0.2	2 – Good	**1**
5	yes	6	yes	1.2	0.2	2 – Good	**1**
212	no			1	0.5	2 – Good	**1**
240	no			1.5	0.5	2 – Good	**1**
116	yes	5	yes	2	0.5	2 – Good	**1**
69	yes	6	yes	3	0.5	2 – Good	**1**
169	no			3.1	0.5	2 – Good	**1**
7	no			1	0.6	2 – Good	**1**

Total in Evaluation		Number	Percentage	PAR Running Slope	PAR Cross Slope	Pavement Condition Rating	Rating
234		**121**	**52%**	**0-5%**	**0-2%**	**1-3**	**1**
		44	**19%**	**5.1-6.9%**	**2.1-3.0%**	**1-3**	**2**
		69	**29%**	**7.0% or more**	**3.1% or more**	**4**	**3**
		234					

Object ID	Marked Crossing	Crosswalk Width	Ramp in Crosswalk	PAR Running Slope	PAR Cross Slope	Pavement Condition Rating	Rating
3	yes	8	yes	1.5	0.6	2 – Good	**1**
183	no			1.5	0.8	2 – Good	**1**
91	yes	6	no	1	1	2 – Good	**1**
4	yes	8	yes	1	1	2 – Good	**1**
28	no			1	1	2 – Good	**1**
100	yes	6	no	1.5	1	2 – Good	**1**
216	no			3	1	2 – Good	**1**
158	no			3.6	1	2 – Good	**1**
32	yes	5	no	4	1	2 – Good	**1**
117	yes	5	yes	4	1	2 – Good	**1**
154	yes	4	yes	4	1	2 – Good	**1**
190	yes	6	yes	4	1	2 – Good	**1**
171	no			4	1	2 – Good	**1**
187	yes	6	no	5	1	2 – Good	**1**
219	yes	6	yes	5	1	2 – Good	**1**
165	no			3.2	1.1	2 – Good	**1**
175	no			4.1	1.1	2 – Good	**1**
38	yes	5	yes	3	1.2	2 – Good	**1**
168	no			3.4	1.2	2 – Good	**1**
156	no			3	1.3	2 – Good	**1**
186	no			4.5	1.3	2 – Good	**1**
160	yes	6	no	3	1.4	2 – Good	**1**
108	yes	8	yes	3	1.4	2 – Good	**1**
54	no			3.5	1.4	2 – Good	**1**
162	yes	5	no	4	1.4	2 – Good	**1**
6	no			0.5	1.5	2 – Good	**1**
45	yes	8	yes	2.5	1.5	2 – Good	**1**
167	no			2.5	1.5	2 – Good	**1**
200	no			2.6	1.5	2 – Good	**1**
176	no			2.7	1.5	2 – Good	**1**
73	yes	6	yes	3	1.5	2 – Good	**1**
170	no			3	1.5	2 – Good	**1**
182	no			3	1.5	2 – Good	**1**
166	no			3.5	1.5	2 – Good	**1**
174	no			3.5	1.5	2 – Good	**1**
99	yes	6	yes	4	1.5	2 – Good	**1**
198	yes	6	no	5	1.5	2 – Good	**1**
88	yes	6	yes	3	1.7	2 – Good	**1**
101	yes	8	no	2	2	2 – Good	**1**
243	no			2.1	2	2 – Good	**1**
10	yes	6	yes	2.5	2	2 – Good	**1**
244	no			2.5	2	2 – Good	**1**
75	yes	6	yes	3	2	2 – Good	**1**
82	yes	6	yes	3	2	2 – Good	**1**
13	no			3	2	2 – Good	**1**
204	yes	8	no	4	2	2 – Good	**1**

Total in Evaluation		Number	Percentage	PAR Running Slope	PAR Cross Slope	Pavement Condition Rating	Rating
234		**121**	**52%**	**0-5%**	**0-2%**	**1-3**	**1**
		44	**19%**	**5.1-6.9%**	**2.1-3.0%**	**1-3**	**2**
		69	**29%**	**7.0% or more**	**3.1% or more**	**4**	**3**
		234					

Object ID	Marked Crossing	Crosswalk Width	Ramp in Crosswalk	PAR Running Slope	PAR Cross Slope	Pavement Condition Rating	Rating
215	yes	6	yes	4	2	2 – Good	**1**
184	no			4.2	2	2 – Good	**1**
148	yes	5	no	5	2	2 – Good	**1**
189	yes	6	no	5	2	2 – Good	**1**
107	yes	6	yes	5	2	2 – Good	**1**
153	yes	5	yes	5	2	2 – Good	**1**
242	no			1.5	0.5	3 – Fair	**1**
120	yes	5	no	1.7	0.5	3 – Fair	**1**
15	yes	6	no	2.2	0.5	3 – Fair	**1**
97	yes	6	yes	2	1	3 – Fair	**1**
23	yes	8	no	3	1	3 – Fair	**1**
178	yes	12	yes	3	1	3 – Fair	**1**
132	yes	5	no	3.5	1	3 – Fair	**1**
209	yes	6	no	3.5	1	3 – Fair	**1**
112	yes	6	no	3	1.1	3 – Fair	**1**
29	no			1	1.5	3 – Fair	**1**
48	yes	10	yes	2	1.5	3 – Fair	**1**
227	yes	6	yes	3	1.5	3 – Fair	**1**
74	yes	6	yes	3.5	1.5	3 – Fair	**1**
119	yes	5	no	4	1.5	3 – Fair	**1**
105	yes	6	no	1	2	3 – Fair	**1**
106	yes	6	yes	2	2	3 – Fair	**1**
19	yes	6	no	3	2	3 – Fair	**1**
12	yes	6	no	4	2	3 – Fair	**1**
34	yes	5	no	4	2	3 – Fair	**1**
206	yes	8	no	4	2	3 – Fair	**1**
96	yes	6	yes	4	2	3 – Fair	**1**
196	yes	6	no	5	2	3 – Fair	**1**
199	no			2.5	1		**1**
129	yes	5	yes	2.5	2.5	1 – Excellent	**2**
143	yes	5	yes	3	2.5	1 – Excellent	**2**
55	yes	6	yes	2.8	2.6	1 – Excellent	**2**
144	yes	5	no	6	2.6	1 – Excellent	**2**
142	yes	5	yes	2	3	1 – Excellent	**2**
145	yes	5	yes	2.5	3	1 – Excellent	**2**
72	yes	6	yes	4	3	1 – Excellent	**2**
210	yes	6	no	6.5	0.5	2 – Good	**2**
203	yes	8	no	6	1	2 – Good	**2**
208	yes	6	no	6	1	2 – Good	**2**
36	yes	5	yes	6	1.5	2 – Good	**2**
89	yes	6	no	6.1	1.6	2 – Good	**2**
95	yes	6	yes	5.5	2	2 – Good	**2**
188	yes	6	no	6	2	2 – Good	**2**
191	yes	6	no	6	2	2 – Good	**2**
118	yes	5	yes	6	2	2 – Good	**2**
205	yes	8	no	6.5	2	2 – Good	**2**

Total in Evaluation		Number	Percentage	PAR Running Slope	PAR Cross Slope	Pavement Condition Rating	Rating
234		**121**	**52%**	**0-5%**	**0-2%**	**1-3**	**1**
		44	**19%**	**5.1-6.9%**	**2.1-3.0%**	**1-3**	**2**
		69	**29%**	**7.0% or more**	**3.1% or more**	**4**	**3**
		234					

Object ID	Marked Crossing	Crosswalk Width	Ramp in Crosswalk	PAR Running Slope	PAR Cross Slope	Pavement Condition Rating	Rating
11	yes	6	yes	6.6	2.4	2 – Good	**2**
104	yes	8	no	7	2.4	2 – Good	**2**
161	no			2.5	2.5	2 – Good	**2**
159	no			4.5	2.5	2 – Good	**2**
231	yes	6	yes	16	2.5	2 – Good	**2**
93	yes	6	yes	4	2.7	2 – Good	**2**
98	yes	6	yes	1	3	2 – Good	**2**
177	no			1.5	3	2 – Good	**2**
149	yes	6	yes	2	3	2 – Good	**2**
92	yes	8	yes	2.5	3	2 – Good	**2**
223	yes	6	yes	3	3	2 – Good	**2**
87	yes	6	yes	3.5	3	2 – Good	**2**
86	yes	6	no	4	3	2 – Good	**2**
147	yes	8	yes	4	3	2 – Good	**2**
194	yes	6	no	4.5	3	2 – Good	**2**
150	yes	6	no	6	3	2 – Good	**2**
226	yes	6	yes	10	3	2 – Good	**2**
155	yes	5	yes	6.8	0.5	3 – Fair	**2**
152	no			6	1	3 – Fair	**2**
213	no			4	2.1	3 – Fair	**2**
27	no			3.2	2.2	3 – Fair	**2**
79	no			3.7	2.2	3 – Fair	**2**
102	yes	8	no	5	2.5	3 – Fair	**2**
222	yes	6	yes	6	3	3 – Fair	**2**
197	yes	6	no	7	3	3 – Fair	**2**
201	yes	6	no	8	3	3 – Fair	**2**
109	yes	6	yes	8	3	3 – Fair	**2**
218	yes	6	yes	7	1	1 – Excellent	**3**
62	yes	6	yes	2.5	3.5	1 – Excellent	**3**
39	yes	5	yes	6	3.5	1 – Excellent	**3**
136	yes	5	yes	2.5	4	1 – Excellent	**3**
228	yes	6	yes	13	1	2 – Good	**3**
1	yes	5	yes	8	1.5	2 – Good	**3**
238	no			4.5	3.2	2 – Good	**3**
103	yes	6	no	6.2	3.2	2 – Good	**3**
84	yes	6	yes	2	3.5	2 – Good	**3**
83	yes	6	yes	2.7	3.5	2 – Good	**3**
181	no			3	3.5	2 – Good	**3**
173	no			2	4	2 – Good	**3**
202	yes	6	no	3	4	2 – Good	**3**
85	yes	6	yes	6.4	4	2 – Good	**3**
232	yes	6	yes	8	4	2 – Good	**3**
179	no			2.8	4.2	2 – Good	**3**
221	yes	6	yes	4	5	2 – Good	**3**
90	yes	6	no	1.5	6.1	2 – Good	**3**
46	yes	8	yes	5	3.5	3 – Fair	**3**

Total in Evaluation		Number	Percentage	PAR Running Slope	PAR Cross Slope	Pavement Condition Rating	Rating
234		**121**	**52%**	**0-5%**	**0-2%**	**1-3**	**1**
		44	**19%**	**5.1-6.9%**	**2.1-3.0%**	**1-3**	**2**
		69	**29%**	**7.0% or more**	**3.1% or more**	**4**	**3**
		234					

Object ID	Marked Crossing	Crosswalk Width	Ramp in Crosswalk	PAR Running Slope	PAR Cross Slope	Pavement Condition Rating	Rating
35	yes	5	no	6	3.8	3 – Fair	3
33	yes	5	yes	1	4	3 – Fair	3
126	yes	5	no	4	4	3 – Fair	3
113	yes	5	yes	4.5	4	3 – Fair	3
185	yes	6	yes	6	4	3 – Fair	3
229	yes	6	no	8	4	3 – Fair	3
214	yes	6	yes	8	4	3 – Fair	3
78	yes	6	no	6	4.4	3 – Fair	3
42	yes	5	yes	1.7	4.5	3 – Fair	3
172	no			12	4.5	3 – Fair	3
9	yes	6	yes	2	5	3 – Fair	3
111	yes	6	no	5	5	3 – Fair	3
193	yes	6	no	5	5	3 – Fair	3
233	yes	6	yes	10	5	3 – Fair	3
180	no			9.5	6.5	3 – Fair	3
30	no			2.4	0.5	4 – Poor	3
43	yes	5	yes	5	1	4 – Poor	3
114	yes	5	yes	5	1	4 – Poor	3
124	yes	5	no	6	1	4 – Poor	3
151	yes	6	yes	6	1	4 – Poor	3
220	yes	6	yes	8	1	4 – Poor	3
17	yes	6	no	2.4	1.4	4 – Poor	3
81	yes	6	yes	1.1	1.5	4 – Poor	3
22	yes	8	no	2.5	1.5	4 – Poor	3
121	yes	5	no	5	1.5	4 – Poor	3
125	yes	5	yes	5	1.5	4 – Poor	3
122	yes	5	no	6	1.5	4 – Poor	3
76	yes	6	no	35	1.5	4 – Poor	3
44	no			1.1	2	4 – Poor	3
115	yes	5	yes	2.5	2	4 – Poor	3
31	yes	6	no	3.1	2	4 – Poor	3
141	no			4	2	4 – Poor	3
16	yes	6	no	4	2.1	4 – Poor	3
80	yes	6	no	1.5	2.5	4 – Poor	3
123	yes	5	yes	5	2.5	4 – Poor	3
110	yes	6	yes	1.4	2.7	4 – Poor	3
94	yes	6	yes	4	2.7	4 – Poor	3
207	yes	6	no	1	3	4 – Poor	3
192	yes	6		6.7	3	4 – Poor	3
14	yes	6	yes	2.8	3.5	4 – Poor	3
41	yes	5	no	3.5	3.5	4 – Poor	3
157	yes	8	NA	1.6	4	4 – Poor	3
241	yes	4	no	2	4	4 – Poor	3
26	no			11	4	4 – Poor	3
40	yes	5	no	5	5	4 – Poor	3
24	yes	8	no	6	5	4 – Poor	3

Total in Evaluation		Number	Percentage	PAR Running Slope	PAR Cross Slope	Pavement Condition Rating	Rating
234		**121**	**52%**	**0-5%**	**0-2%**	**1-3**	**1**
		44	**19%**	**5.1-6.9%**	**2.1-3.0%**	**1-3**	**2**
		69	**29%**	**7.0% or more**	**3.1% or more**	**4**	**3**
		234					

Object ID	Marked Crossing	Crosswalk Width	Ramp in Crosswalk	PAR Running Slope	PAR Cross Slope	Pavement Condition Rating	Rating
195	yes	6	no	8	6	4 – Poor	**3**
18	no			20	6	4 – Poor	**3**
25	no			2	10	4 – Poor	**3**
163	no			1.2	3.8		**3**

Total Length Evaluated		Total Linear Feet	Percent of Total	Comments	Rating
25,999	Linear Feet	1,948	7%	Cross Slope OK, Minor Barrier	1
4.92	Miles	1,502	6%	Cross Slope 2.1 - 3.0%, Minor Barrier	2
		22,549	87%	Cross Slope exceeds 3.1%, Gap in Sidewalk	3

