Americans with Disabilities Act Transition Plan

Prepared for:

City of Highland
1115 Broadway
P.O. Box 218
Highland, IL 62249-0218

Prepared by:

TABLE OF CONTENTS

EXHIBITS

APPENDICES

1.0 INTRODUCTION

The ADA Transition Plan, (referred to as "the Plan") documents the effort by the City of Highland to evaluate existing City owned facilities including sidewalk and curb ramps located on public right of way and develop objectives for making those facilities accessible and usable for all people including those with disabilities. The Plan has been prepared pursuant to the Americans with Disabilities Act (ADA), which requires a transition plan to be completed by all public agencies with more than fifty (50) employees. The National Cooperative Highway Research Program (NCHRP) Project Number 20-7 (232) – *ADA Transition Plans: A Guide to Best Management Practices* was used as a basis for the development of this Plan. This Plan focuses on City owned buildings and facilities and public sidewalks. A cursory review of the City's planning documents and building permits was performed with the results summarized in Exhibit D. This plan follows the recommended steps to compliance including identifying key personnel, creating new documents to meet ADA requirements and laying out plans for monitoring the Plan into the future.

1.1 Designating an ADA Coordinator

The ADA Coordinator will serve as the primary point of contact on all issues related to ADA accessibility within the City of Highland. They will also oversee the requirements outlined in the ADA notice to the public and in the grievance procedure. All written requests should be sent to:

Kevin Limestall, Chief Building and Zoning Official
2610 Plaza Drive
P.O. Box 218
Highland, IL 62249-0218
Email: klimestall@highlandil.gov
Phone: 618-654-7115

1.2 Providing notice to the public about ADA requirements

Public participation was identified in the early planning stages as a key component in the development of the Plan. The public participation process included specific efforts to include persons with disabilities and the elderly, as well as the outreach groups that represent them. Because of their sensitivity to pedestrian travel, these two groups have specific concerns that differ from the general population. The public participation process also included City officials and the general public. A notice to the public about ADA requirements has been developed and approved by the City; it is available at City buildings and on the City's website. A copy of the notice is included in Exhibit A.

1.3 Establishing a grievance procedure

The ADA Coordinator is responsible for ensuring that the grievance procedure is followed and that records are kept for a minimum of three years. A copy of the grievance procedure can be found in Exhibit B, and a copy of the grievance form is provided in Exhibit C.

1.4 Developing internal design standards, specifications, and details

1.4.1 City owned sidewalks and curb ramps

The City of Highland currently references the Illinois Department of Transportation standards, specifications, and construction details for compliance with accessibility requirements.

1.4.2 City owned buildings and facilities

The City of Highland building code is currently the International Building Code, 2003 edition.

1.5 Assigning personnel for the development of the Plan and collecting data

A main focus of the Plan is to inventory the existing City owned facilities including City owned buildings, parks, curb ramps, and sidewalks within the City, identify ADA deficiencies, and develop procedures for implementing and scheduling work to provide an ADA compliant system. The collection of data was broken into two different sources:

1. City owned sidewalks and curb ramps.
2. City owned buildings and facilities

The inventory for sidewalks and curb ramps was completed by Oates Associates, OA, walking the City's sidewalk system on City-owned right of way and recording the observed deficiencies on the sidewalks and curb ramps on a block by block basis. This information was recorded using a mobile GPS (global positioning satellite) unit. The survey team also documented locations where curb ramps and sidewalks are not present. All of the information collected was stored within the City's GIS (Geographic Information System) database. The database will be updated as improvements are performed throughout the City.

All City owned buildings and facilities were walked through for ADA compliance. A report was prepared for each facility and includes a cost estimate to bring the building into full ADA compliance. The buildings and facilities were prioritized based on public usage and established criteria identified in the ADAAG (Americans with Disabilities Act Accessibility Guidelines).

1.6 Approving a schedule and budget for the Plan

The City of Highland currently provides funding for sidewalk improvements. Various state and federal funding sources are also available to fund specific projects throughout the City (i.e. Surface Transportation Program). The City has developed an implementation procedure to identify the sidewalk sections or curb ramp locations that are the most critical based on the criteria established in this plan. Projects will then be logically grouped together for construction efficiency. The implementation procedure will help guide the City to identify specific projects that will allow the City to maximize the improvements that can be performed within the available budget. The final budget for sidewalk and curb ramp improvements within a given year will be determined by the Council during the development of the fiscal budget; however the City is dedicated to continually improving the pedestrian network within the City.

The schedule and budget for upgrading buildings and facilities will be determined by the City Council. There is dedicated funding for maintenance of existing municipal buildings and ADA upgrades can occur through this funding source. In addition, buildings and facilities will be upgraded to meet current ADA compliance during remodeling and all new City owned buildings and facilities will be designed to full compliance.

1.7 Monitoring the progress on the implementation of the Transition Plan

The City of Highland is responsible for monitoring the progress of the Plan. The Plan will require updating the GIS database as projects are completed and documenting changes to ADA requirements. The ADA Coordinator will be responsible for monitoring the program of the Transition Plan.

2.0 REGULATORY REQUIREMENTS

2.1 Americans with Disabilities Act

The Americans with Disabilities Act (ADA), enacted on July 26, 1990, is a comprehensive civil rights act that prohibits discrimination on the basis of disability. The act is divided into five separate titles that cover specific applications: Employment, Public Services (state and local government), Public Accommodations (commercial facilities), Telecommunications and Miscellaneous Provisions. The ADA is meant to compliment the minimum guidelines presented in Section 504 of the Rehabilitation Act of 1973. This Plan focuses on Title II of the ADA.

2.1.1 Title I - Employment

This title is designed to remove barriers that would deny qualified individuals with disabilities access to the same employment opportunities and benefits available to others without disabilities. Employers must reasonably accommodate the disabilities of qualified applicants or employees, unless an undue hardship would result to the employer.

2.1.2 Title II - Public Services

This title prohibits discrimination by public entities on the basis of disability. The public entity is required to provide access to programs, services and activities provided by the state or local government.

2.1.3 Title III - Public Accommodations

This title prohibits discrimination on the basis of disability by private entities in places of public accommodation. Examples include hotels, restaurants, golf courses, etc.

2.1.4 Title IV - Telecommunications

This title requires telephone companies to have developed interstate and intrastate telephone relay services in every state.

2.1.5 Title V - Miscellaneous Provisions

The final title contains a variety of provisions relating to the ADA as a whole, including its relationship to other laws and its impact on insurance providers and benefits.

2.2 Definitions

Title II of the ADA addresses discrimination in relation to public services including “public entities”. The ADA definition of a “public entity” includes any state or local government. Title II of the ADA requires that no person shall by reason of such disability be excluded from participation in or denied the benefits of services, programs, or activities of a public entity, or be subjected to discrimination by any such entity. Sidewalks and curb ramps are considered a “program” per Title II of the ADA and therefore must meet the requirements of the Americans with Disabilities Act to avoid discrimination.

According to Sec. 12102 of the ADA the term "disability" means, with respect to an individual:

(a) A physical or mental impairment that substantially limits one or more major life activities of such individuals;
(b) A record of such an impairment; or
(c) Being regarded as having such impairment.

The ADA does not specifically name all of the impairments that are covered, but describes in detail the conditions that are included or excluded as disabilities under the ADA. An example of an excluded disability is a transitory impairment; an impairment with an actual or expected duration of 6 months or less.

2.3 ADA Requirements of the City of Highland

The ADA presents specific items that the City of Highland or any "public entity" must perform to achieve compliance. The NCHRP 20-7 (232) – *ADA Transition Plans: A Guide to Best Management Practices* was developed to provide guidance in achieving ADA compliance. This document was used to create this Plan. These steps include:

- Perform a self-evaluation
- Develop a grievance procedure
- Designate an individual to oversee Title II compliance
- Develop a transition plan if structural changes are necessary for achieving program accessibility
- Retain the self-evaluation for three years

The Transition Plan lays out the steps and actions to ensure compliance with the above listed steps.

2.4 Administrative Requirements

The City of Highland is responsible for ensuring all-inclusive access for all properties, services, and programs offered by the City. In addition to sidewalks, curb ramps, and City owned buildings and facilities for which additional information is listed below, the City of Highland also maintains several websites, a telecommunications company, several other public utilities including light & power, in addition to other programs and services offered by various City departments.

All City owned websites, www.highlandil.gov, www.highlandcommuncationservices.com, must meet the requirements of Section 508 of the Rehabilitation Act of 1973. The City of Highland offers several services on its websites. Examples of services provided include online utility payment, City facility rental information and building codes and permit information. The website providers for the City's various websites should be contacted to update the websites to meet Section 508 standards. Examples of deficiencies noted include not providing text descriptions below pictures and not providing links to accessibility tools for increasing usability.

All programs and services should be evaluated to determine the current level of ADA compliance. Alterations to programs and services that do not cause an undue burden should occur as soon as feasible. An example of alterations that do not cause an undue burden is relocating a program to a handicap accessible meeting room. If alterations are deemed necessary, the City is not required

to undertake action if it would alter the program or would create a hazardous situation, or represent an undue burden to the City. A review of City documents can be found in Exhibit D.

The City shall ensure that all staff is prepared to fully accommodate individuals with disabilities and provide the services needed. The City shall also provide all employees with reminders about the ADA requirements and any information on changes to ADA law.

2.5 Sidewalk Transition Plan Requirements

The Sidewalk Transition Plan is available for inspection on-line through the City's website as well as at City Hall and is also available in alternative format (e.g. large print, Braille) by request. This Plan identifies physical barriers in public right-of-way under the jurisdiction of the City of Highland. Achieving ADA compliance will require a long term plan based on funding availability. This Plan will serve as a guide to help schedule repairs that have a higher priority and greater impact on the public. See Appendix 1.9 for the sidewalk and curb ramp inventory

A criteria system was also developed to prioritize the ADA compliance by both physical condition and proximity to pedestrian traffic generators. The City sought the input of the community at large and specifically citizens with disabilities in establishing its priorities for upgrading pedestrian accommodations. The Department of Justice's Title II Technical Assistance Manual points to the fact that a public entity's programs related to sidewalks and curb ramps may be prioritized with respect to the location of a particular sidewalk or curb ramp. For this plan, government facilities, schools, and MCT bus stops are considered the highest priority locations.

2.6 Building & Facility Transition Plan Requirements

All buildings owned by the City and offer services used by the public were inspected for ADA compliance. All public spaces were investigated including areas where the public travels to conduct City business including parking lots, ingress and egress locations, meeting rooms, public toilet rooms, drinking fountains, and other public areas. Additionally, public areas utilized by municipal employees were evaluated for ADA compliance including break rooms, employee only toilet rooms, and kitchen facilities.

The Building & Facility Transition Plan is available for inspection on-line through the City's website as well as at City Hall and is also available in alternative format (e.g. large print, Braille), by request. This Plan identifies physical barriers at City owned buildings and facilities under the jurisdiction of the City of Highland. Achieving ADA compliance will require a long term plan based on funding availability. This Plan will serve as a guide to help schedule repairs that have a higher priority and greater impact on the public. See Appendix 2.2 for the inventory of City buildings, facilities and parks.

3.0 PUBLIC OUTREACH

The ADA states that public entities are required to make available to all applicants, participants, residents, and other interested parties information regarding the formation of the Plan. A primary goal of the Plan was to actively seek input from all interested parties, including those with disabilities and the groups that represent them. Meetings were held with the interested parties to help determine the priority rating system, allow for comments, and make specific recommendations for areas in need of improvement. The ADA also requires that a copy of the Plan be made available for public review during a citizen review period.

This section describes the City's efforts to engage various groups representing the public for participation in the development of the Plan. The public coordination included participation from citizens, community groups within the City of Highland and other interested organizations including those who represent people with disabilities. City staff and their consultant prepared a public survey to gather feedback from interested parties including senior citizens and the local disabled community. A meeting was held with IMPACT Center for Independent Living which represents numerous individuals in the local disabled community at the beginning of the project to allow them to review the public survey and disseminate the information to the residents they serve. The input received was used in the development of the priorities for both sidewalks and curb ramps and as in the development of City standards and establishing public usage of City buildings.

3.1 Surveys

A survey was developed to gather information related to user demographics and accessibility concerns with the City's sidewalk system as well as City buildings. One aspect of the survey asks the respondent to rank the importance of sidewalk deficiencies; a second targets curb ramp deficiencies and a third targets how people are using City buildings. The demographic portion of the survey helps illustrate how people use the sidewalk system and allows the user to identify specific problem locations within the City. The survey was available on the City's website and notice of the survey was distributed to the residents in the City's newsletter and water bill. A link to the survey was also distributed to IMPACT Center for Independent Living for distribution among residents on their mailing lists. See Exhibit E for a copy of the original survey and Exhibit F for results and feedback from the public. Future public participation will include public review of this plan and a public comment period to receive feedback and recommendations on improving the plan.

3.2 Public Review and Comment Period

The ADA requires, as part of the development of the Plan, public input throughout the process. The previous sections have detailed the actions taken in the development of the plan. Since the Plan is a multi-year process that is designed to be flexible, it is critical that public involvement and comment continue to be sought through the entire length of the plan. Anyone wishing to comment on the plan can do so in writing or by contacting the City.

4.0 ADA DESIGN STANDARDS

4.1 Incorporation into City of Highland Standards

4.1.1 Pedestrian Facilities

The ADA Design Standards for public rights-of-way within the City of Highland have been developed as a result of a review process to determine the most stringent standards from federal, state, and local guidelines and codes as they relate to various accessibility issues throughout the City. The City of Highland currently references the standard details that have been developed by IDOT. The standards developed to collect data as part of this plan were determined by comparing the IDOT Standards to the standards detailed in the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (dated July 2011). Where there were differences between the standards, the most stringent standard was used for the scoring system for this plan.

The ADA Codes and Standards described in this section are intended to apply to all construction undertaken within City right-of-way after the final approval and adoption of the Plan. This is meant to include all new construction, both private and public, as well as all construction undertaken as part of the Plan.