OBJECT ID	Type of Barrior	Cross Slope Percent	Approximate Length of Barrior (Ft)	Comments	Rating
113	Heaves/Sunken Panels/Twists	0.1	20	Bothe sides of drive	1
102	Heaves/Sunken Panels/Twists	0.3	10		1
5	Broken or Cracked Panel	0.5	30		1
105	Broken or Cracked Panel	0.5	70		1
3	Heaves/Sunken Panels/Twists	0.5	10	Drainage structure edge	1
81	Heaves/Sunken Panels/Twists	0.5	6		1
96	Hydrants	0.5	10	Hydrant VB	1
97	Hydrants	0.5	10		1
138	Hydrants	0.5	10	VB	1
84	Light Posts	0.5	15	Old post base	1
76	Other	0.5	10	RR tracks, no TD's	1
94	Other	0.5	20	RR Crossing	1
196	Other	0.5	30	Standing water	1
95	Panel Gap Less than 20 ft.	0.5	80		1
103	Heaves/Sunken Panels/Twists	0.7	10		1
107	Broken or Cracked Panel	0.8	10		1
132	Heaves/Sunken Panels/Twists	0.8	80		1
21	Broken or Cracked Panel	1	20		1
23	Broken or Cracked Panel	1	10		1
147	Broken or Cracked Panel	1	100		1
155	Broken or Cracked Panel	1	30		1
273	Broken or Cracked Panel	1	10		1
280	Broken or Cracked Panel	1	50		1
43	Other	1	1	Curb box not flush	1
40	Broken or Cracked Panel	1.1	80		1
51	Broken or Cracked Panel	1.1	30		1
129	Heaves/Sunken Panels/Twists	1.1	200		1
106	Tree Roots	1.1	10		1
85	running slope > 5 percent	1.2	20	Alley. 10%rs	1
36	Broken or Cracked Panel	1.3	120		1
87	Broken or Cracked Panel	1.4	50		1
104	Broken or Cracked Panel	1.5	60		1
109	Broken or Cracked Panel	1.5	15		1
281	Surface Narrows to Less than 4 ft.	1.5	30		1
161	Broken or Cracked Panel	1.6	10		1
131	Heaves/Sunken Panels/Twists	1.6	20		1
226	Broken or Cracked Panel	1.7	10		1
22	Broken or Cracked Panel	2	90		1
30	Broken or Cracked Panel	2	30		1
149	Broken or Cracked Panel	2	6		1
153	Broken or Cracked Panel	2	40		1
156	Broken or Cracked Panel	2	60		1
160	Broken or Cracked Panel	2	10		1
166	Broken or Cracked Panel	2	20	Driveway	1
263	Broken or Cracked Panel	2	10		1
265	Broken or Cracked Panel	2	250	Various locations	1
276	Broken or Cracked Panel	2	60	Various locations	1
114	Heaves/Sunken Panels/Twists	2	40		1
272	Heaves/Sunken Panels/Twists	2	10		1
169	Other	2	15	Mud	1
145	Broken or Cracked Panel	2.1	200		2
225	Other	2.2	15	Sand	2
38	Broken or Cracked Panel	2.4	15	Driveway	2
167	Broken or Cracked Panel	2.5	120		2
99	Heaves/Sunken Panels/Twists	2.5	6		2
100	Tree Roots	2.5	20		2
19	Broken or Cracked Panel	2.6	10	Driveway	2
207	Heaves/Sunken Panels/Twists	2.8	10		2
17	Broken or Cracked Panel	3	180		2
27	Broken or Cracked Panel	3	20		2
29	Broken or Cracked Panel	3	80		2

Total Length Evaluated		Total Linear Feet	Percent of Total	Comments	Rating
25,999	Linear Feet	1,948	7%	Cross Slope OK, Minor Barrier	1
4.92	Miles	1,502	6%	Cross Slope 2.1 - 3.0%, Minor Barrier	2
		22,549	87%	Cross Slope exceeds 3.1%, Gap in Sidewalk	3

OBJECT ID	Type of Barrior	Cross Slope Percent	Approximate Length of Barrior (Ft)	Comments	Rating
32	Broken or Cracked Panel	3	120		2
79	Broken or Cracked Panel	3	6		2
251	Broken or Cracked Panel	3	10		2
268	Broken or Cracked Panel	3	180		2
284	Broken or Cracked Panel	3	250		2
31	Heaves/Sunken Panels/Twists	3	10		2
157	Heaves/Sunken Panels/Twists	3	200		2
82	Other	3	10	RR Tracks	2
127	Other	3	30	Branches	2
178	Other	3	10	Plantings	2
168	Broken or Cracked Panel	3.1	30		3
65	excessive cross slope	3.1	15	Driveway	3
90	excessive cross slope	3.1	30	Driveway	3
39	Heaves/Sunken Panels/Twists	3.2	15	Driveway	3
227	Other	3.2	10	Sand	3
165	Broken or Cracked Panel	3.3	30		3
7	Heaves/Sunken Panels/Twists	3.4	10	Tree	3
41	excessive cross slope	3.5	15	Poor design	3
70	excessive cross slope	3.5	15	Driveway	3
72	excessive cross slope	3.5	20	Driveway	3
78	excessive cross slope	3.6	20	Driveway	3
80	excessive cross slope	3.7	12	Driveway	3
163	Other	3.7	10	Tree branches	3
18	Heaves/Sunken Panels/Twists	3.8	10		3
135	excessive cross slope	3.9	300		3
33	Broken or Cracked Panel	4	160		3
34	Broken or Cracked Panel	4	200		3
223	Broken or Cracked Panel	4	75	Various locations	3
267	Broken or Cracked Panel	4	200	Various locations	3
25	excessive cross slope	4	100		3
68	excessive cross slope	4	15	Driveway	3
71	excessive cross slope	4	15	Driveway	3
123	excessive cross slope	4	300		3
125	excessive cross slope	4	60	Church parking	3
158	excessive cross slope	4	30	Driveway	3
188	excessive cross slope	4	10	Driveway	3
201	excessive cross slope	4	200		3
210	excessive cross slope	4	30	Driveway	3
221	excessive cross slope	4	30	Driveway	3
230	excessive cross slope	4	20	Driveway	3
256	excessive cross slope	4	30		3
270	excessive cross slope	4	100		3
275	excessive cross slope	4	300	Various locations	3
277	excessive cross slope	4	200	Various locations	3
283	excessive cross slope	4	40	Various locations	3
2	running slope > 5 percent	4	10		3
194	Street Furniture	4	100		3
11	excessive cross slope	4.1	30	Alley	3
15	excessive cross slope	4.1	80		3
180	excessive cross slope	4.2	25		3
69	excessive cross slope	4.4	15	Driveway	3
92	excessive cross slope	4.4	40	Driveway	3
150	excessive cross slope	4.4	80		3
170	Heaves/Sunken Panels/Twists	4.4	10		3
64	excessive cross slope	4.5	25	Driveway	3
67	excessive cross slope	4.5	15	Driveway	3
77	excessive cross slope	4.5	12	Driveway	3
101	excessive cross slope	4.5	40		3
116	excessive cross slope	4.5	350	Entire block	3
175	excessive cross slope	4.5	60		3
208	excessive cross slope	4.5	130		3

Total Length Evaluated		Total Linear Feet	Percent of Total	Comments	Rating
25,999	Linear Feet	1,948	7%	Cross Slope OK, Minor Barrier	1
4.92	Miles	1,502	6%	Cross Slope 2.1 - 3.0%, Minor Barrier	2
		22,549	87%	Cross Slope exceeds 3.1%, Gap in Sidewalk	3

OBJECT ID	Type of Barrior	Cross Slope Percent	Approximate Length of Barrior (Ft)	Comments	Rating
212	excessive cross slope	4.5	200	Driveway- Fire Station to corner	3
215	excessive cross slope	4.5	100	Various locations	3
218	excessive cross slope	4.5	40	Driveway	3
219	excessive cross slope	4.5	100	Various locations	3
286	excessive cross slope	4.5	300	Various locations	3
282	Heaves/Sunken Panels/Twists	4.5	10		3
93	excessive cross slope	4.7	30	Driveway	3
187	excessive cross slope	4.7	350	Various locations	3
37	Heaves/Sunken Panels/Twists	4.7	10	Tree	3
192	excessive cross slope	4.8	20	Driveway	3
128	Broken or Cracked Panel	5	300		3
159	Broken or Cracked Panel	5	150		3
1	excessive cross slope	5	80		3
28	excessive cross slope	5	20	Driveway	3
58	excessive cross slope	5	30	Driveways	3
63	excessive cross slope	5	15	Driveway	3
98	excessive cross slope	5	100		3
112	excessive cross slope	5	350	Entire block	3
141	excessive cross slope	5	200		3
144	excessive cross slope	5	350		3
148	excessive cross slope	5	20	Driveway	3
154	excessive cross slope	5	15	Driveway	3
179	excessive cross slope	5	30	Driveway	3
182	excessive cross slope	5	200	Various sections	3
184	excessive cross slope	5	50		3
186	excessive cross slope	5	250	Various locations	3
189	excessive cross slope	5	30		3
199	excessive cross slope	5	200	Various locations	3
202	excessive cross slope	5	30		3
203	excessive cross slope	5	150		3
204	excessive cross slope	5	10	Alley	3
205	excessive cross slope	5	30	Driveway	3
220	excessive cross slope	5	300	Various locations	3
224	excessive cross slope	5	50	Various locations	3
233	excessive cross slope	5	20	Driveway	3
242	excessive cross slope	5	100	Various locations	3
249	excessive cross slope	5	30	Driveway	3
250	excessive cross slope	5	100	Various locations	3
274	excessive cross slope	5	100		3
279	excessive cross slope	5	150	Various locations	3
130	Heaves/Sunken Panels/Twists	5	350		3
222	Heaves/Sunken Panels/Twists	5	10		3
291	Surface Narrows to Less than 4 ft.	5	30		3
278	Tree Roots	5	10		3
10	excessive cross slope	5.5	40	City building parking	3
73	excessive cross slope	5.5	30	Driveway and tree	3
83	excessive cross slope	5.5	25	Parking lot	3
89	excessive cross slope	5.5	20	Driveway	3
176	excessive cross slope	5.5	15	Driveway	3
177	excessive cross slope	5.5	100		3
195	excessive cross slope	5.5	20	Driveway	3
206	excessive cross slope	5.5	30	Driveway	3
240	excessive cross slope	5.7	400	Various locations	3
142	Broken or Cracked Panel	6	200		3
20	excessive cross slope	6	20	Driveway	3
42	excessive cross slope	6	60	Poor design	3
47	excessive cross slope	6	20	Driveway	3
62	excessive cross slope	6	15	Driveway	3
66	excessive cross slope	6	15	Driveway	3
118	excessive cross slope	6	350	Entire block	3
124	excessive cross slope	6	300	Entire block	3

Total Length Evaluated		Total Linear Feet	Percent of Total	Comments	Rating
25,999	Linear Feet	1,948	7%	Cross Slope OK, Minor Barrier	1
4.92	Miles	1,502	6%	Cross Slope 2.1 - 3.0%, Minor Barrier	2
		22,549	87%	Cross Slope exceeds 3.1%, Gap in Sidewalk	3

OBJECT ID	Type of Barrior	Cross Slope Percent	Approximate Length of Barrior (Ft)	Comments	Rating
134	excessive cross slope	6	300		3
136	excessive cross slope	6	400		3
140	excessive cross slope	6	20	Driveway	3
143	excessive cross slope	6	350	Block	3
162	excessive cross slope	6	120		3
173	excessive cross slope	6	150		3
181	excessive cross slope	6	100		3
183	excessive cross slope	6	200		3
193	excessive cross slope	6	60		3
209	excessive cross slope	6	250		3
216	excessive cross slope	6	400		3
244	excessive cross slope	6	300	Various locations	3
246	excessive cross slope	6	300	Various locations	3
269	excessive cross slope	6	180		3
292	excessive cross slope	6	200	Various locations	3
91	excessive cross slope	6.1	20	Driveway	3
6	excessive cross slope	6.3	40	Parking lot entrance	3
235	excessive cross slope	6.4	15	Driveway	3
60	excessive cross slope	6.5	10	Driveway	3
115	excessive cross slope	6.5	20		3
236	excessive cross slope	6.5	350	Various locations	3
243	excessive cross slope	6.5	30		3
248	excessive cross slope	6.5	25	Driveway	3
288	Surface Narrows to Less than 4 ft.	6.5	100		3
234	excessive cross slope	6.7	20	Driveway	3
75	excessive cross slope	6.8	15	Driveway	3
4	excessive cross slope	7	35	School entrance	3
14	excessive cross slope	7	40	Parking/Alley	3
48	excessive cross slope	7	20	Driveway	3
88	excessive cross slope	7	10	Tree	3
111	excessive cross slope	7	20	Driveway	3
117	excessive cross slope	7	350	Entire block	3
133	excessive cross slope	7	30		3
151	excessive cross slope	7	20	Driveway	3
164	excessive cross slope	7	60		3
197	excessive cross slope	7	20	Driveway	3
211	excessive cross slope	7	250		3
214	excessive cross slope	7	300		3
237	excessive cross slope	7	350	Various locations- school	3
245	excessive cross slope	7	300	Various locations	3
252	excessive cross slope	7	20	Driveway	3
258	excessive cross slope	7	20	Alley	3
260	excessive cross slope	7	30	Driveway	3
262	excessive cross slope	7	30	Driveway	3
264	excessive cross slope	7	20	Driveway	3
266	excessive cross slope	7	200	Various locations	3
290	excessive cross slope	7	30	Driveway	3
191	running slope > 5 percent	7	80		3
35	excessive cross slope	7.2	15	Driveway	3
12	excessive cross slope	7.5	200	Most of block	3
110	excessive cross slope	7.5	20		3
122	excessive cross slope	7.5	30	Driveway	3
229	excessive cross slope	7.5	30	Driveway	3
152	Heaves/Sunken Panels/Twists	7.5	20		3
16	excessive cross slope	8	20	Alley	3
26	excessive cross slope	8	60	Alley	3
46	excessive cross slope	8	100		3
49	excessive cross slope	8	45	Driveways	3
50	excessive cross slope	8	20	Driveway	3
55	excessive cross slope	8	20	Driveway	3
57	excessive cross slope	8	25	Driveway	3

Total Length Evaluated		Total Linear Feet	Percent of Total	Comments	Rating
25,999	Linear Feet	1,948	7%	Cross Slope OK, Minor Barrier	1
4.92	Miles	1,502	6%	Cross Slope 2.1 - 3.0%, Minor Barrier	2
		22,549	87%	Cross Slope exceeds 3.1%, Gap in Sidewalk	3