4.1.2 Public Buildings and Facilities

The ADA Design Standards for public buildings and facilities owned or operated by the City of Highland have been developed as a result of the existing codes that have been adopted by the City of Highland and applicable federal standards for construction. The relevant existing codes that have been adopted by the City of Highland are the 2003 International Building Code and the 1997 Illinois Accessibility Code. The applicable federal standards were the 2010 Americans with Disabilities Act Accessibility Guidelines.

The ADA Codes and Standards described in this section are intended to apply to all construction undertaken within City jurisdiction after the final approval and adoption of the Plan. This is meant to include all new construction, both private and public, as well as all construction undertaken as part of the Plan.

4.2 Other Applicable Codes, Guidelines & Standards

The following statutes, codes, guidelines, and standards were used in the development of this plan. Should other new statutes, codes or standards become applicable after the adoption of the plan, such new codes or standards shall be incorporated into this plan if they are more restrictive and/or exceeds the existing standards.

(a) Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG), published by the U.S. Architectural and Transportation Barriers Compliance Board on July 26, 2011. These guidelines are currently published for review and comment and will replace the current ADAAG guidelines within the public rights-of-way upon final approval. The guidelines have not been approved by the U.S. Department of Justice, but are currently identified as the best practice for pedestrian accommodations in public right-of-way. After the PROWAG, in either its present form or a modified version, is adopted by the Department of Justice, the Department of Transportation will be responsible for administering the requirements. At this point PROWAG will be the federal standards for accessibility compliance on public right-of-way. Since PROWAG represents the most

current guidelines in regard to public right-of-way it was used as the guiding federal standards for the plan.

(b) The Americans with Disabilities Act Accessibility Guidelines (ADAAG), published by the U.S. Architectural and Transportation Compliance Board in July, 1991, binding regulatory law in 1992, with several revisions through September 2010, is an appendix to Title III of the ADA. The technical standards of the ADAAG also provide a technical definition for accessible elements. Since PROWAG represents the most current guidelines in regard to public right-of-way it was used as the guiding federal standards for the plan. Since the 2010 ADA Standards for Accessible Design are based off the 2004 ADAAG guidelines, the 2010 ADA Standards for Accessible Design was used as the federal guideline for public buildings and facilities including pedestrian facilities located on public rights-of-way.

(c) Bureau of Local Roads and Street Manual Chapter 41, Illinois Department of Transportation dated January 2006, Highway Standards prepared by the Illinois Department of Transportation last modified on January 1, 2014, Standard Specifications for Road and Bridge Construction dated January 1, 2012 are used as the existing standards and specifications for construction referenced by the City of Highland.

(d) The 2003 International Building Code, Tenth Printing, published by the International Code Council in December 2002. The 2003 International Building Code, IBC, is the design standards established by the City of Highland for building construction within the City of Highland. The 2003 IBC was utilized while analyzing City buildings and facilities.

(e) The 1997 Illinois Accessibility Code, published by the State of Illinois Capital Development Board and effective as of April 24, 1997. The 1997 Illinois Accessibility Code is listed as a code adopted by the City. The 1997 Illinois Accessibility Code was utilized while analyzing City buildings and facilities.

4.3 Definitions

See Appendix 1.1 for a list of definitions used through the Transition Plan.

4.4 Implementation of ADA Design & Construction Standards for Public Rights-of-Way

4.4.1 New Construction/New Alignment

All areas of newly designed and constructed facilities located within City regulated right-of-way shall comply with all applicable ADA standards.

4.4.2 New Construction/Existing Alignment

Each addition to an existing City regulated public right-of-way shall comply with all applicable ADA standards except as modified in Section 4.4.3.

4.4.3 Alterations to Existing facilities/Existing Alignment

When existing elements located within City regulated public right-of-way are to be altered, each altered element shall comply with all applicable ADA standards except as modified below:

(a) Exception: In alterations, where compliance with applicable provisions is technically infeasible, the alterations shall comply with the standards to the maximum extent possible without placing undue burden on the City.

(b) Exception: When an alteration is tying into an existing element that does not meet ADA standards at a project terminus, all sidewalk panels except the sidewalk panel directly adjacent to the existing elements shall comply with all applicable ADA standards. The sidewalk panel from existing to new shall not result in reduced accessibility.

(c) Prohibited Reduction in Access: An alteration that decreases the accessibility of a public right-of-way or site arrival points to the buildings or other facilities adjacent to the proposed adjustments on public right-of-way, below the requirements for new construction at the time of the alteration will be prohibited.

4.4.4 Approval Procedures for Exceptions and Technically Infeasible Conditions

The City of Highland requires a written request for making all determinations of exceptions and technical feasibility. Upon a determination on the status of an exception and technical infeasibility, such determination of the applicable City department shall be final, except that any member of the public can appeal a determination, per the procedures laid out in the City of Highland Grievance Procedures under the Americans with Disabilities Act.

4.4.5 Dimensional Tolerances

All dimensions and numerical requirements contained in these standards and any applicable local, state, and federal codes or statutes are absolute and requirements have been derived taking into account construction practices and constraints, and no dimensional or slope tolerances beyond the stated maximum or minimum dimensions or slopes are allowed. The person responsible for the construction operations will be responsible for ensuring that all equipment is calibrated property. The City reserves the right to have any construction that is not built to the standards as listed, removed and reconstructed at no cost to the City.

5.0 SIDEWALK TRANSITION PLAN

5.1 Inventory Methodology

The self inventory of the pedestrian facilities is one of the requirements for any public entity according to the ADA. The City has created a comprehensive GIS database from the information gathered from the inventory that will be utilized by the City staff for future planning. All pedestrian facilities within the City were inventoried. The information collected was then analyzed using a scoring system that will guide the City's sidewalk repairs and construction scheduling.

Data was collected using a mobile GIS data collection unit. The unit had customized forms for OA staff to insert data that they collected related to sidewalks, obstructions, and curb ramps. The staff was trained on the current ADA guidelines and field procedures. The scoring was modified as necessary to reflect the goals determined by the City in prioritizing repairs.

Collection procedures for sidewalk segments, obstructions, and curb ramps were done by walking every block of pedestrian accommodations within the City. The basic surveyor duties were as listed below:

(a) Travel the sidewalk and curb ramps collecting data using the mobile GIS data collection unit.

(b) Visually inspect, measure, and record observations utilizing the drop down menus created inside the mobile GIS unit.

(c) Download the information off of the GIS unit at the end of every workday to eliminate the possibility of losing data.

(d) Discuss with the supervisor any problems or field judgments for non-typical situations to ensure consistency.

5.2 Sidewalk Data Collected

The sidewalk inventory was conducted in segments based on City blocks. A sidewalk segment is considered a continuous length of sidewalk between two termini. When sidewalk was present for the length of the block, the termini was the intersecting roadways and at intervals of approximately 200 feet. See Appendix 1.2 for the sidewalk data measurements collected.

5.3 Obstruction Data Collected

Obstructions were recorded where encountered along the sidewalk section. There could be several obstruction shots taken within a sidewalk segment. See Appendix 1.3 for the obstruction data to be collected. Where obstructions were present within a curb ramp, the obstructions were noted during the curb ramp data inventory.

5.4 Curb Ramp Data Collected

Detailed measurements were taken at each curb ramp to determine ADA compliance. See Appendix 1.4 for the curb ramp data collected.

5.5 Prioritization and Scoring

The next step was converting the field information gathered into meaningful results. The data was downloaded into the City's GIS database allowing for a graphical representation of all information collected. A scoring system was developed to assist the staff in prioritizing the severity of sidewalk segments and curb ramps. Each component of the ADA compliance criteria that was gathered during the sidewalk and curb ramp inventory was assigned a score based on the perceived impact on pedestrian travel. Since obstructions impact the functionality of the respective sidewalk segments and curb ramps, the obstruction data was also tied into the data sets. Obstructions located within a curb ramp are included in the Curb Ramp Impedance Score. For the sidewalk score, a separate Obstruction Impedance Score was determined for sidewalk segments to account for the possibility of multiple obstructions being present along one given sidewalk segment.

The sidewalk section and curb ramps were then evaluated based on not only physical condition but proximity to schools, government buildings, and other pedestrian traffic generators. The goal of this scoring system is to assign the lowest rating to a non-compliant sidewalk that is the most likely to have a high amount of pedestrian traffic. An activity factor (between 1 and 2) was developed as a multiplier for the sidewalk and ramp score and was applied based on the geographic location with respect to a predefined set of pedestrian generators. The activity factor takes into account the proximity of a sidewalk or curb ramp segment to various pedestrian traffic generators (e.g. Schools, Parks, and City buildings). An activity factor of 1, the lowest score, represents a segment that is within a close proximity to all pedestrian traffic generators. While a 2, the highest score represents that is not near any of the pedestrian traffic generators. Both the sidewalk segments and curb ramps are scored on a scale between 1 and 100 with 1, the lowest score, representing a non-existent sidewalk segment or curb ramp within the proximity of all pedestrian traffic generators and 100, the highest score, representing a segment with no ADA deficiencies that is outside the proximity of all the pedestrian traffic generators. See Appendix 1 for scoring of sidewalks and curb ramps within the City.

The established scoring system equations are:

Sidewalk Segments (Between 1 AND 100)

*Sidewalk Score = Activity Factor * (Impedance Score + Sidewalk Obstruction Score)*

Curb Ramps (Between 1 AND 100)

*Curb Ramp Score = Activity Factor * Curb Ramp Impedance Score*

5.6 Activity Factor

The closer a particular sidewalk or curb ramp is located to various trip generators and transportation facilities, the higher the likelihood of pedestrian movements. The activity factor takes into account these traffic generators and predicts the likelihood of pedestrian usage based on seven different categories. The closer a sidewalk segment or curb ramp is to a traffic generator the higher the likelihood of pedestrian traffic utilizing the segment or curb ramp, which will yield a higher activity score. The Activity Factor sums the activity scores and divides by the maximum number of available activity scores. That number is then added to 1 to get the Activity Factor (See Equation below). An Activity Factor with a lower number represents a greater potential likelihood of pedestrian traffic.

Activity Factor (Between 1 AND 2)

Activity Factor = 1 + (Sum of Activity Points/Maximum Number of Activity Points)

See Appendix 1.6 for the traffic generators used as part of the Pedestrian Facility Report and the point values attached based on the proximity to the various traffic generators.

5.7 Impedance Score

Impedance scores are based on the ADA criteria developed and collected during the data collection process. See Appendix 1.2, 1.3 and 1.4 for the data collected. The impedance score is multiplied by the activity factor to create the barrier score. The impedance score for the sidewalk segments, obstructions, and curb ramps were developed based on independent and separate criteria.

5.7.1 Sidewalk Impedance Score

The sidewalk impedance score focuses on sidewalk characteristics that affect the usability of the sidewalk. The score is based on the severity of defects along a sidewalk section. When a sidewalk is present the impedance score will be based on 4 different criteria (maximum score of 25 points). When a sidewalk is not present the impedance score will be a value of 1 point and no additional criteria will be collected. The maximum score of 25 points represents that no deficiencies are present. See Appendix 1.7.1 for the 4 different criteria collected for each sidewalk segment.

Impedance Score (Between 1 AND 25)

Impedance Score = (Sum of Sidewalk Factors)

5.7.2 Obstruction Score

The obstruction score focuses on various obstructions that affect the usability of a sidewalk segment. The score is based on the severity and number of defects along a segment. Each obstruction is scored based on its individual severity and then all the obstructions in a given segment are summated. The obstruction score has a maximum point value of 25 points and is based on the following equation:

Obstruction Score (Between 1 AND 25)

$$\text{Obstruction Score} = 25 - \left[\frac{\sum \text{Obstruction Point Values}}{\text{Length of Sidewalk Segments}} * 25\right]$$

See Appendix 1.7.2 for the point value for each obstruction collected during the data collection process.

5.7.3 Curb Ramp Impedance Score

The curb ramp score focuses on characteristics that affect the usability of the curb ramp. The score is based on the number and severity of defects at a given curb ramp. The scores were assigned per individual curb ramp. If more than one curb ramp was present at a quadrant, each ramp was evaluated on its individual merits. The curb ramp score is based on 10 different criteria (maximum score of 50 points). If a curb ramp was not present where necessary, i.e. sidewalk on

both sides of the roadway and no curb ramps at the intersection, the curb ramp was assigned a point value of 1. A maximum score of 50 points represents a curb ramp without deficiencies.

Curb Ramp Score (BETWEEN 1 AND 50)
Curb Ramp Score = Sum of Curb Ramp Factors

See Appendix 1.7.3 for the point value for each deficiency collected during the data collection process.

5.8 Potential Funding Sources

There are several local, state and federal funding sources available to assist municipalities with capital improvement projects. Most of these programs are competitive and have individual restrictions that must be reviewed for compliance with the proposed project. Below are descriptions of a few funding sources that may be applicable to the implementation of the Plan.

5.8.1 City of Highland Budget

The City of Highland currently has a City Budget that includes several different programs related to the implementation of the Plan.

(a) New Sidewalk Program: This program is an annual fund to add sidewalks where sidewalks are not currently constructed. This program should be guided by the Plan. Priority should be given to the projects that score the highest based on the criteria in this plan.

(b) Sidewalk Replacement Program: This program is an annual fund to repair/reconstruct existing sidewalks and curb ramps. This program should be guided by the Plan. Priority should be given to the projects that score the highest based on the criteria in this plan. This program also includes funding to construct/reconstruct curb ramps to meet ADA compliance.

(c) Sidewalk Specific Funding: Additionally the City may determine that a sidewalk segment in the City may require either expansion or reconstruction outside the funding provided in (a) and (b). This funding should be guided by the Plan. Priority should be given to the project that score the highest based on the criteria in this plan.

5.8.2 Private Developers

There is a variable amount of private development occurring within the limits of the City of Highland at any one time. These projects typically have a direct impact on the adjacent public right-of-way. A City ordinance should be developed requiring Developers, as a condition of the approval of a project, to construct or improve pedestrian accommodations directly adjacent to the private development. On larger projects that may include the construction of new intersections with traffic signals, the developer should be required to include pedestrian accommodations including but not limited to curb ramps, marked crosswalks, pedestrian signals, and accessible pedestrian devices.