OBJECT ID	Type of Barrior	Cross Slope Percent	Approximate Length of Barrior (Ft)	Comments	Rating
59	excessive cross slope	8	15	Driveway	3
74	excessive cross slope	8	15	Driveway	3
86	excessive cross slope	8	10		3
108	excessive cross slope	8	10		3
119	excessive cross slope	8	25	Driveway	3
121	excessive cross slope	8	30	Driveway	3
126	excessive cross slope	8	300		3
139	excessive cross slope	8	20	Driveway	3
146	excessive cross slope	8	400		3
172	excessive cross slope	8	10	Driveway	3
185	excessive cross slope	8	20	Alley	3
190	excessive cross slope	8	40		3
198	excessive cross slope	8	60	Parking	3
200	excessive cross slope	8	20	Driveway	3
239	excessive cross slope	8	200	Various locations	3
241	excessive cross slope	8	400	Various locations	3
253	excessive cross slope	8	200	Various locations	3
254	excessive cross slope	8	300	Various locations	3
257	excessive cross slope	8	20	Driveway	3
259	excessive cross slope	8	30	Driveway	3
261	excessive cross slope	8	30	Driveway	3
285	excessive cross slope	8	300	Various locations	3
287	excessive cross slope	8	400		3
289	excessive cross slope	8	300	Various locations	3
171	Heaves/Sunken Panels/Twists	8	30		3
271	Tree Roots	8	10		3
9	excessive cross slope	8.6	10	Residential stairs	3
45	excessive cross slope	8.8	30	Driveway	3
24	excessive cross slope	9	200		3
53	excessive cross slope	9	50	Gas station driveway	3
61	excessive cross slope	9	20	Driveway	3
213	excessive cross slope	9	30		3
231	excessive cross slope	9	20	Driveway	3
238	excessive cross slope	9	150		3
247	excessive cross slope	9	300	Various locations	3
52	excessive cross slope	9.5	30	Driveway	3
44	excessive cross slope	10	60	Driveways	3
54	excessive cross slope	10	15	Alley	3
56	excessive cross slope	10	15	Driveway	3
120	excessive cross slope	10	60	Driveway	3
137	excessive cross slope	10	600		3
174	excessive cross slope	10	40		3
217	excessive cross slope	10	70		3
255	excessive cross slope	10	300	Various locations	3
228	running slope > 5 percent	10	30		3
8	excessive cross slope	10.4	30	Alley	3
13	excessive cross slope	12	100		3
232	excessive cross slope	13.5	20	Driveway	3

OBJECT ID	Surface Slope	Width of Parking Space	Access Aisle Width	Signage?
1	2	8	0	yes
2	2	8	0	yes
3	6	8	0	yes
4	5.5	8	0	yes
5	5.5	8	0	yes

Appendix C

Public Comments

Appendix D

Grievance Procedure

Grievance Procedure

This Grievance Procedure is established to meet the requirements of the Americans with Disabilities Act of 1990 ("ADA"). It may be used by anyone who wishes to file a complaint alleging discrimination on the basis of disability in the ***Public Right of Way***, in the County of Le Sueur.

The complaint should be in writing and contain information about the alleged discrimination such as name, address, phone number of complainant and location, date, and description of the problem. Alternative means of filing complaints, such as personal interviews or a tape recording of the complaint, will be made available for persons with disabilities upon request.

The complaint should be submitted by the grievant and/or his/her designee as soon as possible but no later than 60 calendar days after the alleged violation to:

County Engineer
ADA Coordinator
88 S. Park Avenue, Le Center, MN 56057 or by phone at 507-357-2251

County Engineer, located at **88 S. Park Avenue, Le Center, MN 56057 or by phone at 507-357-2251**. Within 15 calendar days after receipt of the complaint, the ADA Coordinator or designee will meet with the complainant to discuss the complaint and the possible resolutions. Within 15 calendar days of the meeting, the ADA Coordinator or designee will respond in writing, and where appropriate, in a format accessible to the complainant. The response will explain the position of Le Sueur County and offer options for substantive resolution of the complaint.

If the response by the ADA Coordinator or designee does not satisfactorily resolve the issue, the complainant may appeal the decision within 15 calendar days after receipt of the response to the **County Commissioner / other appropriate high-level official]** or ***[his/her]*** designee.

The **County Engineer** or the designee will respond in writing with a final resolution of the complaint. All written complaints received by the ADA Coordinator or designee, appeals and responses will be retained by Le Sueur County for at least three years.

Appendix E

Opinion of Probable Cost

ADA Transition Plan					
City of Cambridge - Department of Public Works					
Opinion of Probable Cost					
1	Ped Ramp Replacement Cost	unit	unit cost	qty (typ)	total
	Removals	LS	$ 550.00	1	$ 550.00
	Concrete Curb	LF	$ 40.00	15	$ 600.00
	6" Concrete	SF	$ 25.00	80	$ 2,000.00
	4" Concrete	SF	$ 20.00	25	$ 500.00
	Truncated Domes	SF	$ 90.00	10	$ 900.00
	Bit Patching	LS	$ 250.00	1	$ 250.00
	Restoration	LS	$ 150.00	1	$ 150.00
				Total Each	$ 5,000.00
	Number of Pedestrian Ramps with a Barrier			***430***	***$ 2,150,000***
	Replacement Cycle	***30 Years***			***$ 71,667***
2	Ped Crossing			***Part of Street Reconstruction Projects***	
3	Sidewalk Replacement/5x10 (2-5x5 panels)				
	Removals	SF	$ 2.50	50	$ 125.00
	4" Concrete	SF	$ 8.00	50	$ 400.00
	Restoration	SF	$ 5.00	10	$ 50.00
				Total per 50sf	$ 575.00
				SF Cost	$ 11.50
			LF Cost (5' wide sidewalk)		$ 57.50
	Minor Barriers Sections	LF	1,948	$ 57.50	$ 112,010.00
	Minor Cross Slope Sections (2-3%)	LF	1502	$ 57.50	$ 86,365.00
	Major Excessive Cross Slope	LF	22549	$ 57.50	$ 1,296,567.50
			Total Sidewalk Replacement		***$ 1,494,943***
	Replacement Cycle	***30 Years***			***$ 49,831.42***

Appendix F

MNDot Tech Memo

Technical Memorandum

To: **Electronic Distribution Recipients**

From: **Jody Martinson, P.E.**
Division Director, Operations

Nancy T. Daubenberger, P.E.
Division Director, Engineering Services

Subject: Americans with Disabilities Act (ADA) Accessibility in MnDOT's Right-of-Way

Expiration

This Technical Memorandum supersedes Technical Memorandum 08-13-TS-05. This is a new Technical Memorandum and shall continue in force until June 04, 2023 unless superseded or suspended.

Implementation

The requirements contained in this Technical Memorandum are effective immediately. This Technical Memorandum affects:

- MnDOT projects in the scoping or design phase,
- all work within MnDOT right-of-way that is undertaken by other agencies or private entities; whether by permit or by agreement and,
- work added to MnDOT construction contracts by cities or counties that meets the alteration threshold for ADA and is within MnDOT right-of-way. If a facility appended to a project will not meet minimum ADA standards documentation shall be provided to the inspector confirming the design. All city or county work meeting the ADA alterations threshold shall provide all required ADA work to be incorporated into the MnDOT Project.

Curb cuts, sidewalks, Accessible Pedestrian Signals (APS) in signal replacementsand when thub ramb threshold is met and providing APS readiness shall be scoped, designed, and constructed prior to, or at the same time as, the project roadway improvement. The requirements described in this memo and attachments shall be incorporated into all new construction, reconstruction, and alteration threshold projects.

Exceptions to either the Pedestrians Right of Way Accessibility Guidance 2005 (PROWAG) or the MnDOT ADA Standards must be submitted to the ADA Unit for approval.

Introduction

Title II of the Americans with Disabilities Act guarantees the rights of individuals with disabilities to equal access to the services, programs, and activities of public entities. Title II requires that all state and local governments maintain a transition plan and provide accessible facilities and reasonable modification, regardless of the

funding source. Additionally, MnDOT's Strategic Plan, Multimodal Statewide Transportation Plan, Minnesota State Highway Investment Plan (MnSHIP), Minnesota's Olmstead Plan, Minnesota Walks, and the MnDOT Complete Streets policy include accessibility as an integral part of the State's transportation networks. MnDOT has established a goal to substantially complete its ADA Transition Plan by 2037 which requires MnDOT to also improve sidewalks on alteration level projects rather than on reconstruction projects alone. The goal reduces MnDOT's liability and ensure accessible facilities within a reasonable timeframe.

Purpose

This Technical Memorandum sets forth requirements for project thresholds, scoping, designing, and constructing accessible pedestrian facilities within MnDOT's right-of-way.

Guidelines

Refer to Attachments A through E.

Questions

For information on the policy and program contents of this memorandum, contact

Kristie Billiar, ADA Implementation Coordinator at (651) 366-3174

For questions regarding the design and construction contents of this memorandum, contact

Todd Grugel, P.E., ADA Program Engineer at (651) 366-3531

Any questions regarding publication of this Technical Memorandum should be referred to the Design Standards Unit, DesignStandards.DOT@state.mn.us. A link to all active and historical Technical Memoranda can be found at http://techmemos.dot.state.mn.us/techmemo.aspx.

To add, remove or change your name on the Technical Memoranda mailing list, please visit the web page http://techmemos.dot.state.mn.us/subscribe.aspx

Attachments:

Attachment A: ADA Accomodation in MnDOT Rights-of-Way
Attachment B: MnDOT ADA Standards
Attachment C: Scoping Decision Tree
Attachment D: DOJ/FHWA Technical Assistance
Attachment E: Glossary

-END-

Minnesota Department of Transportation

ADA Accessibility In MnDOT's Right-of-Way

Attachment A for TM 18-04-OP-01

ADA Unit

2018

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I. Requirements Overview

All Minnesota Department of Transportation (MnDOT) projects with pedestrian facilities shall scope the pedestrian facilities for a minimum 20 year service life that meets MnDOT's American's with Disabilities Act (ADA) Standards and are:

- Constructible – Ensure plans can be physically built and within construction tolerances.
- Maintainable – The pedestrian system needs to be designed adequately to allow for regular routine summer and winter maintenance throughout the expected life of the system by providing adequate Maintenance Access Routes, providing snow storage, minimize V-curb versus grading, etc.
- Usable for the range of pedestrian users – Follow principles in Curb Ramp Guidelines to optimize facilities for all users

Any project not meeting a threshold to provide accessible features will still need to identify accessibility impacts and opportunities. When it is determined that accessibility improvements will not be included in these projects, work will be done in such a way that it does not require rework or preclude future accessibility improvements.

II. Thresholds

ADA requires that all work meeting the alteration threshold, at a minimum, provide or update curb ramps before or at the time of the alteration work. To meet the transition plan goals MnDOT scopes all projects to address multiple elements to provide a cost-effective opportunity to make the entire facility, or a significant portion of it, accessible. If a pedestrian facility, outside of curb ramps, cannot be included in a new construction, reconstruction, or preservation project, the designer will make accommodations within the project for independent construction of the ADA related facility.

A. New construction

All new construction shall be scoped to identify and address pedestrian needs, including but not limited to ADA, per MnDOT's policy and design requirements.

B. Reconstruction

MnDOT requires that all reconstruction projects include curb ramps, reconstruction and correction of non- ADA compliant sidewalks and driveways, improvements to address sidewalk gaps within the existing network, and provide APS and APS readiness where needed.

C. Alteration Threshold Projects

Work types that meet the alteration threshold are set by the DOJ/FHWA Technical Assistance (Attachment D) and cannot be re-categorized by MnDOT. While, most of the work types follow MnDOT's definition of Preservation Projects some fall under MnDOT's definition of Preventative Maintenance. In those instances where MnDOT considers a work type Preventative Maintenance and the DOJ considers it an alteration designers must follow the DOJ alteration work type classification and definition. Work types categorized as alterations include:

- *Mill and Overlay*
- *Mill and fill*
- *Addition of New Layer of Asphalt,*
- *Hot In-Place Recycling,*
- *Open-graded Surface Course (not MnDOT practice),*
- *Thin lift overlays*
- *Micro-surfacing,*
- *Cape Seals,*
- *Ultra-Thin Bonded wearing course*
- *Asphalt and Concrete CPR: Isolated, partial and/or full-depth repairs to restore functionality of the slab; e.g., edge spalls, corner breaks*
- *Bridge Deck Overlays**
- *Bridge sidewalk repairs**
- *Bridge joint replacement**

**Included in the Bridge Preservation and Improvement Guidelines Technical Memorandum*

Once the alteration threshold has been met MnDOT is required by the ADA to provide curb ramps where needed and replace deficient curb ramps. All curb ramps within the radius shall be addressed. Resurfacing activities on the mainline will wrap the radius to include all crosswalks within the intersection to provide a continuous Pedestrian Access Route (PAR) with in the crosswalk and ensure a usable transition between the curb ramp and crosswalk. Wrapping the radius may not be required when the cross street is a different material than the mainline and that material is not within the project scope.

These thresholds also apply to pavement work in MNDOT owned parking lots and rest areas.

D. Preventative Maintenance

Generally preventative maintenance does not require accessibility improvements, however the DOJ has stated that the combination of two or more preventative maintenance treatments may rise to the level of being an alteration requiring the inclusion of accessible features. The DOJ has not provided explicit direction on what combinations of preventative maintenance may trigger the alteration threshold; the determination is at the discretion of the Project Manager. Work falling under the definition of preventative maintenance includes:

- *Asphalt crack sealing*
- *Bituminous pavement seal coat*
- *Chip sealing*
- *Dowel-bar retrofit*
- *Concrete joint sealing*
- *Concrete pavement surface planing / diamond grinding*
- *Slurry seals*
- *Epoxy chip seal*
- *Surface Sealing*
- *Fog Seals*
- *Scrub Sealing (not MnDOT practice)*
- *Joint Crack Seals*
- *Joint repairs*
- *Spot High-Friction Treatments*
- *Bridge superstructure activities: Painting, bearing rehabilitation/replacement and barrier/guardrail/railing restoration.*
- *Bridge substructure preservation: concrete and steel*

E. Impact to Locally Owned Facilities within MnDOT Right-of-Way

All curb ramps in MnDOT's Right-of-way, regardless of facility ownership, will be updated to MnDOT standards if the alteration threshold is met. MnDOT will seek payment for the work under the terms of the limited use permit and/or cooperative agreement, but lack of payment agreement does not negate MnDOT's obligation to provide accessible curb ramps within the radius

III. Scoping

A. General

Project Managers are required to identify all accessible pedestrian facility needs in the scoping phase of project development for all new construction, reconstruction, and alteration projects. MnDOT requires that project scopes fully address the following:

- ADA Unit Field Walk Recommendations:
- Right-of-way needs to meet MnDOT ADA requirements Attachment C: and
- Budget to meet MnDOT ADA requirements.

ADA needs shall be scoped to provide designs that have a 20 year lifecycle and meet MnDOT's accessibility standards for constructability, maintainability, and usability. A project's scope of work cannot be structured to avoid ADA obligations to provide accessible features. If the scope of a project is the only constraint in achieving a facility that meets standards, the scope will be re-evaluated by district staff and the ADA unit. Facilities not meeting MnDOT ADA requirements will be re-evaluated and

reconstructed when any subsequent projects are proposed with larger scopes that could fix the non-standard facility elements.