On new subdivision development, pedestrian accommodations should be constructed in accordance with City design standards and curb ramps installed at all intersections. Before the City takes over jurisdiction of the roadways, the City should ensure that all pedestrian accommodations meet all applicable ADA codes and standards. The Public Works Department

will be responsible for ensuring that all new construction within public right of way is constructed to meet ADA compliance.

5.8.3 Federal / State Programs

This is not an all-encompassing list of the available federal programs. Funding sources should be monitored and sought as situations arise to complete the goals and objectives of the City and the Plan.

(a) Surface Transportation Plan (STP): The STP program provides flexible funding for states and localities for improvements on public roads and bridges, transit capital projects, and improvements to transit terminals and facilities. STP funds include STP-S funds which are sub allocated to metropolitan areas with populations over 200,000 including the St. Louis Metropolitan area. STP-E funds are spent on "transportation enhancements" including historic preservation, alternative non-motorized transportation, and landscaping. STP funds can be used for wide variety improvements including road improvements with accompanying pedestrian accommodations as well as new construction and reconstruction of sidewalk and curb ramps. The East West Gateway Council of Governments currently administers STP funds for the St. Louis Metropolitan area.

(b) Congestion Mitigation and Air Quality Improvement Program (CMAQ): The CMAQ program provides funds to help mitigate congestion and improve air quality. CMAQ projects commonly include intersection improvements and reconstruction. Pedestrian accommodations including accessible pedestrian signals can be included with CMAQ projects to improve pedestrian safety at the intersection. The East West Gateway Council of Governments currently administers CMAQ funds for the St. Louis Metropolitan area.

(c) Transportation Alternatives Program (TAP): The Moving Ahead for Progress in the 21st Century (MAP-21) combined together multiple funding sources including Safe Routes to Schools (SRTS) and Recreational Trails Program (RTP). Money is still allocated for projects that were previously under these funding sources through the Transportation Alternative Program (TAP). The East West Gateway Council of Governments currently administers TAP funds for the St. Louis Metropolitan area. Additionally, the Illinois Department of Transportation administers ITEP funding for similar projects.

(d) Transportation, Community, and System Preservation (TCSP): The TCSP program provides funds to improve the efficiency of the existing transportation system, reduce the environmental impacts of transportation, and ensure efficient access to jobs, services, and centers of trade. TCSP funds can be used to improve transportation corridors including pedestrian accommodations as well as provide pedestrian access to various jobs, services, and centers of trade within the City. TCSP funding is through the Illinois Department of Transportation.

5.9 Monitoring of Sidewalk Transition Plan

There are numerous construction projects within the City of Highland at any one time. The majority of these projects include pedestrian accommodations in some form or another. All curb ramps and sidewalks currently being constructed or constructed in the future on City-owned right-of-way should be inspected by the Public Works Department to ensure ADA compliance. It is intended for the new information to be logged into the GIS system using the same mobile GIS that was utilized in the original catalog. If the construction replaces an existing sidewalk or curb ramp, the new data

should be stored over the existing data to provide an up-to-date look at the status of the Transition Plan. If the project includes an expansion to the existing pedestrian network, the data should be added to the existing GIS system. The types of projects under which curb ramps or other pedestrian improvements will be constructed and inspected are the following:

(a) Curb ramps and/or sidewalk improvements undertaken under the jurisdiction of the City of Highland or its Contractors as part of the City Budget or other construction project.

(b) Curb ramp and/or sidewalk improvements undertaken by other agencies or private parties within the City over which the City has jurisdiction. The pedestrian accommodations constructed by private parties should be inspected and found to meet all applicable ADA standards before the City approves the construction.

(c) Curb ramps and/or sidewalk improvements undertaken as part of the Plan.

6.0 CITY BUILDING AND FACILITIES TRANSITION REPORT

6.1 Inventory Methodology

The self inventory of the City owned buildings and facilities is one of the requirements for any public entity according to the ADA. An individual ADA Transition Evaluation was prepared for each building or facility documenting ADA deficiencies. A qualified architect inspected each building for compliance. The ADA checklist, *ADA Checklist for Readily Achievable Barrier Removal*, was developed for the New England ADA Center, which is a project by the Institute for Human Centered Design and the ADA National Network. A copy of the checklist can be found in Appendix 2.1.

Programmatic level cost estimates were developed based on the 2012 RS Means Building Construction Cost Data published by Reed Construction Data. The cost estimate for each City owned building and facility can be found in Appendix 2.1 and the cost estimate for City parks can be found in Appendix 2.2. Each Building Facility Report was also converted into a pdf and hyperlinked to allow for insertion into the City's GIS network.

The City building and facilities documented were:

(1) Admin Building (Public Works)
(2) City Hall
(3) Electric Department
(4) Fire Station #1
(5) Fire Station #2
(6) Highland Cemetery
(7) Highland Communication Services
(8) Korte Recreation Center
(9) Police Department
(10) Power Plant
(11) Streets & Alleys
(12) Waste Water Treatment Plant
(13) Water Treatment Plant
(14) Water-Sewer Maintenance Building
(15) Weinheimer Community Center

The City park facilities documented were:

(1) Glik Park
(2) Hoffman Park
(3) Merwin Park
(4) Plaza Park
(5) Silver Lake Park
(6) Spindler Park
(7) Tot Lot Park
(8) Parks and Recreation Maintenance Building
(9) Rinderer Park (Currently in design phase)
(10) Lindendale Park

6.2 Prioritization

Improvements to buildings and facilities will be prioritized in two ways. The first set of priorities will follow the *ADA Checklist for Readily Achievable Barrier Removal* (obtainable at www.adachecklist.org), developed for the New England ADA Center, which is a project by the Institute for Human Centered Design and the ADA National Network. The second set of priorities will be based off of a "usage assessment survey" administered by the City of Highland. The Police Station and Fire Station #2 were moved to the bottom of the priority list as the City currently has plans to construct a new public safety building to replace these buildings.

6.2.1 Prioritization: ADA Checklist for Readily Achievable Barrier Removal

The checklist follows the four priorities in the Department of Justice ADA Title III regulations. These priorities are equally applicable to state and local government facilities.

The regulation suggests that a public entities first priority should be to enable individuals with disabilities to physically enter its facility. This priority on "getting through the door" recognizes that providing physical access to a facility from public sidewalks, public transportation, or parking is generally preferable to any alternative arrangements in terms of both business efficiency and the dignity of individuals with disabilities.

The next priority is for measures that provide access to those areas of a place of public accommodation where goods and services are made available to the public. For example, in a hardware store, to the extent that it is readily achievable to do so, individuals with disabilities should be given access not only to assistance at the front desk, but also access, like that available to other customers, to the retail display areas of the store.

The third priority should be providing access to toilet rooms, if toilet rooms are provided for use by customers or clients.

The fourth priority is to remove any remaining barriers to using the public entities facilities, for example by lowering telephones.

The four priorities are:

(1) Approach & Entrance
(2) Access to Goods and Services
(3) Toilet Rooms
(4) Additional Access

Additional Checklists:
(P) Play Areas
(F) Fishing Piers & Platforms
(R) Recreational Boating Facilities
(M) Miscellaneous Sports Activities

6.2.2 Prioritization: Usage Assessment Survey

The City owned buildings and facilities have been prioritized based off the "usage assessment survey" and conversations with City employees. A higher priority was placed on buildings and facilities that the public utilizes. ADA upgrades will generally follow this priority list but may vary based on planned upgrades to various buildings including but not limited to restorations, renovations, and construction of new City buildings and facilities. Additionally, should an employee whose work functions take place in any City buildings and alterations are necessary to accommodate the employee, this building should be moved up the list. Improvements will be made as City resources allow. The priority of City buildings and facilities were split into three general groups; high priority buildings (daily public use), medium priority buildings (City owned buildings not utilized by public), low priority buildings (planned to be replaced). The priority of City buildings and facilities are:

<u>High Priority Buildings</u>

(1) City Hall
(2) Korte Recreation Center
(3) Weinheimer Community Center

<u>Medium Priority Buildings</u>

(4) Admin Building (Public Works)
(5) Electric Department
(6) Fire Station #1
(7) Highland Cemetery
(8) Highland Communication Services
(9) Streets & Alleys
(10) Power Plant
(11) Water Treatment Plant
(12) Water-Sewer Maintenance Building
(13) Waste Water Treatment Plant

<u>Low Priority Buildings</u>

(14) Police Department
(15) Fire Station #2

The priority of City parks are:

(1) Glik Park
(2) Plaza Park
(3) Spindler Park
(4) Tot Lot Park
(5) Silver Lake Park
(6) Hoffman Park
(7) Merwin Park
(8) Lindendale Park
(9) Parks and Recreation Maintenance Building

6.3 Potential Funding Sources

No funding sources identified at this time.

6.4 Monitoring of Buildings and Facilities Transition Plan

All future City-owned building construction or renovation should be inspected / overseen by the ADA Coordinator or City staff under their direction to ensure ADA compliance.

EXHIBIT A

NOTICE UNDER THE AMERICANS WITH DISABILITIES ACT

City of Highland
Notice Under the Americans With Disabilities Act

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 ("ADA"), the City of Highland will not discriminate against qualified individuals on the basis of disability in its services, programs, or activities.

Employment: The City of Highland does not discriminate on the basis of disability in its hiring or employment practices and complies with the regulations promulgated by the U.S. Equal Employment Opportunity Commission under tile I of the ADA.

Effective Communication: The City of Highland will generally, upon request, provide appropriate aids and services leading to effective communication for qualified persons with disabilities so they can participate equally in the City of Highland's programs, services, and activities, including qualified sign language interpreters, documents in Braille, and other ways of making information and communications accessible to people who have speech, hearing, or vision impairments.

Modification of Policies and Procedures: The City of Highland will make all reasonable modifications to policies and programs to ensure that people with disabilities have an equal opportunity to enjoy all of its programs, services, and activities. For example, individuals with service animals are welcome in the City of Highland offices, even when pets are generally prohibited.

Anyone who requires auxiliary aid or service for effective communication, or a modification of policies or procedures to participate in a program, service, or activity of the City of Highland, should contact the office of Kevin Limestall, Chief Building and Zoning Official, (618) 654-7115, klimestall@highlandil.gov as soon as possible but no later than 96 hours (4 days) before the scheduled event.

The ADA does not require the City of Highland to take any action that would fundamentally alter the nature of its programs or services, or impose an undue financial or administrative burden.

Complaints that a program, service, or activity of the City of Highland is not accessible to persons with disabilities should be directed to the office of Kevin Limestall, Chief Building and Zoning Official, (618) 654-7115, klimestall@highlandil.gov.

The City of Highland will not place a surcharge on a particular individual with a disability or any group of individuals with disabilities to cover the cost of providing auxiliary aids/services or reasonable modifications of policies, such as retrieving items from locations that are open to the public but are not accessible to persons who use wheelchairs.

EXHIBIT B
ADA GRIEVANCE PROCEDURE

City of Highland
Grievance Procedures Under
The Americans with Disabilities Act

This Grievance Procedure is established to meet the requirements of the American 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 provision of services, activities, programs, or benefits by the City of Highland. The City's Personnel Policy governs employment related complaints of disability discrimination.

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 fling complaints, such as personal interviews or a tape recording of the complaint, will be made 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:

Kevin Limestall, Chief Building and Zoning Official
2610 Plaza Drive
P.O. Box 218
Highland, IL 62249-0218
Email: klimestall@highlandil.gov

Within 21 calendar days after receipt of the complaint, Kevin Limestall or his designee will meet with the complainant to discuss the complaint and the possible resolutions. Within 21 calendar days of the meeting, Kevin Limestall or his designee will respond in writing, and where appropriate, in a format accessible to the complainant, such as large print, Braille, or audio tape. The response will explain the position of the City of Highland and offer options for substantive resolution of the complaint.

If the response by Kevin Limestall or his designee does not satisfactorily resolve the issue, the complainant and/or his/her designee may appeal the decision within 21 calendar days after receipt of the response to the City Manager or his designee.

Within 21 calendar days after receipt of the appeal, the City Manager or his designee will meet with the complainant to discuss the complaint and possible resolutions. Within 21 calendar days after the meeting, the City Manager or his designee will respond in writing, and, where appropriate, in a format accessible to the complainant, with a final resolution of the complaint.

All written complaints received by Kevin Limestall or his designee, appeals to the City Manager or his designee, and responses from these two offices will be retained by the City of Highland for at least three years.

EXHIBIT C

ADA GRIEVANCE FORM

City of Highland
ADA Grievance Form

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: (___) _____ Email:

Please provide a complete description of your grievance:

_____

_____

_____

Please specify the location of your grievance:

_____

_____

_____

Please state what you think should be done to resolve the grievance:

_____

_____

_____

Please attach additional pages or photo(s) as needed.

Signature: _____ Date: _____

Please return to:

Kevin Limestall, Chief Building and Zoning Official, 2610 Plaza Drive, P.O. Box 218, Highland, IL 62249-0218, Email: klimestall@highlandil.gov

Upon request, reasonable accommodations will be provided in completing this form. Contact the office of Kevin Limestall, Chief Building and Zoning Official, (618) 654-7115, klimestall@highlandil.gov.

EXHIBIT D

MEMORANDUM ON REVIEW OF CITY DOCUMENTS FOR ADA INCLUSION

OATES ASSOCIATES
Engineering + Architecture

ILLINOIS
Eastport Business Center 1
100 Lanter Court, Suite 1
Collinsville, IL 62234
tel 618.345.2200
fax 618.345.7233

MISSOURI
Laclede Gas Building
720 Olive, Suite 1660
St. Louis, MO 63101
tel 314.588.8381
fax 314.588.9605

www.oatesassociates.com

MEMORANDUM

Date: 12/29/2014 **Project #:** 14045
Time: 10:00 AM

To: Lisa Peck, Economic Development Director, City of Highland
From: Steve Keil
Subject: Review of City Documents for ADA inclusion

Ms. Peck,

The following documents were reviewed as part of the ADA Transition Plan being prepared for the City of Highland by Oates Associates, Inc. The documents were reviewed for ADA inclusion and this memorandum will serve as a summary of our findings in addition to recommendations to the various City documents. The documents reviewed and all other permits and applications offered by the City of Highland should be available in alternative formats (e.g. large print and Braille) at the request of citizens. The following documents were reviewed for ADA inclusion:

1.) Comprehensive Plan Update adopted October 2013
2.) Citywide Resource Plan
3.) Highland Trail Master Plan
4.) Code of Ordinances City of Highland, IL
5.) City of Highland Personal Policy Manual
6.) Building Permit Application
7.) Zoning Compliance Application
8.) Variance Application
9.) Zoning Text Amendment Procedure
10.) Special Use Permit Application
11.) Site Plan / Subdivision Application
12.) Building Codes
13.) Limited Permit Information Sheet
14.) Korte Recreation Center Rental Form
15.) Highland Parks & Recreation Program Registration Form
16.) Highland Parks & Recreation Athletic Registration Form
17.) Pavilion Rental Information
18.) Playground
19.) Party Reservation Form / Highland Community Pool
20.) Highland Community Pool Rental Form

Comprehensive Plan Update adopted October 2013

No suggested changes.

Citywide Resource Plan

No suggested changes.

OATES ASSOCIATES
Engineering + Architecture

ILLINOIS
Eastport Business Center 1
100 Lanter Court, Suite 1
Collinsville, IL 62234
tel 618.345.2200
fax 618.345.7233

MISSOURI
Laclede Gas Building
720 Olive, Suite 1660
St. Louis, MO 63101
tel 314.588.8381
fax 314.588.9605

www.oatesassociates.com

MEMORANDUM

Highland Trail Master Plan

Section 4.3.3 Accessibility Issues – Under the Section Wheelchair Users note that any grades over 5% are considered ramps and have a maximum vertical elevation difference of 30 inches. If the vertical difference is greater than 30 inches a 5' x 5' landing with a maximum slope of 2% in all directions. Grades over 5% also require handrails.

Section 4.3.3 Accessibility Issues – Under the Section Visually Impaired note that detectable warning panels are required.

Code of Ordinances City of Highland, IL

Chapter 14-2 Definitions – Add a definition of service animal. Services animals are defined as dogs that are individually trained to do work or perform tasks for people with disabilities.

Chapter 14-37 Fee Schedule – Does the City want to have the fee for service animals?

Chapter 62-56 Goods or merchandise displayed on sidewalk – The code should be modified to state that at no point may the effective width of the sidewalk be less than 4' wide similar to that described in Section 62-60.

Chapter 62-101 (b) Standard driveway construction – Add a statement requiring driveway pavement where sidewalk is present and this portion of the driveway shall not exceed 2% cross slope.

Chapter 66-5-6 General Design Standards – Add PROWAG to general design standards

Chapter 66-5-7.11 Sidewalks – The sidewalks are called out as being accessible per American with Disabilities Act (ADA) change to construct per the standards identified in the PROWAG.

Chapter 66-5-7.11 Sidewalks – IDOT no longer uses the terminology Type B ramp for perpendicular curb ramps. Standard 424001 is still the applicable standard.

Chapter 66-5-7.12 Maintenance Responsibility –MoDOT has created an ADA Checklist to test for ADA compliance following the construction of new sidewalk. Does the City wish to utilize the same checklist to have the Contractor sign off on the construction? The link is located at:
http://contribute.modot.mo.gov/business/contractor_resources/documents/ADAChecklistMarch2014.pdf

Chapter 90-225 Accessible parking requirements – This chapter needs to be updated to meet the new 2010 ADA Standards. The information that needs to be updated in this section include:

1. *Update Table 5.3 to include information on van accessible spaces (For every 6 or fraction of 6 parking spaces required by Table 5.3, at least 1 should be a van accessible space).*
2. *The bottom of the ADA signs needs to be a minimum of 60 inches above the ground. The van accessible space needs a sign reading "van accessible".*
3. *Figure 5.1 needs to be updated to have a level landing at all access aisles and detectable warning surfaces at all level landing locations.*

OATES ASSOCIATES
Engineering + Architecture

ILLINOIS
Eastport Business Center 1
100 Lanter Court, Suite 1
Collinsville, IL 62234
tel 618.345.2200
fax 618.345.7233

MISSOURI
Laclede Gas Building
720 Olive, Suite 1660
St. Louis, MO 63101
tel 314.588.8381
fax 314.588.9605

www.oatesassociates.com

MEMORANDUM

City of Highland Personnel Policy Manual

The City should consider adding a reasonable accommodation statement to the handbook. (Example from City of San Francisco, The City and County of San Francisco is firmly committed to equal opportunity for persons with disabilities in compliance with the Americans with Disabilities Act and state law. The law prohibits discrimination against persons with disabilities during the application process and in all phases of employment. It requires employers to interact with disabled employees to identify reasonable accommodations that will enable them to perform the essential functions of their jobs and to enjoy equal benefits and privileges of employment. The City will provide all reasonable accommodations for the known physical or mental disability of a qualified employee or applicant, unless to do so would pose an undue hardship or direct threat to the health or safety of the individual or others.

If you feel you need an accommodation, inform your supervisor, departmental personnel officer, or reasonable accommodation coordinator immediately. Requests for accommodation will be evaluated on a case-by-case basis. If you request an accommodation, it is essential that you participate fully in the interactive process to address your request. This participation may include but is not limited to, providing medical documentation, meeting with specialists, and identifying restrictions and possible accommodations.

Building Permit Application

No suggested changes.

Zoning Compliance Application

No suggested changes.

Variance Application

Add a statement to the (3) Standards for Consideration that variances that do not meet the American with Disabilities Act will not be approved.

Zoning Text Amendment Procedure

No suggested changes.

Special Use Permit Application

No suggested changes.

Site Plan/Subdivision Application

No suggested changes.

Building Code

No suggested changes.

OATES ASSOCIATES
Engineering + Architecture

ILLINOIS
Eastport Business Center 1
100 Lanter Court, Suite 1
Collinsville, IL 62234
tel 618.345.2200
fax 618.345.7233

MISSOURI
Laclede Gas Building
720 Olive, Suite 1660
St. Louis, MO 63101
tel 314.588.8381
fax 314.588.9605

www.oatesassociates.com

MEMORANDUM

Limited Permit Information Sheet

No suggested changes.

Korte Recreation Center Rental Form

No suggested changes.

Highland Parks & Recreation Program Registration Form

No suggested changes.

Highland Parks & Recreation Athletic Registration Form

No suggested changes.

Pavilion Rental Information

No suggested changes.

Playground

No suggested changes.

Party Reservation Form / Highland Community Pool

No suggested changes.

Highland Community Pool Rental Form

Can the lift be operated by lifeguards or does someone else need to be on duty to operate the pool lift?

Copy:
Attach:

By: Travis Helmkamp, PE

EXHIBIT E

PUBLIC SURVEY

Highland ADA Transition Plan Survey

The City of Highland is in the process of creating a comprehensive ADA transition plan. The plan is mandated by Title II of the American with Disabilities Act (ADA) passed into law on July 26, 1990 for every public entity with over fifty (50) employees. The plan will evaluate municipal buildings and services offered by the City, including sidewalk and curb ramps. We need public input to help determine routes and travel habits as well as any current access problems within the City.

Please complete the form and either drop it off at City Hall or mail it to:

Oates Associates
100 Lanter Court, Suite 1
Collinsville, IL 62234

CITY SIDEWALKS AND CURB RAMPS

1. Which of the following statements best represents you? (circle as many as apply)

    a. I am a City of Highland Resident.
    b. I work in the City of Highland.
    c. I frequently visit the City of Highland for goods and services.
    d. Other (please specify)

    _____

2. How often do you travel on City sidewalks? (circle only ONE)

    a. Daily
    b. Weekly
    c. Monthly
    d. Never

3. What is the usual purpose of your walking trip? (circle as many as apply)

    a. Exercise/health
    b. Personal/family business
    c. Pleasure
    d. School/church/civic
    e. To work
    f. Walking Dog

4. How long do you usually walk on City sidewalks during a day, in minutes? (circle only ONE)

   a. 10 minutes
   b. 20 minutes
   c. 30 minutes
   d. 40 minutes
   e. 60 minutes
   f. 90 minutes

5. Does someone in your household use the sidewalk system to travel to and from school.

   ____Yes
   ____ No

   If so, please list the school that your child attends.

   _____

6. What part of the City should the sidewalks be improved in first? (rank 1-6 with 1 being the most critical)

   ____ Downtown Highland (Plaza Park)
   ____ Subdivisions
   ____ Sidewalk leading to or from schools
   ____ Sidewalk adjacent to commercial developments
   ____ Sidewalk leading to or from City parks
   ____ Sidewalk along major thoroughfares

7. What conditions along City streets/sidewalks keep you from walking more often? (rank 1-5 with one being the most critical)

   ____ Afraid of motor vehicles/drivers
   ____ Difficult/unsafe street crossings
   ____ Personal security/safety
   ____ Sidewalks in poor condition
   ____ Inaccessible condition/ no sidewalk, curb ramps

8. What conditions along City streets/sidewalks are most important to you? (rank 1-6 with one being the most critical)

    ____ Pavements in good, firm condition

    ____ Reasonable crossing times

    ____ Wide sidewalks

    ____ Planting strips between street and walk

    ____ Street trees for shady areas

    ____ Curb ramps at every corner

9. Please identify difficulties or constraints along the routes you normally take:

10. If you have a mobility disability or travel with someone who has a mobility disability, what accessibility problems have you experienced along the City's sidewalk & pedestrian facilities?

City Buildings

11. How often do you utilize City buildings? (circle only ONE)

    a. Daily
    b. Weekly
    c. Monthly
    d. Never

12. What is the usual purpose of your trip? (circle as many as apply)

    a. Attend City meetings
    b. Pleasure (Parks, Ballfields)
    c. Exercise
    d. City business
    e. To work

13. What City building should be upgraded to meet current ADA standards first? (rank 1-7 with 1 being the most critical)

    ____ City Hall
    ____ Weinheimer Center
    ____ Korte Recreation Center
    ____ Latzer Memorial Library
    ____ Admin Building
    ____ Highland Communications Center
    ____ City Park

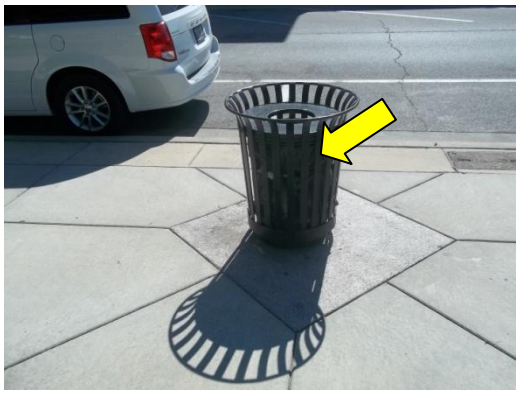
14. What conditions at City properties are most important to you? (rank 1-5 with one being the most critical)

    ____ Accessible parking spaces
    ____ Accessible route from parking lot to building
    ____ Accessible entrances
    ____ Accessible restrooms
    ____ Accessible meeting areas

15. Please identify difficulties or constraints you have experienced at City facilities:

16. If you have a mobility disability or travel with someone who has a mobility disability, what accessibility problems have you experienced at City facilities?

17. Please complete the following photographic Sidewalk evaluation survey. Rank the following obstacles / conditions in order of impact to your daily travel (1 being the highest impact and 5 the least impact.)



_____ Obstructions

_____ Trip Hazards

_____ Cross Slope

_____ Panel Quality

_____ Non-Continuous sidewalks

18. Please complete the following photographic Curb Ramp evaluation survey. Rank the following obstacles / conditions in order of impact to your daily travel (1 being the highest impact and 6 being the least impact.)

_____ No Curb Ramp

_____ Obstructions

_____ Lack of crosswalks

_____ Longitudinal ramp slope

_____ Vertical separation Along ramp

_____ No detectable warning panels

19. Please provide any additional comments:

EXHIBIT F
PUBLIC SURVEY RESULTS AND COMMENTS

APPENDIX 1
SIDEWALK TRANSITION PLAN

1.1 Definitions

The following list of definitions used throughout the entirety of this Appendix:

Accessible Pedestrian Signal (APS, or Audible Pedestrian Signal): A mounted device that communicates information to pedestrians in both visual and non-visual formats (i.e. audible tones and vibrotactile surfaces) related to the pedestrian walk phase.

Clear Width: The effective width of a sidewalk or curb ramp, the actual distance that a pedestrian has to navigate an obstacle as opposed to the full width of a sidewalk or curb ramp section.

Condition: A subjective analysis of the existing usability of a sidewalk or curb ramp based on cracking, spalling, or other visual deficiencies.

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

Crosswalk: The part of a roadway at an intersection that is utilized by pedestrian to get from one side of the roadway to another. If the path is not marked, the crosswalk is represented by an extension of the lateral lines of the sidewalk to the sidewalk on the opposite side of the roadway.

Crosswalk Alignment: If the crosswalk is marked, where the markings direct the pedestrian towards.

Curb: A vertical or rolled transition that serves as a separation between the roadway or gutter and the sidewalk or green space.

Curb Line: A line at the face of the curb that marks the transition from the roadway or gutter to a sidewalk or green space.

Curb Ramp: A short ramp cutting through a curb that provides access between the sidewalk and the adjacent surface.

Curb Type: The transition provided between the roadway or gutter and the sidewalk or green space (i.e. vertical, rolled, etc.)

Detectable Warning Panel: A standardized surface feature built in or applied to walking surfaces or other elements to warn visually impaired people of hazards on a circulation path.

Diagonal Curb Ramp: A singular ramp that can be either perpendicular or parallel that is diagonal to the pedestrian user's path of travel as well as oncoming vehicular traffic.

Driveway: Pavement that provides access for a motorized vehicle to access a single parcel of private property.

Driveway Slope: The cross slope of a sidewalk segment at a location where the driveway crosses the sidewalk.

Encroachment: An obstruction that limits the clear width of a sidewalk or curb ramp that is not fixed (i.e. parked vehicles, tree limbs, or bushes).

Fixed Obstruction: A permanent obstruction (i.e. utility pole or fire hydrant) that limits the clear width of a sidewalk or curb ramp.

Flangeway Gaps: The gap provided at railroad tracks to allow a train's wheel flange to clear the adjacent pavement.