B. Procedure

All new construction will be scoped to meet MnDOT's policy and design requirements for pedestrian accommodation. When scoping a reconstruction or alteration project the project manager shall, at a minimum, conduct an on-site evaluation to identify facility types, right-of-way needs, utilities, obstructions, and coordination with local jurisdictions.

If MnDOT does not control sufficient right-of-way, MnDOT is obligated to acquire the necessary right-of-way and/or easements. If a complaint is filed, MnDOT will need to show that it made reasonable efforts to obtain access to the necessary right-of-way. When developing the scope for accessible features project managers will identify project limits and preferred designs as early as possible to ensure that there will be sufficient time to acquire right-of-way and easements. It is recommended that project managers have a significant portion of the pedestrian design for ADA done by the 30% project development stage to minimize delays and cost overruns to the overall project. Please see the Scoping Decision Tree in Attachment C for additional guidance.

Project managers and designers are also reminded that the scope for accessibility improvements is not limited to the accessible feature itself. Projects will also address obstacles that limit the ability to provide accessible features that meet MnDOT standards. Common obstacles to be relocated include but are not limited to; drainage structures, hand holes, signal, lighting and utility poles, etc. When relocating an obstacle to provide accessibility the cost estimate should be within industry norms.

C. City and County Coordination

Whenever possible scoping field walks should be conducted with the local government to identify any local initiated work and aesthetic features, and concerns that may affect the type of design MnDOT may propose for a project. Once the project scoping field walk has been completed it is critical that impacts to locally owned utilities, transit facilities, and building access be conveyed as soon as possible. MnDOT should coordinate with willing property owners to maintain or improve their access if the work fits within the scope of the project and can be done within roadway and sidewalk design standards. If a project alters private access the altered access shall meet Minnesota Building Code requirements. Under both ADA and property law a project cannot make an access inaccessible by adding a step to an entrance that previously had no step.

As a Title II entity, MnDOT has an obligation to work with private businesses, to maintain temporary access and minimize impacts when constructing adjacent to their access. Early coordination allows cities and/or counties to understand their cost participation obligations and secure funding necessary to provide better connectivity to existing local trail/sidewalk networks. Project Managers are obligated to consider all local input, but local preferences cannot hinder MnDOT's accessibility or operational obligations.

As accessibility designs are identified, project managers will work with local communities to identify local cost share for facilities, maintenance responsibilities, and any potential need for limited use permits. Maintenance can include, but is not limited to: snow and ice control, snow hauling, sweeping, vegetation management, trip hazard and spot panel repair, and routine maintenance. Local limited use permits need to include agreement on acceptable use of sidewalk, amenity zones and trail areas on Trunk Highway right-of-way. A limited use permit or similar agreement does not relieve MnDOT of the obligation to provide and maintain accessible facilities within its right-of-way.

IV. Scoping and Selecting Facilities

A. General

ADA improvements fall into one of three categories: short term, long term, and permanent.

- Short term fixes are improvements that do not change the existing footprint, provide minimum access and have accessibility barriers immediately adjacent to the improvement. Though they

meet minimum compliance, short term improvements are the most expensive over time because they typically require frequent rework and are routinely impacted by future projects of varying scopes including independent utility and drainage work.

- Long term improvements have an anticipated lifecycle of 20-40 years and represent the risk based approach to completing MnDOT's ADA Transition Plan. Long term improvements identify the footprint and geometry needed to meet MnDOT standards for accessibility and routinely require acquiring right-of-way, curb line adjustments, minor utility relocation, and barrier removal. Long term improvements have more upfront costs, which are generally offset by fewer reworks or impacts from future projects.

- Permanent fixes are typically part of reconstruction projects and have the lowest lifecycle cost since they generally last for the life of the reconstructed roadway.

The ADA design process and project scope are closely related and should be an iterative process to ensure that the final design and project scope are well coordinated.

B. Common Elements

1. Pedestrian Access Route (PAR) and Maintenance Access Route (MAR)

The pedestrian Access Route (PAR) is a required access route. When selecting and designing individual elements, project managers and designers need to keep in mind how the pieces function together as a PAR even if the entire PAR will not be completed within a project. To achieve the PAR in MnDOT's Right-of-way MnDOT has identified a series of standards to create PARs that are usable, constructible, and maintainable.

To provide sufficient space for winter maintenance required under the ADA, but not reflected in the Access Board's design guidance MnDOT has established the Maintenance Access Route (MAR). The MAR follows the PAR alignment and provides additional clear distance between raised obstacles (i.e. push button stations, signal, lighting or utility poles, buildings, retaining walls, V curbs, sign posts, etc.) for mechanically removing snow and ice. While desired, the additional width for the MAR does not need to meet 2% cross slope requirements, and should be a paved surface at signalized quadrants.

The obstacle clear area needed to establish both the designed PAR width and the MAR is a 6' minimum clear width for sidewalks and a 10' minimum clear width for shared use paths and should maintain a general alignment. Any utilities that are located in the required clear area or impacting the alignment of the pedestrian route will be relocated unless this relocation is proven infeasible. Additionally, the profile of the PAR and MAR should be as continuous as feasible to minimize the users' effort to navigate changes in elevation and grade.

2. Curb Ramps

Curb ramps provide a transition between the street and the pedestrian network for users with disabilities. Ramp design and location are essential for a safe, usable, and maintainable pedestrian system. As part of the PAR and MAR, the width, slope landings and incoming sidewalks need to be in general alignment with each other and free of raised vertical barriers such as signal and lighting components, hydrants, utility poles, signs, etc.

There are three acceptable curb ramp types: perpendicular; parallel; and blended transitions. See Figure 11-3.08A in the Road Design Manual (RDM) for curb ramp types and MnDOT Standard Plan 5-.297.250 for specific design types and requirements. If a diagonal curb ramp is used it shall be approved by the ADA Unit and documented in the MnDOT Transition Plan

3. Sidewalks and Driveways

Sidewalks and driveways are the longitudinal elements of the PAR and MAR. The PAR shall have a cross slope <2% and a 5' continuous width free of vertical obstructions and surface discontinuities.

The overall sidewalk width will be determined by use, context, the space needed to transition in and out of building entrances, and community input.

To ensure MnDOT will be able to substantially complete its Transition Plan by 2037 all reconstruction and alteration projects are required to scope sidewalk needs. Reconstruction projects require replacement of all non-compliant sidewalk and all sidewalks in poor or failing condition. The sidewalk replacement threshold for alteration projects is 3% or greater cross slope and/or poor or failing sidewalk. Sidewalk replacement thresholds are classified into priorities A, B, C and Barrier Removal:

- **Priority A Sidewalks**
  Priority A sidewalks and driveways are constructed at the back of curb and require curb line relocation and/or raising the curb line to provide an accessible sidewalk. Reconstructing curb lines on Priority A sidewalks is more cost effective on alteration projects, than standalones, to maintain both the roadway drainage and the roadway surface integrity. All Priority A sidewalks shall be completed on alteration level projects to avoid missing any opportunities to substantially complete the Transition Plan.

- **Priority B and C Sidewalks**
  Priority B and C sidewalk improvements do not affect the curb line and can be done as part of a pavement project or independently. Replacing these sidewalks is based on use and context, with Priority B assigned to higher use areas such as commercial districts, schools, parks, and other high pedestrian usage areas described in Minnesota Walks. Priority C have lower use and do not connect public facilities or services.

  Priority B and C sidewalk replacement can be completed on standalone sidewalk replacement projects, but if at all possible should be included on alteration projects particularly, when associated with adjacent curb ramps. This minimizes both pedestrian and traffic work zone impacts, optimizes contractor efficiency, minimizes potential duplicate right-of-way acquisitions, and minimizes reworking transitional sidewalk sections.

- **Driveways**
  The PAR alignment and profile should be as continuous as feasible through driveways. This can be accomplished by utilizing boulevard widths that match or exceed curb heights to achieve perpendicular driveways. The driveway PAR width should match the incoming PAR width where feasible with incremental PAR reductions to 4' in steep situations. See Driveway and Sidewalk Standard Plans 5-297.254 for additional information.

- **Barrier Removal**
  On projects where the ADA Unit and Project Manager determine a total sidewalk replacement will not be included in the alteration project. The sidewalk will be scoped for barrier removal. Barriers to address, regardless of project type, include trip hazards greater than or equal to ½" vertical, sidewalks with a condition 4 rating and locations where the passable width is less than 4 feet.

- **Sidewalk Gap Infill**
  The MnDOT ADA Transition Plan lists sidewalk gaps within the existing network as a potential barrier to accessibility. The ADA Unit will make the recommendation to fix gaps as part of the overall sidewalk improvement being scoped. The ADA unit shall be notified of a district decision to not address an identified gap and the reason so that the information can be reflected in MnDOT's Transition Plan.

Exceptions to completing the necessary sidewalk improvements on alterations can be made if there is a larger scale roadway reconstruction project identified in the STIP. This imminent reconstruction exception can be useful to help prioritize resources by getting longer term benefits from sidewalk investments as well as providing better sidewalk fixes with larger scope projects. However, it should be used judiciously to limit over programming the last half of the 20-year Transition Plan goal.

4. Crosswalks

Crosswalks are considered part of the PAR and shall meet the necessary requirements for width, running slope, and cross slope. In stop to yield or stop conditions the crosswalk cross slope is to be less than 2% employing “tabling” if necessary. At locations without yield or stop conditions, the crosswalk cross slope can be up to 5% to lessen the impact to through vehicular traffic. In those locations where the intersection is already tabled for vehicles that same tabling should also be constructed for the crosswalk to provide the same benefit to pedestrians while not introducing a new "bench" for vehicles to traverse. Running slopes are required to be less than 5% regardless of stop and yield conditions.

In corridors where frequent mitigations are needed to achieve the required cross and running slopes, the proposed pavement fix should be further evaluated with the ADA Staff to determine if a larger pavement fix such as a roadway reclaim, shoulder reconstruction, or other fix that allows pavement cross slope modification is necessary.

5. Roadway Modifications

Roadway modifications are tools to create the necessary footprint and obstacle-free space that meet the obligations of the PAR and MAR while minimizing the amount of right-of-way needed. Curb ramps are often built in close proximity to a variety of existing structures and cannot be improved without mitigating some of the existing features. Roadway modifications provide a long term solution for accessibility and need to be identified early in the scoping process so coordination with other functional groups can occur. A brief description of common roadway modifications follows:

- **Curb Line Modification and Tabling**
  In many constrained areas roadway and curb line modifications are the most important element to achieving high quality curb ramps. Curb extensions and/or roadway diets can provide the needed extra area in locations where right-of-way acquisition isn’t feasible. In vertically constrained areas curb line raises are a very effective method to meet standards. At quadrants with steep flow lines, gutter flowline flattening or “tabling” should be utilized to meet curb ramp standards.

- **Grade Mitigation**
  In steep areas curb ramp grades and construction limits need to be evaluated for the flattest resulting grades. Construction limits should allow for a 30’ secondary ramp and landing beyond the initial landing if standards can’t be met. If the proposed secondary ramp and landing tie in results in a steeper slope than the existing condition, a shorter straight line ramp grade can be utilized if it results in a flatter slope. In extreme cases construction limits may extend beyond this guidance to get a usable product. These curb ramp construction limits may include sidewalk, curb and gutter, and roadway paving if applicable.

- **Structure Relocation**
  Structures that impact the horizontal or vertical alignment of the PAR and MAR shall be addressed within the project scope. Common structures include traffic and lighting poles, utilities, hydrants, bus shelters, and drainage structures. All drainage structures impacting curb ramps need to be relocated or utilize an ADA safe grate. Where drainage capacity is adversely impacted, add additional shallow helper catch basin structures tied into the affected structures to restore the previous hydraulic capacities.

C. Additional Facility Types

1. Accessible Pedestrian Signals (APS)

- When meeting the curb ramp improvement threshold at signalized quadrants, with pedestrian indications, design and construct those curb ramps to APS standards:
- When half or more of the crosswalks at an intersection are significantly impacted by the pavement project the entire intersection should be upgraded to full APS at all quadrants.
- If less than half the crosswalks at the intersection are impacted by the pavement project the affected quadrants are to be APS "ready" - defined as designing and constructing the curb

ramps and underground electrical components including relocating the solid state push buttons to new pedestrian push button locations meeting APS standards.

2. Bridges

When a bridge is new or reconstructed project managers are strongly encouraged to provide facilities for pedestrians on both sides of the bridge, due to the long lifespan of bridge assets and the traffic safety issues created by forcing additional street crossings when only on one side. For all other bridge work project managers shall follow Technical Memorandum 15-06-B-01 Bridge Preservation and Improvement Guidelines.

3. Railroad Crossings

All rail crossings are required to be accessible including connecting sidewalks across compliant rail road crossing surfaces, meeting sidewalk slopes, providing sidewalk separation from gates, providing detectable warnings, etc.

4. On Street Transit Stops

Scoping field walks shall ensure that existing transit stops meet ADA requirements and will make recommendations for improvements for unimproved transit stops. All work, maintenance, and cost sharing on transit facilities will be coordinated with the transit operator.

5. Trails and Shared Use Paths

Trails built on MnDOT right-of-way by MnDOT or another state or local agency under a limited use permit will be designed according to the MnDOT Bikeway Facility Design Manual and will meet all ADA requirements for cross-slope, running grade, and maintenance.

V. Right-of-way

A. Overview

Additional right-of-way will often be required at quadrants and along sidewalks and driveways to meet MnDOT Standards for curb ramps, APS, and PARs and MARs. Existing right-of-way is frequently consumed by vehicle turning and surface utility concentrations. Constraints at signalized intersections are compounded by the presence of signal poles, cabinets, hand holes, and APS push button stations. Under Minnesota Statute 161.163, Subd. 2 Municipal Consent is not required for minor permanent ADA acquisitions if those acquisitions are the only permanent takings on a project.

1. Curb Ramp

To ensure a usable and maintainable pedestrian system provide a 9’-12’ deep rectangular right-of-way footprint (dependent on ramp type and context) at non-signalized intersections.

2. APS

To ensure a usable and maintainable pedestrian system, provide a minimum 12’-15’ deep rectangular right-of-way footprint (dependent on push button locations) at signalized intersections with APS. Additional width and right-of-way beyond the footprint may be needed for signal pole and hand hole placement and will be needed for shared use paths and signal cabinets

3. Sidewalk

To ensure PAR compliance the minimum sidewalk width is 5’ with additional width determined by facility type and context e.g. residential versus downtown districts. Whenever possible acquire wider sidewalk footprints and temporary easements. In areas that can be tapered flush with the adjacent sidewalk by either grading or sloping paved areas. This minimizes the use of V curb, reduces trip hazards and improve maintainability.

B. Procedure

Identify right-of-way needs and easements at scoping or shortly after. Permanent right-of-way needs can be determined based on field recommendations or the recommended footprints. When right-of-way is being determined by general recommendations progress design to verify those limits early in the project development process, by completing a substantial amount of pedestrian design prior to 30% plan development the potential for delay at the later stages of the project is significantly reduced.