Flare Slope: The sloped sides of a perpendicular or parallel curb ramp where a pedestrian circulation path crosses the curb ramp.

Flush Transition: The transition between a curb ramp and either a landing at the top of a curb ramp or the gutter pan at the bottom of the curb ramp.

Grade Break: The intersection of two surfaces at different grades (slopes).

Green Space: The portion of the public right-of-way, usually grass, located between the sidewalk and the curb line or edge of roadway.

Impedance: A characteristic of a sidewalk or curb ramp that inhibits accessibility for pedestrian access.

Island: A raised or painted area that is located outside the vehicular path that is provided to separate pedestrians and direct traffic movements, and which may also serve as a refuge for pedestrians.

Landing: The sidewalk panel located at the top of a curb ramp.

Landing Slope: The slope of the landing measured both directions, cross and running slope.

Marked Crosswalk: Any portion of a roadway at the intersection or elsewhere that is distinctly indicated for the express use of a pedestrian crossing often marked by painted lines.

Parallel Curb Ramp: A system of two ramps that run parallel to existing curb lines to a lower landing that matches the elevation of the adjacent street.

Pedestrian Circulation Path: The predominant path that a pedestrian can be reasonably expected to utilize to travel from one destination to another (i.e. sidewalk).

Perpendicular Curb Ramp: A system of two ramps with the main slope perpendicular to the curb line that directs traffic perpendicular to vehicular traffic.

Public Right-of-Way: Land or property that is owned by a public entity and usually is acquired or devoted to transportation and/or pedestrian purposes.

Ramp Type: The design of ramp used to connect the pedestrian circulation path to the adjacent roadway (i.e. perpendicular curb ramp, diagonal curb ramp, or parallel curb ramp.)

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

Sidewalk: Any pedestrian accommodation that is located between the curb line or edge of roadway and the adjacent property line.

Street Furniture: Permanent or moveable elements in the public right-of-way such as benches and garbage cans that are intended for use by pedestrians.

Surface: The existing material the sidewalk is constructed of (i.e. concrete, asphalt, brick).

Technical Infeasibility: An alteration to an existing element that has little likelihood of being accomplished due to existing constraints that cannot be overcome without placing an undue burden on the City.

Undue Burden: A requirement that can be achieved only at a significant difficulty or expense to the City or other property owner.

Vertical Displacement: A vertical difference of greater than ¼" along the pedestrian circulation path that can result in a trip hazard.

Walk Interval: The phase of a pedestrian traffic signal during which a pedestrian is to begin crossing a roadway.

1.2 Sidewalk Data Collected

At each end of the sidewalk segment the following measurements and data were collected:

(a) Surface: The type of surface present; including an option for no sidewalk.
(b) Curb Type: Identify whether or not a curb is present, and if present the type of curb (vertical or rolled).
(c) Green Space: Identify whether or not a green space is present, and if present, note the distance between the curb line and sidewalk.
(d) Condition: A subjective analysis of the current aesthetic and physical state of the sidewalk section.
(e) Sidewalk Width: The width of the sidewalk.
(f) Cross Slope: The cross slope of the sidewalk.
(g) Running Slope: The running slope of the sidewalk and whether the running slope varies from the running slope of the adjacent roadway.

1.3 Obstruction Data Collected

The following measurements and data were recorded as obstructions where encountered along the sidewalk section:

(a) Fixed Obstruction: If a fixed obstruction is present, the type of obstruction (e.g. utility poles, inlets, sidewalk grating, or manholes).
(b) Encroachments: If an encroachment is present, the type of obstruction (e.g. tree limbs, parked vehicles, or shrubbery).
(c) Vertical Displacement: If abrupt grade changes are present, the vertical displacement between two adjacent sidewalk panels.
(d) Driveway Slope thru Sidewalk: If a driveway cross slope greater than 2% is present, the cross slope across the sidewalk.
(e) Clear Width: If the clear width at any fixed obstruction or encroachment was less than 4 feet.

1.4 Curb Ramp Data Collected

The following measurements and data were recorded at each curb ramp:

(a) Ramp Type: The type of curb ramp present, including an option for no ramp present
(b) Surface: The type of surface present, including an option for no surface present.
(c) Condition: A subjective analysis of the current aesthetic and physical state of the curb ramp.
(d) Running Slope: The slope of the curb ramp parallel to the direction of travel.
(e) Cross Slope: The slope of the curb ramp perpendicular to the direction of travel.
(f) Flare Slope: The slope of the flares when the curb ramp is in the pedestrian circulation path, including an option for flare slopes outside of pedestrian circulation path.
(g) Ramp Width: The width of the ramp at its narrowest location.
(h) Ramp Length: The length of the ramp at the midpoint of the curb ramp.
(i) Gutter Slope: The slope of the gutter pan parallel to the direction of travel.
(j) Detectable Warning Panels: The type of detectable warning panel present, including an option for no detectable warning panel.

(k) Vertical Displacements: If abrupt grade changes are present, the vertical displacement between the ramp and the landing or the ramp and the curb.
(l) Landing: The dimensions of the sidewalk panel located at the top of the curb ramp.
(m) Landing Slope: The maximum slope in both directions on the landing panel.
(n) Crosswalk Width: The width of the crosswalk if striped, including an option for crosswalk not striped.
(o) Crosswalk Alignment: If the crosswalk is striped, does the crosswalk lead to another curb ramp.
(p) Running Slope of Crosswalk: The slope inside the crosswalk parallel to the direction of travel.
(q) Cross Slope of Crosswalk: The slope inside the crosswalk perpendicular to the direction of travel.
(r) Obstruction: Any fixed object (i.e. utility pole, manholes, fire hydrants) that restricts the pedestrian zone under the minimum width.

1.5 Reserved

1.6 Activity Factor

The following activity scores were included in the Activity Factor equation based on a sidewalk segments or curb ramps proximity to the traffic generators listed below:

(a) Schools: The Highland School District services the residents in the City and does not offer bus service for any student that lives within ¼ mile of the school that they attend. Accessible sidewalks and curb ramps not only provide safe access to students who currently travel to school, but encourage more parents and students to travel to school by foot. This activity score is assigned based on a radial distance to these destinations.

Proximity to Schools	Point Value
< ¼ mile	0
¼ mile – ½ mile	5
> ½ mile	10

(b) Parks: There are 8 parks in the City of Highland that offer a variety of services, programs, and facilities including playgrounds, ball fields, a skate park, Korte Rec Center, and City gardens . The City is committed to providing access to all residents, including those with disabilities, to all the services that City parks offer. This activity score is assigned based on a radial distance to these destinations.

Proximity to Parks	Point Value
< ¼ mile	0
¼ mile – ½ mile	5
> ½ mile	10

(c) Senior Services: Although aging is not legally listed as a disability, disabilities rise with increased age. Seniors who travel by foot are more susceptible to tripping hazards and other impedances. Senior services include senior centers, retirement communities, and nursing homes. This activity score is assigned based on the radial distance to these services.

Proximity to Senior Services	Point Value
< ¼ mile	0
> ¼ mile	5

(d) Government Buildings: Government buildings including City Hall, libraries, and fire and police stations provide a wide area of essential services and programs to residents within the City. The ADA emphasizes the importance of "walkways serving local government offices and facilities" as government buildings are a critical element of the civic experience. This activity score is assigned based on the radial distance to these buildings.

Proximity to Municipal Buildings	Point Value
< ¼ mile	0
> ¼ mile	10

(e) Traffic Generators: Traffic generators including employment center and retail centers within the City. Removing the physical barriers to these traffic generators allows all residents to fully participate in all aspects of civic life. This activity score is assigned based on the radial distance to the traffic generators.

Proximity to Traffic Generators	Point Value
< ¼ mile	0
> ¼ mile	5

(f) MCT Bus Stops: The Madison County Transit System provides dependable, accessible transportation to locations in Highland and throughout Madison County as well as providing service to downtown St. Louis and Metro's light-rail train system. MCT service also provides connections to Metro Bus and St. Clair County Transit District (SCCTD) Routes. This transportation is especially important to the elderly and people with disabilities that rely on the bus system to get to work and be active members of the community. This activity score is based on its proximity to MCT bus stops.

Proximity to MCT Bus Stops	Point Value
< ¼ mile	0
> ¼ mile	10

(g) Street Classification: Arterial and collector routes serve as the major thoroughfares through the City of Highland providing access to many destinations within the City such as shopping centers, employment centers, hospitals, and government offices. Arterial and collector routes typically have higher pedestrian traffic than residential streets due to the connectivity they provide. Residential streets typically only provide access within a specific neighborhood and therefore have lower motor vehicle and pedestrian traffic. This activity score is based on the City of Highland GIS layer of City streets.

Street Classification	Point Value
Principal Arterial	0
Minor Arterial	3
Major Collector	5
Local/Residential	10

1.7 Impedance Score

1.7.1 Sidewalk Impedance Score

The following 4 criteria were collected at each sidewalk segment. The point values for each unique deficiency is listed below and used in the equation list in Section 5.7.1:

(a) Surface: Surface is the existing wearing material of the sidewalk. When sidewalk is not present, pedestrians are forced to either travel in the travel lanes of the adjacent roadway or walk in the grass. This can lead to hazardous pedestrian motor vehicle interactions as well as uneven walking surfaces. When no surface is present it is almost impossible for someone with a mobility disability to safely travel.

Surface	Point Value
No Surface Present	1
Concrete	For Information Only
Brick	For Information Only
Wood	For Information Only
Other	For Information Only

(b) Sidewalk Width: Narrow sidewalks limit the mobility of pedestrian on the pedestrian circulation path. This can lead to a dangerous passing especially when wheelchairs or walkers are involved. Sidewalk width requirements vary based on the presence of a green space between the roadway and the sidewalk so point values were assigned based on the clearance between the sidewalk and the adjacent roadway.

Sidewalk Width (with Green space)	Point Value
< 4’	1
4’ – 5’	12
5’ - 6’	12
>6’	12

Sidewalk Width (w/o Green space)	Point Value
< 4’	1
4’ - 5’	1
5’ - 6’	3
>6’	12

(c) Cross Slope: Cross slope is the slope measured perpendicular to the direction of travel. A cross slope of greater than 2% can make it difficult for wheelchairs to maintain lateral balance especially in downhill conditions.

Cross Slope	Point Value
> 5%	1
3% - 5%	3
2% - 3%	6
<2%	10

(d) Running Slope: The running slope of a sidewalk is the slope parallel to the direction of travel. According to PROWAG standards the running slope can match the running slope of the adjacent roadway, however if the sidewalk running slope does not match the adjacent roadway running slope the slope can be a maximum of 5%. A dangerous running slope can cause wheelchairs to become unstable and difficult to control.

Running Slope	Point Value
>5%	1
<5%	3
Running slope matches road grade	3

1.7.2 Obstruction Impedance Score

The following 3 criteria were assigned to each obstruction observed in the field to describe the limiting factor of the various obstructions. The point values for each unique deficiency is listed below and used in the equation list in Section 5.7.2:

(e) Vertical Displacement: Vertical displacements are the abrupt grade changes between two adjacent sidewalk panels. These changes are often caused by sidewalk settling and tree roots. Vertical Displacements are tripping hazards and especially dangerous to those in wheelchairs, walkers, and the elderly.

Vertical Displacement	Point Value
>1"	10
½" – 1"	6
¼" – ½"	3

(f) Driveway Slope thru Sidewalk: While the cross slope of a sidewalk segment may meet the standards of ADA compliance at the endpoints, often where a driveway crosses a sidewalk the cross slope of the sidewalk follows the driveway slope. A cross slope of greater than 2% can make it difficult for wheelchairs to maintain lateral balance and sudden changes in cross slope may be difficult for the elderly and the visual disabled.

Driveway Cross Slope	Point Value
>8%	4
5% - 8%	3
3% - 5%	2
2% - 3%	1

(g) Clear Width: The clear width is the width of sidewalk surface available for a pedestrian to navigate around an obstacle. The obstacle could be anything from a utility pole and traffic sign to overgrown shrubbery. Although a sidewalk width can meet the minimum ADA standards, if a section of the segment does not meet the minimum width requirement the whole segment is effectively not accessible to a pedestrian specifically those in wheelchairs.

Clear Width	Point Value
<4’	10
>/= 4’	0

1.7.3 Curb Ramp Impedance Score

The following 10 criteria were collected at each curb ramp. The point values for each unique deficiency is listed below and used in the equation list in Section 5.7.3:

(a) Curb Ramp Type: When a sidewalk intersects with a curb and curb cut should be provided per ADA regulations. When a curb cut is not provided to provide access from the sidewalk to the adjacent roadway corridor pedestrians are discriminated against, this is considered the highest priority for improvements. The Curb Ramp Score will vary between 1 and 2 and if no curb ramp is present none of the subsequent deficiencies will be taken into account with the scoring.

Curb Ramp Type	Point Value
No Ramp Present	1
All Other Ramp Types	0

(b) Fixed Obstructions: Fixed obstructions range from utility poles and fire hydrants to wide street signs and low-hanging braches. Fixed Obstructions can limit the clear width of a curb ramp as well as being hazardous to visually impaired pedestrians. A clear width of less than 4’ is considered hazardous. Other fixed obstructions including vertical displacement and broken sidewalks that do not limit the curb ramp to a clear width of less than 4 feet are classified under other deficiencies within the Curb Ramp Impedance Score. The Curb Ramp Score will vary from 2 to 4 and if a fixed obstruction is present none of the subsequent deficiencies will be taken into account with the scoring.

Fixed Obstructions	Point Value
Present – Fixed Obstruction	2
Present – Encroachment	2

(c) Running Slope: The running slope is the slope parallel to the direction of travel. On a curb ramp the running slope is the slope between the edge of pavement and the top of the curb ramp. A steep running slope can cause a wheelchair to lose control or cause the wheels to get stuck at the bottom of the ramp due to the gradient change.

Running Slope	Point Value
>15%	1
12% - 15%	2
8% - 12%	4
<8%	6

(d) Cross Slope: The cross slope is the slope perpendicular to the direction of travel. On a curb ramp a steep cross slope can cause the user to lose balance.

Cross Slope	Point Value
>5%	1
3% - 5%	2
2% - 3%	4
<2%	6

(e) Flared Slope: The flare slope is the slope between the curb ramp and the sidewalk panel or green space besides the curb ramp. If this slope is in the pedestrian circulation path the slope must be less than 10%. Slopes greater than 10% can be a challenge to navigate and can lead to loss of balance. It is possible for the flared slope of a curb ramp to be outside the pedestrian circulation path and therefore the slopes are of no consequence.

Flared Slopes	Point Value
> 10%	1
</= 10%	3
Outside of Pedestrian Circulation Path	3

(f) Curb Ramp Width: Narrow curb ramps limit the mobility of pedestrians and can lead to a dangerous passing especially when wheelchairs or walkers are involved.

Curb Ramp Width	Point Value
<4’	1
4’ - 6’	4
6’ – 8’	4
>8’	4

(g) Gutter Slope: A steep gutter slope leads to a sharp transition from the curb ramp to the pavement. This can lead to wheelchair and walker wheels catching as well as a generally uncomfortable walking situation.

Gutter Slope	Point Value
>8%	1
5% - 8%	3
<5%	6

(h) Detectable Warning Panels: Detectable warning panels inform the visually impaired that they are approaching a dangerous condition and hazard is warranted. On perpendicular and parallel curb ramps they also guide the visually impaired as to the direction of the opposing curb ramp across the roadway.

Detectable Warning Panels	Point Value
Not Present	1
Concrete Mesh / Adhesive Domes	1
Truncated Pavers	3
Truncated Domes	5

(i) Vertical Displacements: The transition between the curb ramp and gutter pan and the curb ramp and the landing needs to be flush due to the potential for tripping hazards. Due to the steep slopes common on curb ramps it is more likely that the pedestrian can lose his/her balance and fall.

Vertical Displacements	Point Value
>1”	1
½” – 1”	3
¼” – ½”	6
<¼”	9

(j) Landing Dimensions: The landing at the top of a diagonal or perpendicular curb ramp provides a safe location for a pedestrian to change direction. The landing at the bottom of the curb ramp provides protection for the pedestrian from motorists.

Landing (Top or Bottom)	Point Value
>/= 4’ in each direction	4
<4’ in each direction	1

(k) Landing Slopes: The slopes at the top landing need to meet ADA requirements in both directions due to the large number of turning movements. Steep slopes in either direction could cause a wheelchair to lose balance and affect the stability of all pedestrian especially the elderly.

Top Landing Slope	Point Value
>2% in either direction	1
</= 2% in either direction	3

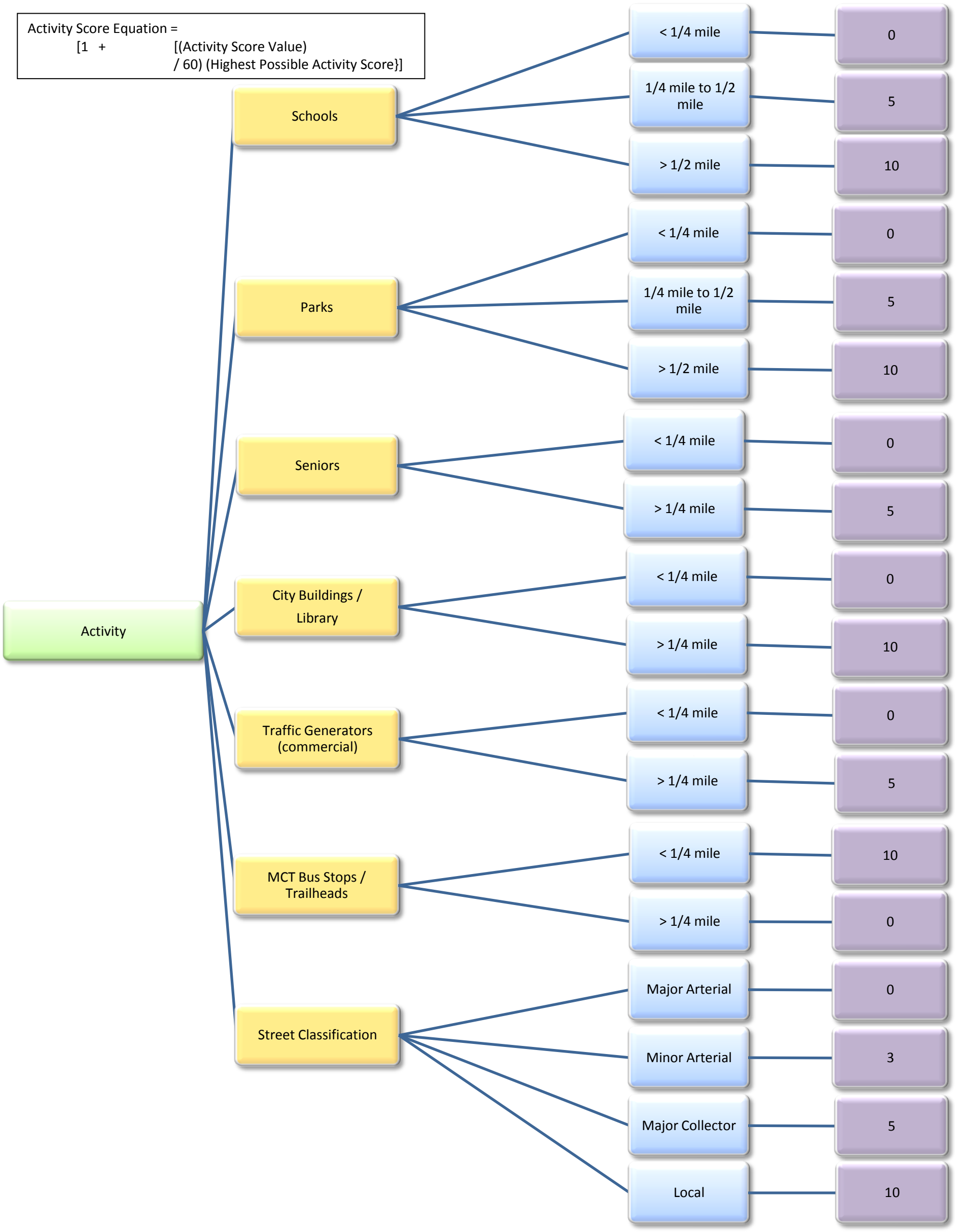
APPENDIX 1.8
DATA COLLECTION MATRICES

ACTIVITY SCORE FLOW CHART

Multiplication Factor between 1 and 2

The following is a graphical representation of the activity score to be applied as a multiplication factor to the curb ramp or sidewalk score as part of the transition plan. The nodes directly right of "Activity" (i.e. Schools, Parks, seniors, etc.) represents the various pedestrian generating activities. The data to the right of the various pedestrian generating activities (i.e. < ¼ mile, ¼ mile to ½ mile, etc.) represents the distance between the various sidewalk segments or curb ramps from the activity. The data to the right of the buffer distances represents the point value that will be assigned based on the segment or ramps distance from the various activities. These points add up to a maximum of sixty points. The activity scores for a given segment or ramp will be divided by the maximum points (sixty) and added to the number 1. The lower the Activity Factor the closer the proximity to pedestrian generators. The Activity Factor will then be multiplied by the curb ramp or sidewalk score to get a maximum score of one hundred points.

Activity Score Equation =
[1 + [(Activity Score Value) / 60) (Highest Possible Activity Score}]



SIDEWALK DATA SCORING FLOW CHART

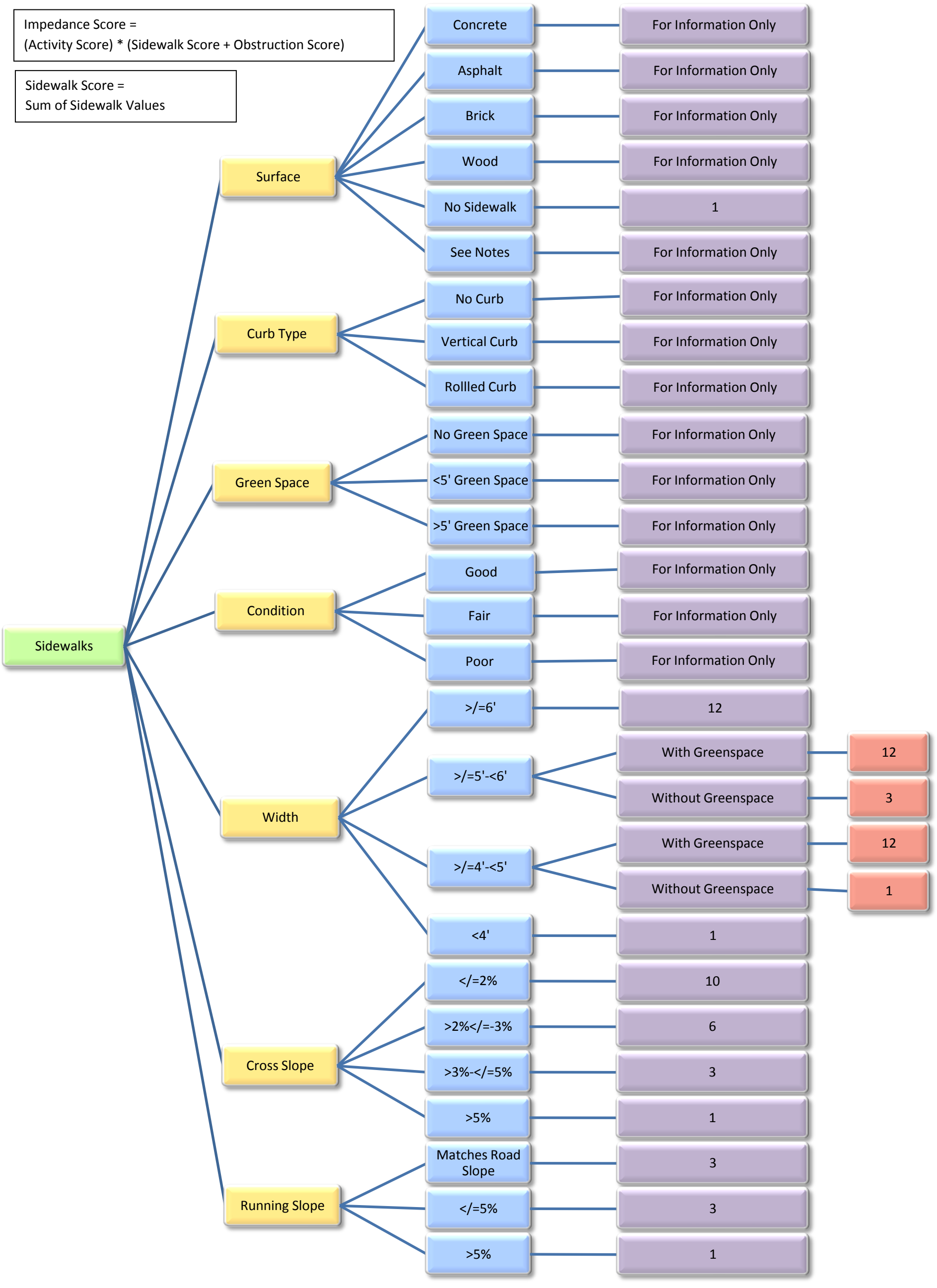
Max Score 25 points (Sidewalk Present)

Score 1 point (No Sidewalk Present)

The following is a graphical representation of the sidewalk data to be collected as part of the transition plan. The main node at the left side of the chart "Sidewalks" represents the feature class for which the data is being collected. The nodes directly right of "Sidewalks" (i.e. Surface, Curb Type, etc.) represents the attributes that will be collected. The data right of the attribute nodes (i.e. Concrete, Asphalt, etc.) represents the options that will be presented to the field crew via a drop down menu. The data on the far right is the point value assigned for the various deficiencies along the sidewalk. The maximum point value for the sidewalk data was twenty-five points. The maximum value of twenty-five points represents a sidewalk with no deficiencies. This value will be added to the obstruction score and multiplied by the activity score to get a total point value for a sidewalk segment.

Impedance Score =
(Activity Score) * (Sidewalk Score + Obstruction Score)

Sidewalk Score =
Sum of Sidewalk Values



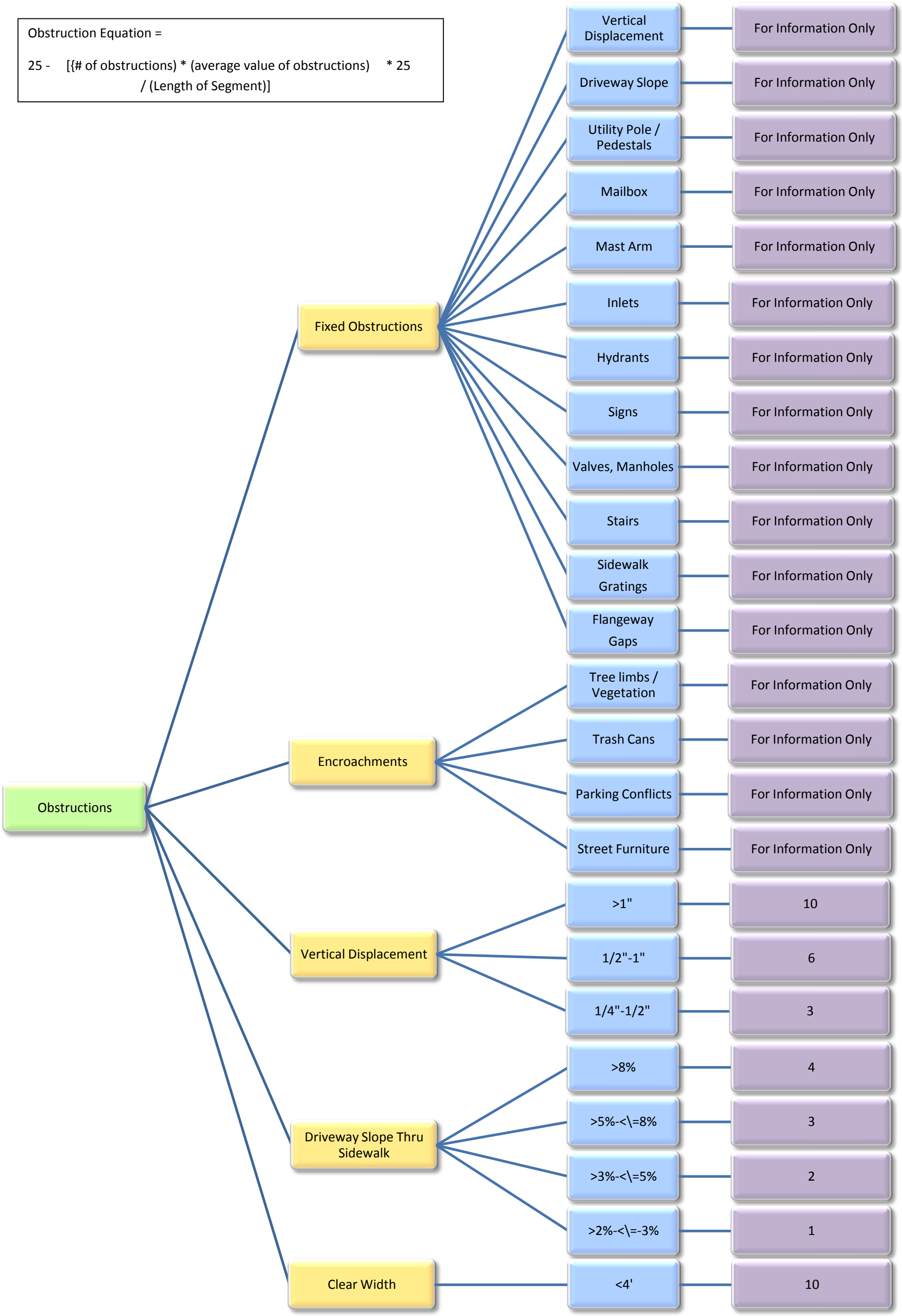
OBSTRUCTIONS DATA SCORING FLOW CHART (SIDEWALK SEGMENTS)