Metro Project Managers are advised that sidewalk reconstruction and new pedestrian ramp installation work of 5000 square feet or more can trigger the need for storm water treatment. It is important to identify ADA needs, footprints, and locations for treatment early in scoping, so that time and budget for right-of-way and associated storm water treatment needs are available.

C. Exceptions

Right-of-way will not be required in the immediate area when one of the following conditions exist:

- Buildings or other permanent structures with durable concrete footings (i.e., large advertising signs, poured concrete retaining walls;
- Environmental Risks – Risk assessment made before acquiring high risk properties; and
- Utilities – significant utility relocations (i.e., mainline utilities – communications vaults, water, sewer, and storm mains, larger electrical distribution lines, gas mains.)

In locations where right-of-way cannot be obtained project managers and designers will utilize roadway modifications to meet MnDOT ADA Standards.

VI. Design Requirements

A. General

Pedestrian facilities in new construction, reconstruction, and alteration projects are required to meet the design requirements in:

- MnDOT ADA Standards (Attachment B)
- MnDOT Standard Plan 5-.297.250,
- MnDOT Driveway and Sidewalk Standard Plans 5-297.254,
- Standard Plates and 7038A,
- MnDOT Road Design Manual,
- MnDOT LRFD Bridge Design Manual,
- MnDOT Traffic Engineering Manual,
- Bridge Preservation and Improvement Guidelines Technical Memorandum,
- Pedestrian Facilitation and Crosswalk Tech Memo,
- Shoulder Width Tech Memo,
- ADA Project Design Guide,
- Bikeway Facility Design Manual, and
- Curb Ramp Guidelines

When the resources listed above are silent on an aspect of accessible design, consult the Public Rights of Way Accessibility Guidelines (PROWAG) 2005. In the event that MnDOT requirements cannot be met PROWAG minimums should be used. Designers using PROWAG minimums must document the decision in the project file.

To achieve the design goals of constructible, maintainable, and usable, program managers and designers are encouraged to use “outside-in” design for all new roadway construction, reconstruction, and sidewalk reconstruction. This includes matching adjacent tie ins with variable sloped roadway cross sections, using independent gutter profiles, variable sloped boulevards with sidewalk profiles, and

in select areas using shifted centerline crowns and variable height curb with the goal of matching doorway thresholds and eliminating steps up to 4" in height.

B. Exceptions and Documentation

1. Exceptions to PROWAG (2005)

When MnDOT cannot fully meet the Americans with Disabilities Act (ADA) because the terrain or site conditions preclude construction or alteration of the facility to PROWAG minimums* the project manager , design engineer, and ADA Unit need to concur in providing accommodation to the maximum extent feasible. All facilities not meeting minimums will be documented through SharePoint in the ADA Design Memo and added to MnDOT's Transition Plan and inventory

**MnDOT's use of PROWAG minimums does not include the guidance to signalize roundabouts , multilane free rights or flange way fillers.*

2. Exceptions to MnDOT Standards

Where MnDOT Standards cannot be fully met, the design engineer will evaluate, document, and recommend a preferred alternative. Final approval for the preferred alternative will be made by the ADA Design Engineer. All facilities not meeting MnDOT Standards will be documented through SharePoint in the ADA Design Memo.

When the project manager, design engineer, and the ADA Design Engineer cannot find consensus on design options the decision will be elevated to the District ADE and brought to the Assistant Director for the Operations Division.

VII. Plan Development and Geometrics

A. General

Designers shall complete plans utilizing level 1, 2, & 3 designs as field conditions dictate, follow sample plan formats, and utilize ADA pay items, special provisions, and plan review checklists. Survey accuracy standards for level 2 & 3 designs are less than 0.1' horizontal and 0.05' vertical. Plans shall include driveway tables for all driveways with sidewalks, curb and gutter profiles when using variable sloped shoulders, sidewalk profiles when using variable sloped boulevards, and clear notes describing the designer's intent and communicate relevant design information to the field.

B. Construction Limits

The majority of ADA work is not based on cross sections, so temporary construction easements can often be established by acquiring uniform widths along a corridor. Exceptions to this are most driveways and also curb ramps or sidewalks in significant cut areas that need individual design to set those construction limits. Adjacent turf areas should generally have a minimum 5' easement from back of walk to construct new sidewalk. Adjacent paved surface areas should have 2' minimum to set forms, allow for compaction, provide a transition between irregular surfaces that maintains drainage patterns, and eliminates trip hazards.

C. Geometric Layouts and Final Design

Regardless of design level geometric design layouts play a significant role in final design for pedestrian facilities. Always consider:

- Balancing lane widths and appropriate sidewalk cross sections with paved or turf boulevards. All sidewalk and boulevard widths should be measured from back of curb,
- 6' minimum turf boulevards in order to facilitate simpler design and construction as well as improved pedestrian usability,
- wider boulevard widths of 8'-10'; to provide snow storage, pedestrian lighting, and improved tree planting environments. If only 4' or less of turf boulevard is possible, strongly consider a 4"curb height to maintain consistent height sidewalk PARs through driveways to simplify design and construction.

When sidewalks need to be constructed at back of curb a minimum 7' width should be provided with 8' widths provided at driveways and curb ramps. Sidewalks adjacent to storefronts should have a minimum 6' PAR with a ration of two thirds PAR to one third boulevard.

The following tools should be employed to benefit pedestrian design with minimal impacts to vehicles:

- Select regularly occurring design vehicles and compound or three-centered radii at constrained quadrants to maximize pedestrian ramp geometry/space while still meeting design vehicle needs.
- Evaluate turning movements for changes that impact additional vehicle lanes; not simply additional overturning within the same affected lane.
- When setting roadway profiles using vertical curves, deflection angles and vertical points of intersection should be considered to match adjacent features/terrain.
- Explore varying cross sections, super elevations, and drainage modifications in areas where ADA standards cannot be met.
- Provide a location for push buttons at signalized intersections, median refuges 6<, and free right islands. Evaluating turning movements is essential to either extend a raised median to achieve a refuge or place detectable warnings outside of the turning vehicle path if there is no refuge provided. Evaluating turning movements and shoulder widths is critical when sizing free-right islands.
- When pedestrian facilities are not provided where there is a need within city limits, the shoulder cross slope should be paved with the same cross slope as the adjacent through lane.
- When introducing any new vehicle channelization to an intersection, provide accessible pedestrian accommodations through that channelization – even if there are no dedicated pedestrian facilities at the intersection. Common example of channelization in intersections include R-CUTS, ¾ intersections, median closures, and roundabouts.

VIII. Construction

A. Inspection

All ADA features shall be inspected during construction to ensure the features follow the approved plans and meet requirements set forth in this technical memorandum. Features not meeting MnDOT ADA requirements or special provisions must be corrected prior to the close out of the construction contract. Inspectors should work closely with contractors to limit the likelihood of systematic misconstruction. The process for construction inspection is as follows:

- Follow MnDOT Standards as listed in the Design Requirements section.
- Implement (1804) Prosecution of Work provision while working collaboratively with the contractor. If questions arise or field conditions differ contact the ADA Office.
- Complete ADA Compliance Check lists and Project Compliance for all projects in a timely manner.

B. Accessibility during construction

When a pedestrian access route is disrupted, closed, or relocated during construction, maintenance work, or other temporary condition, an Alternate Pedestrian Route (APR) shall be provided. The APR shall have at least the minimum accessibility attributes of the disturbed route**.** Signage and devices, as necessary, shall be provided to direct pedestrians safely through or around the work zone. This guidance does not apply to the final pedestrian route, only the pedestrian accommodations during maintenance or construction. It is recommended that the APR be identified during scoping especially in commercial business districts.

See the Minnesota Manual on Uniform Traffic Control Devices (MN/MUTCD) Part 6and the Temporary Traffic Control Zone Layouts Field Manual 2018 for further guidance on the requirements for establishing an alternative pedestrian access route for temporary traffic control. See also MnDOT's Pedestrian Accommodations through Work Zones web resource.

IX. Historic Properties

All new construction, reconstruction, and alterations that may directly or indirectly affect a qualified Historic Facility or District require review by the Cultural Resources Unit to determine if the proposed alteration may adversely impact the property's historic significance. The Cultural Resources Unit, OES, will make a determination and recommend accessible feature locations and design solutions that will preserve the historic significance of the property.

X. Trees and Shrubs

All construction activities within municipal boundaries which include sidewalks, pedestrian ramps, curbs, items such as sidewalk cutouts for trees or tree grates within pedestrian access routes, and disturbance of boulevard will be reviewed by the Roadside Vegetation Management Unit to determine if the proposed construction may adversely impact existing trees, shrubs, and herbaceous vegetation. The Roadside Vegetation Management Unit, OES, will make a determination of the project's impact to vegetation and recommend appropriate mitigations or other actions.

Minnesota Department of Transportation

MnDOT ADA Standards

Attachment B for TM 18-04-OP-01

ADA Unit

2018

MnDOT ADA Standards

All designs need to be ADA compliant and follow the ADA Standards unless all alternatives have been explored and the results have been documented. While ADA compliance is the minimum standard that must be met, in order to meet the long term objectives, all designs must also be constructible, maintainable, and address the range of pedestrian user needs. The ADA Standards were created to implement best practices and incorporate lessons learned in a manner that provides construction tolerances and meets the long term maintenance and usability needs.

MnDOT PROWAG MUTCD

CURB RAMP DESIGN CRITERIA

revision: 5/4/2018

ITEM		MIN	MAX	STANDARD	REASON*	GUIDANCE
LANDING		4' X 4'	VARIES	5' X 5'	C & U	1) Match Pedestrian Access Routes (PAR). 2) Enlarge landings to achieve perpendicular grade breaks. 3) Landings should be designed in one continuous plane.
RAMP SLOPE	(F)	2.0%	5.0%	4.0%	C, M & U	1) Maintains drainage in gutter. 2) Blend in better with surrounding terrain. 3) Reduce removal limits while minimizing v-curb. 4) (S) Fans in vertically constrained areas are only allowed with non-compliance documentation.
	(S)	5.0%	8.3%	7.0%		
	FAN	2.0%	5.0%	4.0%		
ONCE YOU HAVE REACHED THE 3" MIN CURB HEIGHT, THE CURB HEIGHT SHOULD MATCH PAR HEIGHT. SHOW INTERMEDIATE CURB HEIGHTS WHEN (A) LANDING ELEVATIONS ARE LESS THAN THE TYPICAL CURB SECTION OR (B) BOULEVARDS ARE LESS THAN 3 FEET AT THE CURB RAMP OR (C) WHEN SIDEWALK IS AT BACK OF CURB.					M & U	Avoid inverse sloped boulevards and keep landing above or within an inch of the top of curb to reduce trip hazards. Utilizing an appropriate ramp slope helps maintain the PAR height and provides a very usable pedestrian network, in addition to the guidance seen above.
RAMP WIDTH		4'	VARIES	6' MIN APS 6’ MIN COMMERCIAL AREA MATCH TRAIL WIDTH	M & U	Match PARs.
RAMP LENGTH		3'	15'	4' MIN 6' MAX	C & U	Construction can build a minimum 2.5' ramp if necessary.
LANDING & RAMP CROSS SLOPE	POSITIVE FLOW		2.0%	1.0% MIN 1.5% MAX	C	Steep trails and side landings use 0.5% cross slope.
GUTTER FLOWLINE	POSITIVE FLOW		2.0%	1.0% MIN 1.5% MAX	C	Maintain positive drainage, flowline with radial domes should have a continuous grade, show tabling of curb and gutter with adequate construction limits if existing flowline is over 3%. If 2-3%, state designer intent to obtain <2% with note on plan.
ROADWAY CROSS SLOPE	POSITIVE FLOW		5.0%	1.0% MIN 5.0% MAX	C & U	Used when adjusting flowline, maintain positive drainage to edge of road and do not exceed 5%.

(1) Design to the nearest minimum half-foot increment, one-foot increment (preferred) for all ADA and APS Applications.
(2) When inverse grades are present, minimize the elevation change of the PAR unless proven necessary to maintain drainage.
(3) With regards to v-curb/grading, see Curb Ramp Standard Plans 5-297.250 Pg 1 of 6 Note 7. Talk with property/land owners to find out which treatment they would prefer.
(4) With regards to multiple ramps design at a quadrant, see Curb Ramp Standard Plans 5-297.250 Pg 2 of 6 Note 4. The “bump” typically happens when ramp separation is minimal on a combined directional and no (or narrow) boulevard is present. In these instances, a Fan/Depressed Corner will alleviate this problem and provide better maintainability and usability. 7’ min. separation between ramps should be achieved in areas with concrete boulevards while 5.5’ min. separation applies for areas with grass boulevards.
(5) Flowlines need a 3" minimum freeboard to doorways. (3" below threshold i.e. depressed corners must not be used when adjacent to corner doorways at buildings).

*C for Constructability, M for Maintainability, U for Usability.

MnDOT PROWAG MUTCD

APS DESIGN CRITERIA

revision: 5/4/2018

ITEM	MIN	MAX	STANDARD	REASON*	GUIDANCE
PUSH BUTTON STATION SETBACK	1.5'	10'	4' MIN URBAN, 6-8' MIN RURAL, 9.5' MAX	M	Push button setback measured from the back of curb (urban) or edge of roadway (rural) at outside zero point.
PUSH BUTTON FROM INITIAL RAMP GRADE BREAK OR BACK OF WALK	0.75'	-	2' MIN	C & U	Place push button 2’ min from edge of landing to provide usable push button access. 6' MAR takes priority over this criteria.
MAINTENANCE ACCESS ROUTE (MAR)	6'	-	-	M & U	Move push button to back of landing when 6' MAR cannot be achieved. Talk with local agencies to understand their snow and ice maintenance requirement widths.
PUSH BUTTON OFFSET FROM OUTSIDE EDGE OF CROSSWALK	0'	5'	-	U	When the push button is offset from the edge of crosswalk a walkable flare is preferred over a graded flare so users who depart from the push button will traverse a concrete surface. Distance is measured perpendicularly from extension of crosswalk.
PUSH BUTTON SEPARATION	10'	-	10.5’ MIN	C	Must meet minimum MAR criteria at pork chop islands.
PUSH BUTTON SIDE REACH	-	10”	-	U	Side reach is measured horizontally from the button face to the edge of landing adjacent to the push button.

(1) A leveled landing shall be adjacent to all push buttons.
(2) Keep all push buttons outside of sidewalk PAR's. Push buttons shall not be in the middle of shared-use paths. Allowable push button encroachment: 2' on 10' wide trails and 1' on 8' wide trails if needed.
(3) When sidewalk is at the back of curb, the push button should be placed toward the back of walk. Typically placed at 8' - 9.5' from the back of curb.
(4) When installing new signal poles, it is preferred to get them out of the way as to not obstruct the pedestrian facilities. When in congested quadrants (i.e. downtown corridors), APS push buttons on signal poles are preferred although new signal poles need thorough underground utility coordination.

***C for Constructability, M for Maintainability, U for Usability.**

MnDOT PROWAG MUTCD

SIDEWALK DESIGN CRITERIA

revision: 5/4/2018

ITEM	MIN	MAX	STANDARD	REASON*	GUIDANCE
LANDING	5' X 5'	VARIES	-	C & U	MATCH PARs, enlarge landings to achieve perpendicular grade breaks.
SIDEWALK CROSS SLOPE	POSITIVE FLOW	2.0%	1.5% MAX 1.0% MIN	C	For steep sidewalk running slopes greater than 5%, flatter cross-slopes should be used 0.5% typical.
SIDEWALK RUNNING SLOPE		5.0%	-	C, M & U	For sidewalk running slopes, the max. running slope is 5% (unless roadway grade is steeper).
SIDEWALK RAMP SLOPE	5.0%	8.3%	7.0%	C, M & U	Only for sidewalk not adjacent to roadway. A landing is needed for every 30" of vertical rise with compliant handrails on both sides of ramp For building access, ramp slopes are 5% max. unless covered.
SIDEWALK OFFSET AND TAPER	-	-	-	M & U	Maximum offset is 1/2 the width of the ramp. On Curb ramp retrofit projects the min. sidewalk taper is 1:3 with 1:5 being preferred. However the min. taper for sidewalk reconstruction projects is 1:10.
SIDEWALK WIDTH	5'	VARIES	-	M & U	1) Based on context and volume of users. 2) Talk with local partners to understand their snow and ice maintenance requirements. 3) Recommend 10’ min measured from back of curb for commercial areas with doorways at back of walk.
SIDEWALK WIDTH AT BACK OF CURB (NON-COMMERCIAL AREAS)	5'-6'	VARIES	7' MIN 8' PREFERRED	M & U	The sidewalk minimums of 5'-6' should only be used if there are no driveway, lighting or sign impacts present with in the sidewalk.
SIDEWALK PAVED BOULEVARD SLOPE	POSITIVE FLOW	8%	1.0% MIN 5.0% MAX	M & U	Slopes greater than 8% can become tripping hazards for user traversing the curb and sloped boulevard. Adjust centerline road profile or flatten the shoulder/parking lane to raise the curb line to achieve desired boulevard slope.
PAVED BOULEVARD WIDTH	2' MIN	-	1/3 BLVD. WIDTH TO 2/3 PAR WIDTH	M & U	For example a 9' sidewalk at a min. should have 6' wide par with a 3' wide boulevard.
GRASS BOULEVARD WIDTH	3' MIN	-	4' FOR 4" HIGH CURB 6' FOR 6" HIGH CURB	M & U	When the boulevard width is less than 3', it should be paved.
PAR WIDTH	4' MIN	VARIES	6' MIN ADJ. TO BUILDINGS. 2/3 PAR MIN TO 1/3 BLVD	M & U	PAR width adjacent to buildings should be 6' min. to allow for a 1' buffer to the building and doorways. The 6’ min. PAR takes priority over 2/3 PAR width to 1/3 boulevard criteria.

***C for Constructability, M for Maintainability, U for Usability.**

MnDOT PROWAG MUTCD

DRIVEWAY DESIGN CRITERIA

revision: 5/4/2018

ITEM	MIN	MAX	STANDARD	REASON*	GUIDANCE
APRON LENGTH	18"	-	6' FOR 6" CURB HEIGHT, 4' FOR 4" CURB HEIGHT	U	Add one foot of driveway apron length for every inch of designed curb height if Right-of-Way (ROW) allows.
COMMERCIAL APRON SLOPE	POSITIVE FLOW	10%	1.0% MIN 8.0% MAX	U	Design adequate slope for PAR to match designed curb height, maintain consistent PAR elevation and limit the sidewalk roller coaster effect.
RESIDENTIAL APRON SLOPE		12%			
PAR HEIGHT (6" C&G)	0"	6"	3" MIN, 6" PREFERRED	M & U	1) Minimize sidewalk roller coaster effect. 2) Desirable to keep PAR elevation continuous or at least in the upper half of curb height. 3) Do not introduce unnecessary elevation changes into the PAR. 4) Standard criteria do not apply to parallel driveway. Recommend to not have consecutive parallel driveway in a series.
PAR HEIGHT (4" C&G)	0"	4"	2" MIN, 4" PREFERRED		
PAR CROSS SLOPE	0.5%	2.0%	1.0% MIN 1.5% MAX	C, M & U	-
SIDEWALK RUNNING SLOPE (PAR) AT DRIVEWAY TRANSITIONS	2.0%	5.0%	4.0% MAX	C, M & U	Can match roadway slope if roadway profile is >5%
PEDESTRIAN ACCESS ROUTE (PAR)	4'	VARIES	5’ MIN	C & U	Preferred to match sidewalk/trail widths
BACK OF CURB HEIGHT AT DRIVEWAY APRON	1"	3”	1”	M & U	1) Refer to Sidewalk & Driveway Standard Plan 5-297.254. 2) DW Curb Type 2 can be used to maintain drainage in gutter flowline at negative driveways. 4" curb height is preferred in sidewalk fill areas and in areas adjacent to negative driveways slipping downward from the roadway. 3) Only use DW Curb Type 3 with garage doors at back of walk or minor usage driveways like railroad access along tracks.

***C for Constructability, M for Maintainability, U for Usability.**

Minnesota Department of Transportation

Scoping Decision Tree

Attachment C for TM 18-04-OP-01

ADA Unit

2018

Scoping Decision Tree (Attachment C)

Introduction

The decision tree is a tool to assist project managers in project development by showing the relationship between ADA thresholds, scoping, design requirements, and right-of-way. The tree outlines common project types and their requirements; it is not intended to account for every project scenario or be a replacement for the scoping process.

Goals

- Fulfill Transition Plan Commitments;
- Avoid rework with additional cost and other impacts to the public;
- Avoid back loading the Transition Plan 2037 goal.

Thresholds and scoping

The decision tree applies to all reconstruction and preservation project types identified in the Alterations Threshold section of the Technical Memorandum

Curb Ramps (Use with Scope and Selection of Facilities)

1. Quadrants are within the project limits and at intersections that are;
    a. Un-signalized;
        i. Pursue MnDOT standards for PAR
            1. With boulevard provide 5' minimum unobstructed width, <2% cross slope to achieve ADA compliance.
            2. Without boulevard 5' minimum unobstructed width, <2% cross slope to achieve ADA compliance. The overall sidewalk width may need to be expanded to meet this standard.
            3. address barriers outside of the initiating scope
                a. drainage, vertical barriers, etc.
            4. acquisition of right-of-way required if there is insufficient space and bump outs are not an option
    b. Signalized and will require replacement within Transition Plan timeline and are not included in the STIP;
        i. Pursue MnDOT standards for MAR to achieve ADA compliance, including APS and replacing the signal if necessary.
            1. address barriers outside of the initiating scope
            2. acquisition of right-of-way required
    c. Signalized and will require replacement within Transition Plan timeline and are identified in the STIP;
        i. Pursue MnDOT Standards for PAR to the maximum extent feasible
            1. right-of-way not required

2. Quadrants are outside the project limits (i.e. frontage roads and ramp intersections), and the intersection is:
    a. Un-signalized;

i. and outside the paving limits of the project
    1. Pursue MnDOT standards for PAR if no projects are planned in the STIP.
    2. Defer compliance through those intersections if the local agency has a project within the STIP.
    3. Defer compliance through those intersections if MnDOT has a project within the STIP.

b. Signalized
    i. and outside the paving limits of the project,
        1. Pursue MnDOT standards for MAR if no projects are planned in the STIP.
        2. Defer compliance through those intersections if the local agency has a project within the STIP.
        3. Defer compliance through those intersections if MnDOT has a project within the STIP.

Sidewalks (Use with Scope and Selection of Facilities)

3. Paving or bridge projects meets alteration threshold and no projects are planned within the Transition Plan timeline and sidewalk is condition 3 or 4 and/or the cross slope is greater than 3%
    a. Residential
        i. Scope project for sidewalk replacement and inclusion where there are gaps
            1. Sidewalk shall meet MnDOT requirements for PAR
    b. Commercial/downtown
        i. Scope project for sidewalk replacement and inclusion where there are gaps
            1. Sidewalks should be scoped for MAR

Right-of-way (Use with Right of Way Section)

4. The need for right-of-way is both compliance and context driven
    a. Residential with no adjacent public facilities or additional need identified
        i. When PROWAG compliance can be met within the existing right-of-way, it is not necessary to purchase additional right-of-way. If PROWAG minimums cannot be met and right or way is needed, acquire sufficient right-of-way to meet MnDOT standards for PAR.
    b. Commercial/downtown
        i. When MnDOT standards for PAR can be met within the existing right-of-way, it is not necessary to purchase additional right-of-way. If MnDOT standards for PAR minimums cannot be met and right-of-way is needed, acquire sufficient right-of-way to meet MnDOT standards for MAR.

Minnesota Department of Transportation

Department of Justice/ Department of Transportation Joint Technical Assistance 2013 & 2015

Attachment D for TM 18-04-OP-01

ADA Unit

2018

U.S. Department of Justice
Civil Rights Division
Disability Rights Section

U.S.Department of Transportation
Federal Highway Administration

Department of Justice/Department of Transportation Joint Technical Assistance[1] on the Title II of the Americans with Disabilities Act Requirements to Provide Curb Ramps when Streets, Roads, or Highways are Altered through Resurfacing

Title II of the Americans with Disabilities Act (ADA) requires that state and local governments ensure that persons with disabilities have access to the pedestrian routes in the public right of way. An important part of this requirement is the obligation whenever streets, roadways, or highways are altered to provide curb ramps where street level pedestrian walkways cross curbs.[2] This requirement is intended to ensure the accessibility and usability of the pedestrian walkway for persons with disabilities.

An alteration is a change that affects or could affect the usability of all or part of a building or facility.[3] Alterations of streets, roads, or highways include activities such as reconstruction, rehabilitation, *resurfacing*, widening, and projects of similar scale and effect.[4] Maintenance activities on streets, roads, or highways, such as filling potholes, are not alterations.

Without curb ramps, sidewalk travel in urban areas can be dangerous, difficult, or even impossible for people who use wheelchairs, scooters, and other mobility devices. Curb ramps allow people with mobility disabilities to gain access to the sidewalks and to pass through center islands in streets. Otherwise, these individuals are forced to travel in streets and roadways and are put in danger or are prevented from reaching their destination; some people with disabilities may simply choose not to take this risk and will not venture out of their homes or communities.

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1 The Department of Justice is the federal agency with responsibility for issuing regulations implementing the requirements of title II of the ADA and for coordinating federal agency compliance activities with respect to those requirements. Title II applies to the programs and activities of state and local governmental entities. The Department of Justice and the Department of Transportation share responsibility for enforcing the requirements of title II of the ADA with respect to the public right of way, including streets, roads, and highways.

2 See 28 CFR 35.151(i)(1) (Newly constructed or altered streets, roads, and highways must contain curb ramps or other sloped areas at any intersection having curbs or other barriers to entry from a street level pedestrian walkway) and 35.151(i)(2) (Newly constructed or altered street level pedestrian walkways must contain curb ramps or other sloped areas at intersections to streets, roads, or highways).

3 28 CFR 35.151(b))1)

4 2010 ADA Accessibility Standards, section 106.5

Because resurfacing of streets constitutes an alteration under the ADA, it triggers the obligation to provide curb ramps where pedestrian walkways intersect the resurfaced streets. See Kinney v. Yerusalim, 9 F 3d 1067 (3rd Cir. 1993). This obligation has been discussed in a variety of technical assistance materials published by the Department of Justice beginning in 1994.[5] Over the past few years, state and local governments have sought further guidance on the scope of the alterations requirement with respect to the provision of curb ramps when streets, roads or highways are being resurfaced. These questions have arisen largely due to the development of a variety of road surface treatments other than traditional road resurfacing, which generally involved the addition of a new layer of asphalt. Public entities have asked the Department of Transportation and the Department of Justice to clarify whether particular road surface treatments fall within the ADA definition of alterations, or whether they should be considered maintenance that would not trigger the obligation to provide curb ramps. This Joint Technical Assistance addresses some of those questions.

Where must curb ramps be provided?

Generally, curb ramps are needed wherever a sidewalk or other pedestrian walkway crosses a curb. Curb ramps must be located to ensure a person with a mobility disability can travel from a sidewalk on one side of the street, over or through any curbs or traffic islands, to the sidewalk on the other side of the street. However, the ADA does not require installation of ramps or curb ramps in the absence of a pedestrian walkway with a prepared surface for pedestrian use. Nor are curb ramps required in the absence of a curb, elevation, or other barrier between the street and the walkway.

When is resurfacing considered to be an alteration?

Resurfacing is an alteration that triggers the requirement to add curb ramps if it involves work on a street or roadway spanning from one intersection to another, and includes overlays of additional material to the road surface, with or without milling. Examples include, but are not limited to the following treatments or their equivalents: addition of a new layer of asphalt, reconstruction, concrete pavement rehabilitation and reconstruction, open-graded surface course, micro-surfacing and thin lift overlays, cape seals, and in-place asphalt recycling.

What kinds of treatments constitute maintenance rather than an alteration?

Treatments that serve solely to seal and protect the road surface, improve friction, and control splash and spray are considered to be maintenance because they do not significantly affect the public's access to or usability of the road. Some examples of the types of treatments that would normally be considered maintenance are: painting or striping lanes, crack filling and sealing, surface sealing, chip seals, slurry seals, fog seals, scrub sealing, joint crack seals, joint repairs, dowel bar retrofit, spot high-friction treatments, diamond grinding, and pavement patching. In some cases, the combination of several maintenance treatments occurring at or near the same time may qualify as an alteration and would trigger the obligation to provide curb ramps.

What if a locality is not resurfacing an entire block, but is resurfacing a crosswalk by itself?

Crosswalks constitute distinct elements of the right-of-way intended to facilitate pedestrian traffic. Regardless of whether there is curb-to-curb resurfacing of the street or roadway in general, resurfacing of a crosswalk also requires the provision of curb ramps at that crosswalk.

July 8, 2013

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5 See 1994 Title II Technical Assistance Manual Supplement, Title II TA Guidance: The ADA and City Governments: Common Problems; and ADA Best Practices Tool Kit for State and Local Governments: Chapter 6, Curb Ramps and Pedestrian Crossings under Title II of the ADA, available at ada.gov.

Glossary of Terms for DOJ/FHWA Joint Technical Assistance on the ADA Title II Requirements to Provide Curb Ramps When Streets Roads or Highways are Altered Through Resurfacing

This glossary is intended to help readers understand certain road treatments referenced on page 2 of the DOJ/FHWA Joint Technical Assistance on the ADA Title II Requirements to Provide Curb Ramps When Streets Roads or Highways are Altered Through Resurfacing. The definitions explain the meaning of these terms from an engineering perspective and are provided in the order in which they appear in the Technical Assistance document.