Max Score 25 Points

The following is a graphical representation of the obstruction data to be collected as part of the transition plan. The main node at the left side of the chart "Obstructions" represents feature for which the data is being collected. The nodes directly right of "Obstructions" (i.e. Fixed Obstructions, Driveway Slope, etc.) represents the attributes that will be collected. The data right of the attribute nodes (i.e. Inlets, Mast Arm, etc.) represents the options that will be presented to the field crew via a drop down menu. The data at the far right accounts for the value that will be assigned to each obstruction. This information will be used in the equation provided below; the maximum obstruction score will be twenty-five. A score of twenty-five points represents a sidewalk segment were no obstructions are present. The obstruction score will be a factor of the number and severity of the obstructions divided by the length of sidewalk segment. The obstruction score will be added to the sidewalk score and multiplied by the activity score to calculate the total score for sidewalk segments.

Obstruction Equation =

25 - [{# of obstructions) * (average value of obstructions) * 25
/ (Length of Segment)]



CURB RAMP DATA SCORING FLOW CHART (SHEET 1)

Max Score 50 points

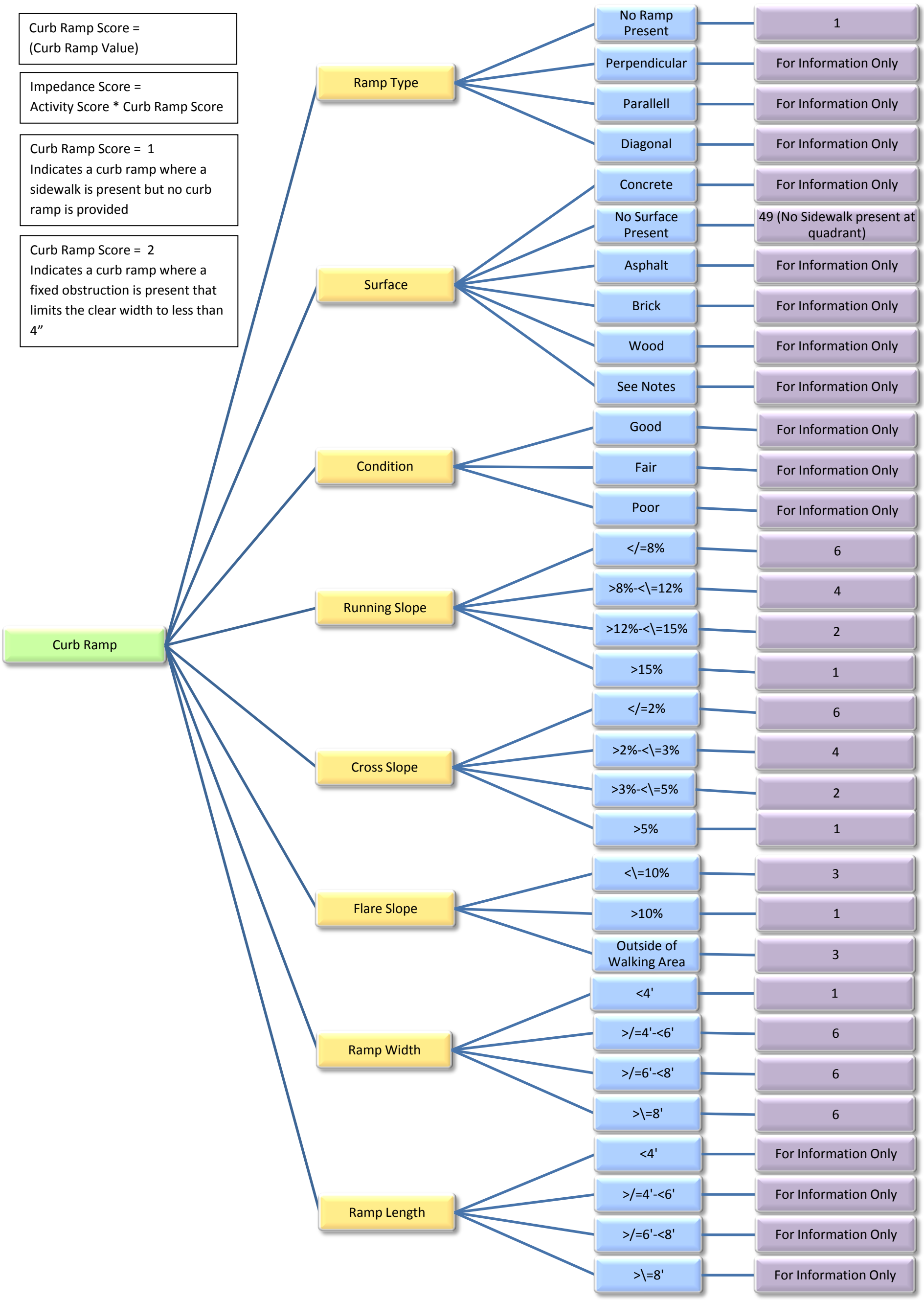
This is the first sheet of curb ramp data. Curb ramps were divided into 2 sheets to provide clarity. The following is a graphical representation of the curb ramp data to be collected as part of the transition plan. The main node at the left side of the chart "Curb Ramps" represents the feature for which the data is being collected. The nodes directly right of "Curb Ramps" (i.e. Surface, Condition, etc.) represents the attributes that will be collected. The data right of the attribute nodes (i.e. Concrete, Asphalt, etc.) represents the various options that will be presented to the field crew via drop down menu. The data at the far right represent the point value that will be assigned to the various deficiencies; if the curb ramp does not have a curb ramp present than a score of 1 will be assigned. If an obstruction is present a score value of 2 points will be assigned. A surface of "no surface present" represents that no sidewalk is present at the curb ramp and forty-nine points will be deducted from the score. The max score of fifty points represents a curb ramp that has no deficiencies.

Curb Ramp Score =
(Curb Ramp Value)

Impedance Score =
Activity Score * Curb Ramp Score

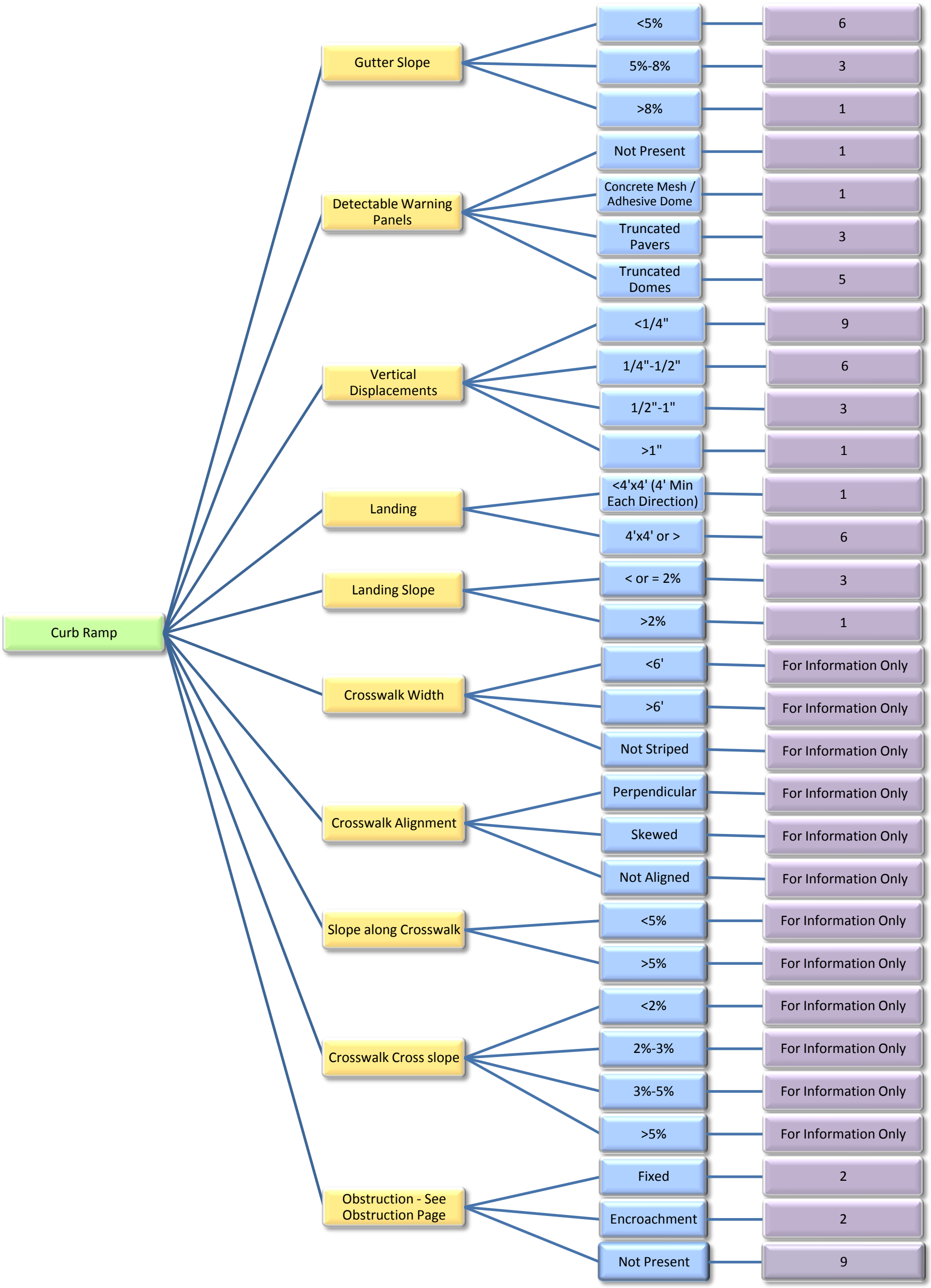
Curb Ramp Score = 1
Indicates a curb ramp where a sidewalk is present but no curb ramp is provided

Curb Ramp Score = 2
Indicates a curb ramp where a fixed obstruction is present that limits the clear width to less than 4"



CURB RAMP DATA SCORING FLOW CHART (SHEET 2)

This is the first sheet of curb ramp data. Curb ramps were divided into 2 sheets to provide clarity. The following is a graphical representation of the curb ramp data to be collected as part of the transition plan. The main node at the left side of the chart "Curb Ramps" represents the feature for which the data is being collected. The nodes directly right of "Curb Ramps" (i.e. Surface, Condition, etc.) represents the attributes that will be collected. The data right of the attribute nodes (i.e. Concrete, Asphalt, etc.) represents the various options that will be presented to the field crew via drop down menu. The data at the far right represent the point value that will be assigned to the various deficiencies; if the curb ramp does not have a curb ramp present than a score of 1 will be assigned. If an obstruction is present a score value of 2 points will be assigned. A surface of "no surface present" represents that no sidewalk is present at the curb ramp and forty-nine points will be deducted from the score. The max score of fifty points represents a curb ramp that has no deficiencies.