Treatments that are considered alterations of the road surface

Reconstruction – Reconstruction refers to removing all or a significant portion of the pavement material and replacing it with new or recycled materials. This may include full-depth reclamation, where the pavement surface is demolished in place and new pavement surface is applied. In addition, reconstruction may also include grinding up a portion of the pavement surface, recycling it and placing it back, and then adding a wearing surface, such as in cold in-place asphalt recycling. Reconstruction often includes widening or geometrical changes to the roadway profile.

Rehabilitation - Rehabilitation refers to significant repairs made to a road or highway surface, including activities such as full slab replacement, filling voids under slabs (slabjacking), widening, and adding additional structural capacity.

Open-graded surface course – Open-graded surface course, also known as "open-graded friction course," involves a pavement surface course that consists of a high-void, asphalt concrete mix that permits rapid drainage of rainwater through the course and off the shoulder of the road. The mixture consists of either Polymer-modified or rubber-modified asphalt binder, a large percentage of one-sized coarse aggregate, and a small amount of fibers. This treatment prevents tires from hydroplaning and provides a skid-resistant pavement surface with significant noise reduction.

Microsurfacing – Microsurfacing involves spreading a properly proportioned mixture of polymer modified asphalt emulsion, mineral aggregate, mineral filler, water, and other additives, on a paved surface. Microsurfacing differs from slurry seal in that it can be used on high volume roadways to correct wheel path rutting and provide a skid resistant pavement surface.

Thin lift overlays – Thin lift overlays are thin applications of mixtures of hot mix asphalt. Thin lift overlays may also require some milling along curbs, manholes, existing curb cuts, or other road structures to assure proper drainage and cross slopes.

Cape seal – A cape seal is a thin surface treatment constructed by applying a slurry seal or microsurfacing to a newly constructed chip seal. It is designed to be an integrated system where the primary purpose of the slurry is to fill voids in the chip seal.

In-place asphalt recycling - In-place asphalt recycling is a process of heating and removing around 1-2 inches of existing asphalt and remixing the asphalt with the addition of a binder additive and possible aggregate to restore the wearing surface for placement and compaction. All of this is performed in a train of equipment.

Treatments that are considered maintenance of the road surface

Crack filling and sealing – Crack filling and sealing involves placing elastomeric material directly into cracks in pavement.

Surface sealing - Surface sealing involves applying liquid sealant to pavement surface in order to stop water penetration and/or reduce oxidation of asphalt products. Sand is sometimes spread over liquid to absorb excess material.

Chip seals – Chip Seals involve placing graded stone (chips) on liquid emulsified asphalt sprayed on pavement surface. The surface is rolled to enable seating of chips.

Slurry seal – Slurry seals involve spraying a mixture of slow setting emulsified asphalt, well graded fine aggregate, mineral filler, and water on the pavement surface. It is used to fill cracks and seal areas of old pavements, to restore a uniform surface texture, to seal the surface to prevent moisture and air intrusion into the pavement, and to improve skid resistance.

Fog seals – Fog seals are a type of surface sealing.

Scrub sealing – Scrub sealing is type of surface sealing

Joint crack seals – Joint crack seals are usually associated with concrete pavement. This work consists of routing and cleaning existing cracks and joints and resealing to prevent water and non-compressibles from entering into the pavement joints and subgrade materials.

Joint repairs – Joint repairs are usually associated with concrete pavement. This work consists of selectively repairing portions of the pavement where the slabs are generally in good condition, but corners or joints are broken. The depth of the patch could be full depth or partial depth.

Dowel retrofit – Dowel retrofits are usually associated with concrete pavement. This work involves the installation of dowel bars connecting slabs in existing pavements. Pavement with dowel bar retrofits can have life extensions of as much as 20 years. Its application is almost exclusively on high-speed Interstate highways.

Spot high-friction treatments – Spot high-friction treatments involve using epoxy based resin liquids as a binder for an aggregate with high-friction properties. These are used in locations where drivers are frequently braking and the pavement surface has less resistance to slipping.

Diamond grinding – Diamond grinding involves using a gang saw to cut grooves in the pavement surface to restore smoothness and eliminate any joint faulting.

Pavement patching – Pavement patching involves selectively repairing portions of the pavement where the slabs are generally in good condition, but corners or joints are broken. The depth of the patch could be full depth or partial depth.

U.S. Department of Justice
Civil Rights Division
Disability Rights Section

U.S. Department of Transportation
Federal Highway Administration

QUESTIONS & ANSWERS
Supplement to the 2013 DOJ/DOT Joint Technical Assistance on the Title II of the Americans with Disabilities Act Requirements To Provide Curb Ramps when Streets, Roads, or Highways are Altered through Resurfacing

The *Department of Justice (DOJ)/Department of Transportation (DOT)* *Joint Technical Assistance on the Title II of the Americans with Disabilities Act [ADA] Requirements to Provide Curb Ramps when Streets, Roads, or Highways are Altered through Resurfacing* *(Joint Technical Assistance)* was published on July 8, 2013. This document responds to frequently asked questions that the Federal Highway Administration (FHWA) has received since the technical assistance document was published. In order to fully address some questions, the applicable requirements of Section 504 of the Rehabilitation Act of 1973 that apply to public entities receiving Federal funding from DOT, either directly or indirectly, are also discussed. This document is not a standalone document and should be read in conjunction with the 2013 Joint Technical Assistance.

Q1: ***When a pavement treatment is considered an alteration under the ADA and there is a curb ramp at the juncture of the altered road and an existing sidewalk (or other prepared surface for pedestrian use), but the curb ramp does not meet the current ADA Standards, does the curb ramp have to be updated to meet the current ADA Standards at the time of the pavement treatment?***

A1: It depends on whether the existing curb ramp meets the appropriate accessibility standard that was in place at the time it was newly constructed or last altered.

When the Department of Justice adopted its revised title II ADA Regulations including the updated ADA Standards for Accessible Design (2010 Standards,[1] as defined in 28 CFR 35.151), it specified that "(e)lements that have not been altered in existing facilities on or after March 15, 2012, and that comply with the corresponding technical and scoping specifications for those elements in either the 1991 Standards or in the Uniform Federal Accessibility Standards (UFAS) … are not required to be modified in order to comply with the requirements set forth in the 2010 Standards." 28 C.F.R. 35.150(b)(2)(i). As a result of this "safe harbor" provision, if a curb ramp was built or altered prior to March 15, 2012, and complies with the requirements for curb ramps in either the 1991 ADA Standards for Accessible Design (1991 Standards, known prior to 2010 as the 1991 ADA Accessibility Guidelines, or the 1991 ADAAG) or UFAS, it does **not** have to be modified to comply with the requirements in the 2010 Standards. However, if that existing curb ramp did not comply with either the 1991 Standards or UFAS as of March 15, 2012, then the safe harbor does not apply and the curb ramp must be brought into compliance with the requirements of the 2010

Standards concurrent with the road alteration. *See* 28 CFR 35.151(c) and (i).

Note that the requirement in the 1991 Standards to include detectable warnings on curb ramps was suspended for a period between May 12, 1994, and July 26, 1998, and again between December 23, 1998, and July 26, 2001. If a curb ramp was newly constructed or was last altered when the detectable warnings requirement was suspended, and it otherwise meets the 1991 Standards, Title II of the ADA does not require that the curb ramp be modified to add detectable warnings in conjunction with a road resurfacing alteration project. *See* Question #14 however, for a discussion of the DOT Section 504 requirements, including detectable warnings.

Q2: ***The Joint Technical Assistance states that "[r]esurfacing is an alteration that triggers the requirement to add curb ramps if it involves work on a street or roadway spanning from one intersection to another, and includes overlays of additional material to the road surface, with or without milling." What constitutes "overlays of additional material to the road surface" with respect to milling, specifically, when a roadway surface is milled and then overlaid at the same height (i.e., no material is added that exceeds the height of what was present before the milling)?***

A2: A project that involves milling an existing road, and then overlaying the road with material, regardless of whether it exceeds the height of the road before milling, falls within the definition of "alteration" because it is a change to the road surface that affects or could affect the usability of the pedestrian route (crosswalk). *See Kinney v. Yerusalim*, 9 F.3d 1067 (3rd Cir. 1993). Alterations require the installation of curb ramps if none previously existed, or upgrading of non-compliant curb ramps to meet the applicable standards, where there is an existing pedestrian walkway. *See* also Question 8.

Q3: ***If a roadway resurfacing alteration project does not span the full width of the road, do I have to put in curb ramps?***

A3: It depends on whether the resurfacing work affects a pedestrian crosswalk. If the resurfacing affects the crosswalk, even if it is not the full roadway width, then curb ramps must be provided at both ends of the crosswalk. *See* 28 CFR 35.151(i).

Public entities should not structure the scope of work to avoid ADA obligations to provide curb ramps when resurfacing a roadway. For example, resurfacing only between crosswalks may be regarded as an attempt to circumvent a public entity's obligation under the ADA, and potentially could result in legal challenges.

If curb ramp improvements are needed in the vicinity of an alteration project, it is often cost effective to address such needs as part of the alteration project, thereby advancing the public entity's progress in meeting its obligation to provide program access to its facilities. *See* Question 16 for further discussion.

Q4: ***When a road alteration project triggers the requirement to install curb ramps, what steps should public (State or local) entities take if they do not own the sidewalk right-of-way needed to install the required curb ramps?***

A4: The public entity performing the alteration is ultimately responsible for following and implementing the ADA requirements specified in the regulations implementing title II. At the time an alteration project is scoped, the public entity should identify what ADA requirements apply and whether the public entity owns sufficient right-of-way to make the necessary ADA modifications. If the public entity does not control sufficient right-of-way, it should seek to acquire the necessary right-of-way. If a complaint is filed, the public entity will likely need to show that it made reasonable efforts to obtain access to the necessary right-of-way.

Q5: ***The Joint Technical Assistance is silent on when it becomes effective. Is there an effective date for when States and local public entities must comply with the requirements discussed in the technical assistance?***

A5: The Joint Technical Assistance, as well as this Supplement to it, does not create any new obligations. The obligation to provide curb ramps when roads are altered has been an ongoing obligation under the regulations implementing title II of the ADA (28 CFR 35.151) since the regulation was initially adopted in 1991. This technical assistance was provided to respond to questions that arose largely due to the development of a variety of road surface treatments, other than traditional road resurfacing, which generally involved the addition of a new layer of asphalt. Although the Joint Technical Assistance was issued on July 8, 2013, public entities have had an ongoing obligation to comply with the alterations requirements of title II and should plan to bring curb ramps that are or were part of an alteration into compliance as soon as possible.

Q6: ***Is the curb ramp installation work required to be a part of the Plans, Specifications and Estimate package for an alteration project or can the curb ramp work be accomplished under a separate contract?***

A6: The curb ramp installation work can be contracted separately, but the work must be coordinated such that the curb ramp work is completed prior to, or at the same time as, the completion of the rest of the alteration work. *See* 28 CFR 35.151(i).

Q7: ***Is a curb ramp required for a sidewalk that is not made of concrete or asphalt?***

A7: The Joint Technical Assistance states that “the ADA does not require installation of ramps or curb ramps in the absence of a pedestrian walkway with a prepared surface for pedestrian use.” A “prepared surface for pedestrian use” can be constructed out of numerous materials, including concrete, asphalt, compacted soil, decomposed granite, and other materials. Regardless of the materials used to construct the pedestrian walkway, if the intent of the design was to provide access to pedestrians, then curb ramps must be incorporated where an altered roadway intersects the pedestrian walkway. *See* 28 CFR 35.151(i).

Q8: ***If an existing curb ramp is replaced as part of a resurfacing alteration, is there an obligation to address existing obstacles on the adjacent sidewalk at the same time?***

A8: No. The Joint Technical Assistance addresses those requirements that are triggered when a public entity alters a roadway where the roadway intersects a street level pedestrian walkway (28 CFR 35.151(i)). Public

entities are required to address other barriers on existing sidewalks, such as steep cross slopes or obstructions, as part of their on-going program access and transition plan obligations under title II of the ADA and Section 504 and in response to requests for reasonable modifications under the ADA or reasonable accommodations under Section 504. *See* 28 CFR 35.105, 35.130(b)(7), and 35.150(d); *see also* 49 CFR 27.7(e), 27.11(c)(2).

Q9: ***Several pavement preservation treatment types are not listed in the technical assistance. If the treatment type is not specifically on the list of maintenance treatments, is it an alteration?***

A9: New treatments are always being developed and the best practice is for the City or other local public entity conducting the work, the State transportation agency, and FHWA to work together to come to an agreement on a reasonable determination of whether the unlisted treatment type is an alteration or maintenance and document their decisions. If the new treatment can be deemed to be the equivalent of any of the items listed as alterations, it is a reasonable interpretation that they are in fact alterations and should be treated as such.

Q10: ***When does a combination of two or more 'maintenance' treatments rise to the level of being an alteration?***

A10: The list of the pavement types that are considered maintenance, as stated in the 2013 Joint Technical Assistance document, are Chip Seals, Crack Filling and Sealing, Diamond Grinding, Dowel Bar Retrofit, Fog Seals, Joint Crack Seals, Joint Repairs, Pavement Patching, Scrub Sealing, Slurry Seals, Spot High-Friction Treatments, and Surface Sealing. The combination of two or more maintenance treatments may rise to the level of being an alteration.

The best practice is for the City or other local public entity conducting the work, the State transportation agency, and FHWA to work together to come to an agreement on a reasonable determination, document their policies, and apply that determination consistently in their locality.

Q11: ***When will utility trench work require compliance with ADA curb ramp requirements?***

A11: The answer to this question depends on the scope and location of the utility trench work being done. If the utility trench work is limited to a portion of the pavement, even including a portion of the crosswalk, repaving necessary to cover the trench would typically be considered maintenance and would not require simultaneous installation or upgrading of curb ramps. Public entities should note that the ADA requires maintenance of accessible features, and as such, they must ensure that when the trench is repaved or other road maintenance is performed, the work does not result in a lesser level of accessibility. *See* 28 CFR 35.133(a). If the utility work impacts the curb at a pedestrian street crossing where no curb ramp exists, the work affecting the curb falls within the definition of "alteration," and a curb ramp must be constructed rather than simply replacing the curb. *See* 28 CFR 35.151(b) and 35.151(i).

If a public entity is unsure whether the scope of specific trench work and repair/repaving constitutes an alteration, the best practice is for the public entity to work together with the State transportation agency and

the FHWA Division to come to an agreement on how to consistently handle these situations and document their decisions.

Q12: ***Is full-depth pavement patching considered maintenance?***

A12: The answer to this question depends on the scope and location of the pavement patch. If the pavement patch work is limited to a portion of the pavement, even including a portion of the crosswalk, patching the pavement would typically be considered maintenance and would not require simultaneous installation or upgrading of curb ramps. Public entities should note that the ADA requires maintenance of accessible features, and as such, they should ensure that when the pavement is patched or other road maintenance is performed, the work does not result in a lesser level of accessibility. *See* 28 CFR 35.133(a). If the pavement patching impacts the curb at a pedestrian street crossing where no curb ramp exists, the work affecting the curb falls within the definition of "alteration," and a curb ramp must be constructed rather than simply replacing the curb. *See* 28 CFR 35.151(b) and 35.151(i).

If a public entity is unsure whether the scope of specific full-depth pavement patching constitutes an alteration, the best practice is for the public entity to work together with the State transportation agency and the FHWA Division to come to an agreement on how to consistently handle these situations and document their decisions.

Q13: ***Do any other requirements apply to road alteration projects undertaken by public entities that receive Federal financial assistance from DOT either directly or indirectly, even if such financial assistance is not used for the specific road alteration project at issue?***

A13: Yes, if a public entity receives any Federal financial assistance from DOT whether directly or through another DOT recipient, then the entity must also apply DOT's Section 504 requirements even if the road alteration project at issue does not use Federal funds. *See* 49 CFR 27.3 (applicability of DOT's Section 504 requirements) and 27.5 (definition of "program or activity").

DOT's Section 504 disability nondiscrimination regulations are found at 49 CFR Part 27. These regulations implement Section 504 of the Rehabilitation Act of 1973 (Section 504). In 2006, DOT updated its accessibility standards by adopting the 2004 Americans with Disabilities Act Accessibility Guidelines (2004 ADAAG[2]) into its Section 504 regulations at 49 CFR 27.3 (referencing 49 CFR Part 37, Appendix A). These requirements replaced the previously applicable ADA Standards for Accessible Design (1991) (formerly known as 1991 ADAAG). At that time, DOT's regulation adopted a modification to Section 406 of the 2004 ADAAG which required the placement of detectable warnings on curb ramps.

The revised DOT Section 504 regulation also provided a "safe harbor" provision (similar to the ADA provision discussed in Question 1) that applies to curb ramps that were newly constructed or altered by entities receiving Federal financial assistance from DOT and that were in compliance with the 1991 ADAAG requirements prior to November 29, 2006. If the "safe harbor" applies, these curb ramps are still considered compliant and do not have to be modified to add detectable warnings unless they are altered after November

29, 2006. The DOT "safe harbor" provision is found at 49 CFR 37.9(c). DOT's Section 504 regulations (49 CFR 27.19(a)) require compliance with 49 CFR Part 37.

The Section 504 safe harbor does not apply, however, if, at the time of the road alteration project, the existing curb ramp does not comply with the 1991 ADAAG and at that time it must be brought into compliance with the current DOT Section 504 requirements (2004 ADAAG) including detectable warnings.

Q14: ***Does the Section 504 safe harbor apply to curb ramps built in compliance with 1991 ADAAG during the time period when the requirement for detectable warnings was suspended and the roadway is now being resurfaced where it intersects the pedestrian walkway?***

A14: If the curb ramps that were built or altered prior to November 29, 2006 were fully compliant with 1991 ADAAG at the time that the detectable warnings requirements were suspended, then the DOT Section 504 safe harbor applies to them and the recipient does not have to add detectable warnings as a result of a resurfacing project.

Q15: ***In addition to the obligations triggered by road resurfacing alterations, are there other title II or Section 504 requirements that trigger the obligation to provide curb ramps?***

A15: In addition to the obligation to provide curb ramps when roads are resurfaced, both DOJ's title II ADA regulation and DOT's Section 504 regulation (applicable to recipients of DOT Federal financial assistance), require the provision of curb ramps if the sidewalk is installed or altered at the intersection, during new construction, as a means of providing program accessibility, and as a reasonable modification under title II or a reasonable accommodation under Section 504.

New Construction and Alterations

DOJ's title II ADA regulation provides that newly constructed or altered streets, roads, and highways must contain curb ramps or other sloped areas at any intersection having curbs or other barriers to entry from a street level pedestrian walkway. In addition, the regulation provides that newly constructed or altered street level pedestrian walkways must contain curb ramps or other sloped areas at intersections to streets, roads, or highways. *See* 28 CFR 35.151(i). These curb ramps must comply with the 2010 Standards.[3]

DOT's Section 504 Federally assisted regulation also requires the provision of curb ramps in new construction and alterations. *See* 49 CFR 27.19(a) (requiring recipients of DOT financial assistance to comply with DOJ's ADA regulation at 28 CFR Part 35, including the curb ramp requirements at 28 CFR 35.151(i)); 49 CFR 27.75 (a)(2) (requiring all pedestrian crosswalks constructed with Federal financial assistance to have curb cuts or ramps).

Program Accessibility

Both DOJ's title II ADA regulation and DOT's Section 504 regulation require that public entities/recipients operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety,

is readily accessible to and usable by individuals with disabilities. This obligation, which is known as providing "program accessibility," includes a requirement to evaluate existing facilities in the public right-of-way for barriers to accessibility, including identifying non-existent or non-compliant curb ramps where roads intersect pedestrian access routes (sidewalks or other pedestrian walkways). After completing this self-evaluation, a public entity/recipient must set forth a plan for eliminating such barriers so as to provide overall access for persons with disabilities. *See* 28 CFR 35.150, and 49 CFR 27.11(c).

Since March 15, 2012, the DOJ title II regulation requires the use of the 2010 Standards for structural changes needed to provide program access. However, in accordance with the ADA safe harbor discussed in Question 1, if curb ramps constructed prior to March 15, 2012 already comply with the curb ramp requirements in the 1991 Standards, they need not be modified in accordance with the 2010 Standards in order to provide program access, unless they are altered after March 15, 2012.

Similarly, DOT's Section 504 "safe harbor" allows curb ramps that were newly constructed or altered prior to November 29, 2006, and that meet the 1991 ADAAG to be considered compliant.[4] Elements not covered under the safe harbor provisions may need to be modified to provide program access and should be incorporated into a program access plan for making such modifications. 49 CFR 27.11(c)(2).

Under Section 504, self-evaluations and transition plans should have been completed by December 29, 1979. Under the ADA, transition plans should have been completed by July 26, 1992, and corrective measures should have been completed by January 26, 1995. While these deadlines have long since passed, entities that did not develop a transition plan prior to those dates should begin immediately to complete their self-evaluation and develop a comprehensive transition plan.

Reasonable Modification /Accommodation

In addition to alteration and program accessibility obligations, public entities may have an obligation under title II and Section 504 to undertake curb ramp construction or alteration as a "reasonable modification/accommodation" in response to a request by, or on behalf of, someone with a disability. Such a request may be made to address a non-compliant curb ramp outside of the schedule provided in the public entity's transition plan. A public entity must appropriately consider such requests as they are made. 28 CFR 35.130(b)(7); 49 CFR 27.7(e).

Deccember 1, 2015

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1 The 2010 Standards can be found on DOJ's website at http://www.ada.gov/2010ADAstandards_index.htm.

2 In 2004, the United States Architectural and Transportation Barriers Board (U.S. Access Board) published the Americans with Disabilities Act Accessibility Guidelines (2004 ADAAG), which serve as the basis of the current enforceable ADA standards adopted by both DOT and DOJ.

3 The 2010 Standards include a provision on equivalent facilitation that allows covered entities to use other designs for curb ramps if such designs provide equal or greater access. *See* section 103 of the 2010 Standards.

4 The DOT “safe harbor” provision is found at 49 CFR 37.9(c). DOT’s Section 504 regulations (49 CFR 27.19(a)) require compliance with 49 CFR Part 37.

Minnesota Department of Transportation

MnDOT ADA Glossary

Attachment E for TM18-04-OP-01

ADA Unit

2018

ADA Transition Plan: A document required under the ADA identifying accessibility needs and the schedule of when accessibility improvements will be completed. Mn/DOT's transition plan identifies accessibility needs, the process to fully integrate accessibility improvements into the Statewide Transportation Improvement Program (STIP), and ensures all transportation facilities, services, programs, and activities are accessible to all individuals.

Accessible: A facility that provides access to people with disabilities using the design requirements of the ADA.

Accessible Route: A continuous unobstructed path connecting all accessible elements and spaces of a building or facility.

Accessible Pedestrian Signal (APS): A device that communicates information about the WALK phase in audible and vibro-tactile formats. Also known as APS.

Alteration Project: A highway alteration project is a change to any portion of an existing facility (space, site, structure, or improvement of a pedestrian or vehicular route) located in the public right-of-way that affects or could affect access, circulation, or use of the facility. Alterations could also affect the structure, grade, function and use of the roadway. An alteration must not decrease or have the effect of decreasing the accessibility of a facility or an accessible connection to an adjacent building or site.

Americans with Disabilities Act (ADA): The Americans with Disabilities Act; Civil rights legislation passed in 1990 and effective July 1992. The ADA sets design guidelines for accessibility to public facilities, including sidewalks and trails, by individuals with disabilities. Also known as ADA.

Blended Transition: A pedestrian walkway connection with a grade of 5 percent or less between the level of the walkway and the level of the roadway crosswalk.

Crosswalk That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalk on opposite sides of the highway, measured from the curbs or, in the absence of curbs, from the edges of the traversable roadway; and, in the absence of a sidewalk on one side of the roadway, that part of a roadway included within the extension of the lateral lines of the existing sidewalk. Any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface.

Cross Slope: The slope that is perpendicular to the direction of travel.

Curb: The edge of a roadway surface which has been raised to contain, protect or form a gutter and is usually made of concrete or cut stone.

Curb Ramp: A short pedestrian ramp cutting through a curb or built up to a curb from a lower level.

Detectable Warning: A surface feature of truncated domes, built in or applied to the walking surface to indicate an upcoming change from pedestrian to vehicular way.

Fan: A curb ramp type similar to the blended transition where the entire radius of the corner is dropped from tangent point to tangent point and has a slope between 2% -8.3% to make up grades faster and eliminate drainage concerns

Landing. An approximately level area measuring at least 4' x 4' and 2.00% maximum cross slope in all directions, part of a pedestrian accessible route or walkway that provides a space for performing turning maneuvers or resting.

Mn/MUTCD: Minnesota Manual on Uniform Traffic Control Devices (2015 Edition). A fine documentation of traffic control devices and their application.

Maintenance Access Route (MAR): A MnDOT standard which allots additional width for the mechanical maintenance of accessible pedestrian features. The MAR follows the alignment of the PAR and provides the clear distance needed between raised obstacles (i.e. push button stations, signal, lighting or utility poles, buildings, retaining walls, V curbs, sign posts, etc.) for the mechanical removal of snow and ice. While desired, the additional width for the MAR does not need to meet 2% cross slope requirements, and should be a paved surface at signalized quadrants.

Maximum Extent Feasible: When existing site constraints prevent full compliance, access will be provided to the greatest extent possible, under ADA requirements. (e.g., curb ramps may be constructed with slopes greater than 1V:12H (8.33%) where limitations prohibit the use of flatter slopes. These curb ramps must use slopes that provide access to the maximum extent feasible.).

New Construction Projects. A project constructing a transportation facility where none existed, in a location without existing site constraints, where it is technically feasible to fully meet the standards for accessibility.

Pedestrian. A person traveling on foot or using assistive devices, such as wheelchairs, for mobility.

Pedestrian Access Route (PAR). A continuous and unobstructed walkway within a pedestrian circulation path that provides accessibility. Pedestrian access routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps, and lifts.

Pedestrian Facilities. A general term denoting improvements and provisions made to accommodate or encourage non-vehicular transit.

Physical Barrier. A physical obstruction (i.e. fence, planter, guide rail, etc.) which prohibits a pedestrian movement. Placement of intentional physical barrier to deter pedestrian movements must be outside the vehicular line of sight and clear zone.

PROWAG: An acronym for the *Guidelines for Accessible Public Rights-of-Way* issued in 2005 by the U. S. Access Board. This guidance addresses roadway design practices, slope, and terrain related to pedestrian access to walkways and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way.

Ramp: Any part of a constructed pedestrian pathway with a slope greater than 1V:20H (5.00%).

Refuge Island: A specifically defined area (most often raised above the street level) between vehicular traffic lanes intended as a pedestrian refuge location for persons unable to cross the entire roadway width at one time.

Running Slope. The slope that is parallel to the direction of travel.

Reconstruction: A rebuilding of an existing highway alignment. Generally, projects in this category have minimal site or scope constraints, making it technically feasible to fully meet the standards for accessibility.

Right of Way: A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes. “Right of way” also may mean the privilege of the immediate use of the highway. (MN 169.11 Subd. 66)

Section 504: The section of the Rehabilitation Act that prohibits discrimination by any program or activity receiving financial assistance.

Sidewalk: A portion of a roadway between curb lines or the lateral line of a roadway and the adjacent

property line or easement of private property that is paved or improved and intended for use by pedestrians.

Shoulder. A section of a roadway system adjacent to the traveled way that may be shared by motorized vehicles, horse drawn vehicles, bicycles, and pedestrians. The shoulder facilitates drainage, supports the roadway and provides a buffer between vehicles and pedestrians.

Statewide Transportation Improvement Program (STIP): The Statewide Transportation Improvement Program (STIP) is Minnesota's four year transportation improvement program. The STIP identifies the schedule and funding of transportation projects by state fiscal year (July 1 through June 30). It includes all state and local transportation projects with federal highway and/or federal transit funding along with 100% state funded transportation projects. Rail, port, and aeronautic projects are included for information purposes. The STIP is developed/updated on an annual basis.

Technically Infeasible. When an improvement to an existing facility that cannot fully meet the standards because of existing site conditions. Existing site conditions can include, buildings, major underground utilities, and environmental/historic impacts. Technical infeasibility is ultimately determined on a case by case basis and must be submitted to the ADA Unit for approval.

Title II: Refers to the second title of the ADA requiring all public facilities and programs to be accessible regardless of funding source.

United States Access Board: An independent federal agency that develops and maintains design criteria for buildings and other improvements, transit vehicles, telecommunications equipment, and electronic and information technology. They also enforce the Architectural Barriers Act standards which covers federally funded facilities.

United States Department of Justice (DOJ): The United States Department of Justice (often referred to as the Justice Department or DOJ), is the United States federal executive department responsible for the enforcement of the law and administration of justice.

V-Curb: Commonly known as vertical curb. A formed concrete structure with a vertical face of varying height and width depending on application. In the context of accessible design v-curb is used at the back edge of a pedestrian facility to provide a more optimal tie in grade for the pedestrian access route.

Walkway: The continuous portion of a pedestrian access route that is connected to street crossings by curb ramps or blended transitions.

Wrap the Radius: To carry the pavement beyond the mainline pavement to ensure that the transition from the curb ramp to the crosswalk and the crosswalk meet ADA requirements.

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Sustainable buildings, sound infrastructure, safe transportation systems, clean water, renewable energy and a balanced environment. Building a Better World for All of Us communicates a companywide commitment to act in the best interests of our clients and the world around us.

We're confident in our ability to balance these requirements.

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