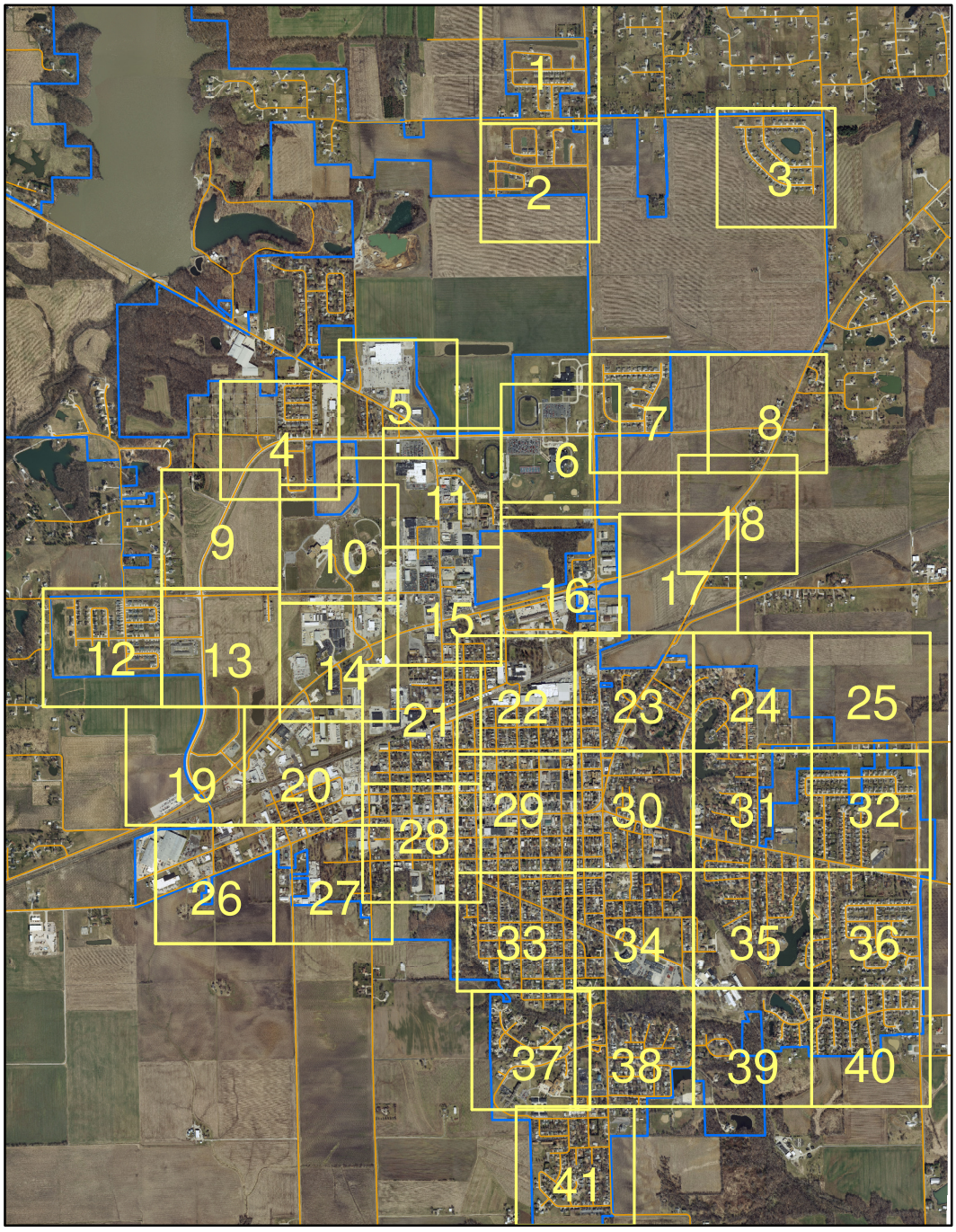


APPENDIX 1.9

AERIAL EXHIBITS FOR SIDEWALK SEGMENTS AND CURB RAMPS

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN REFERENCE MAP



N

0 0.25 0.5 1 Miles

Legend

- Detail Map Boundaries
- Roads and Streets
- Corporate Boundary

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 1

N

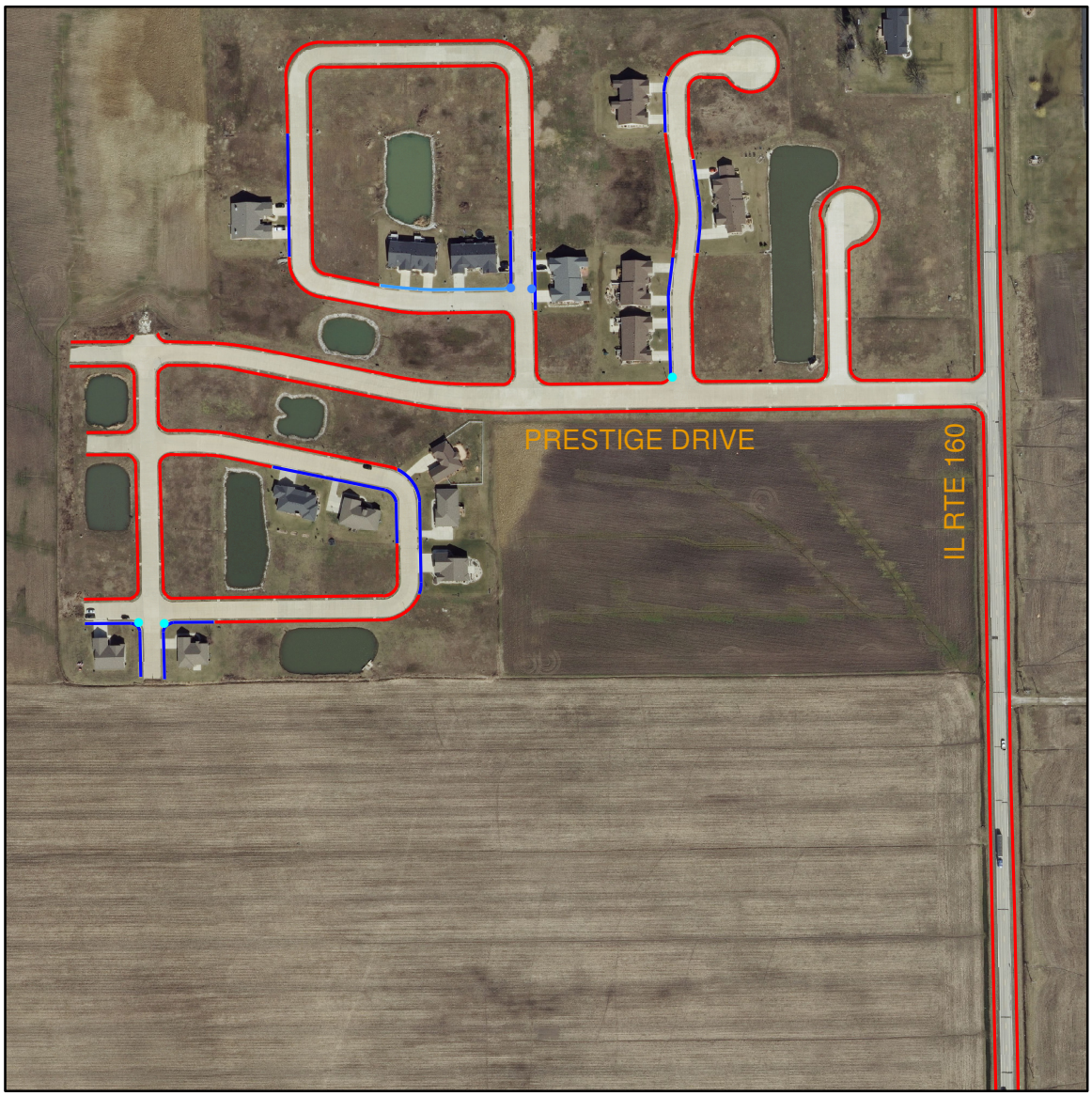
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 2



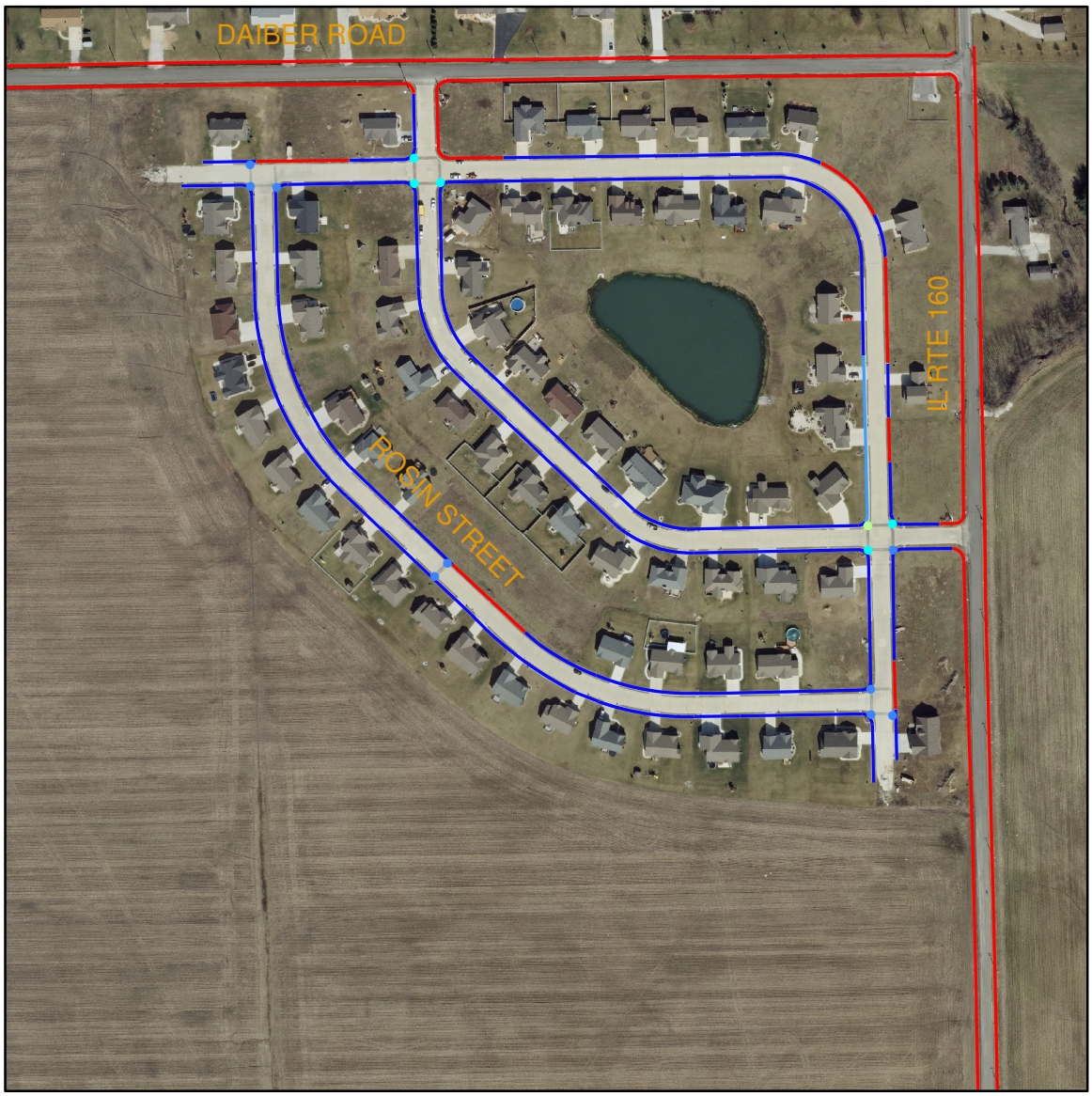
N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

ADA TRANSITION PLAN
GRID 3



N

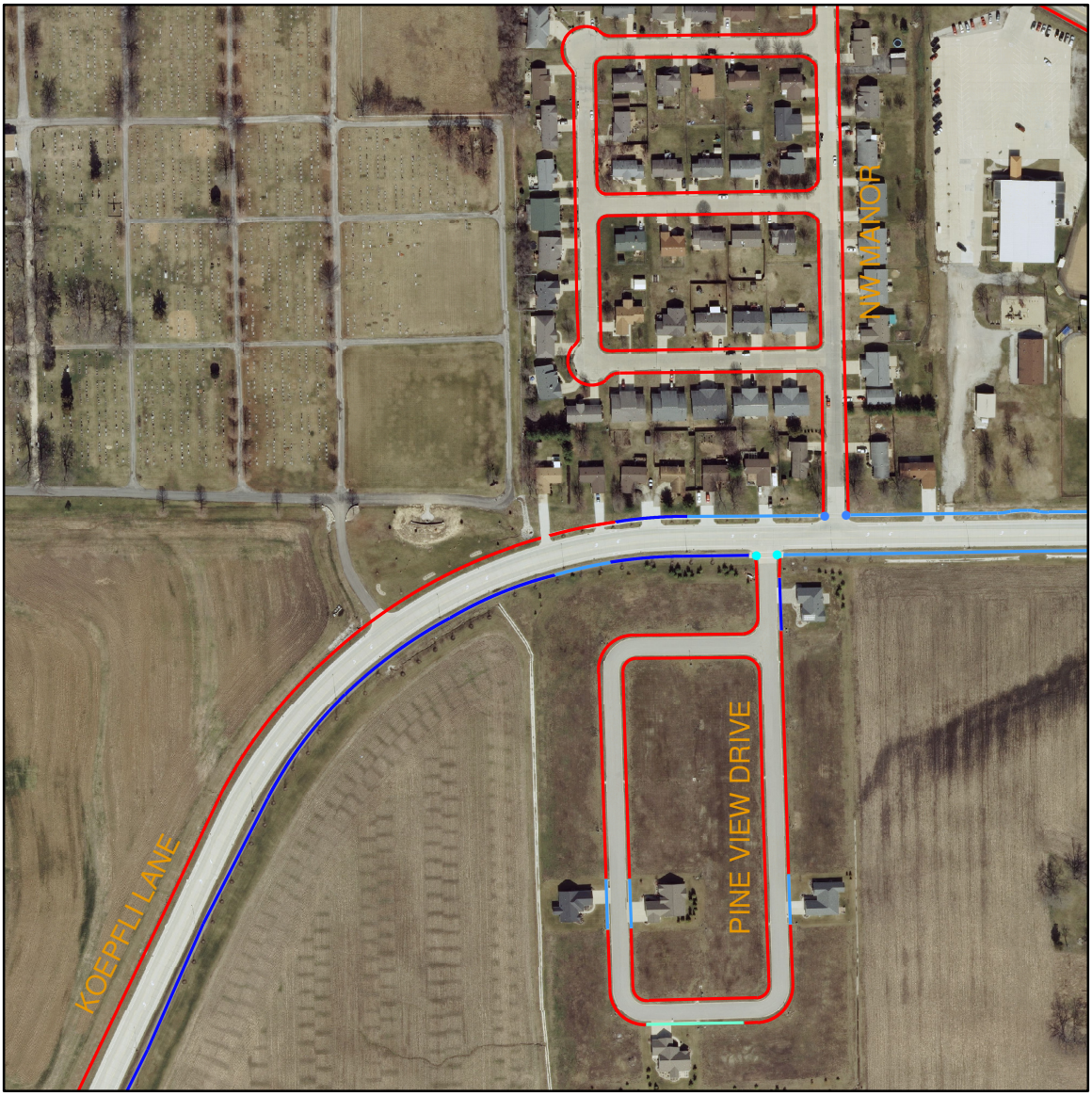
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 4



N

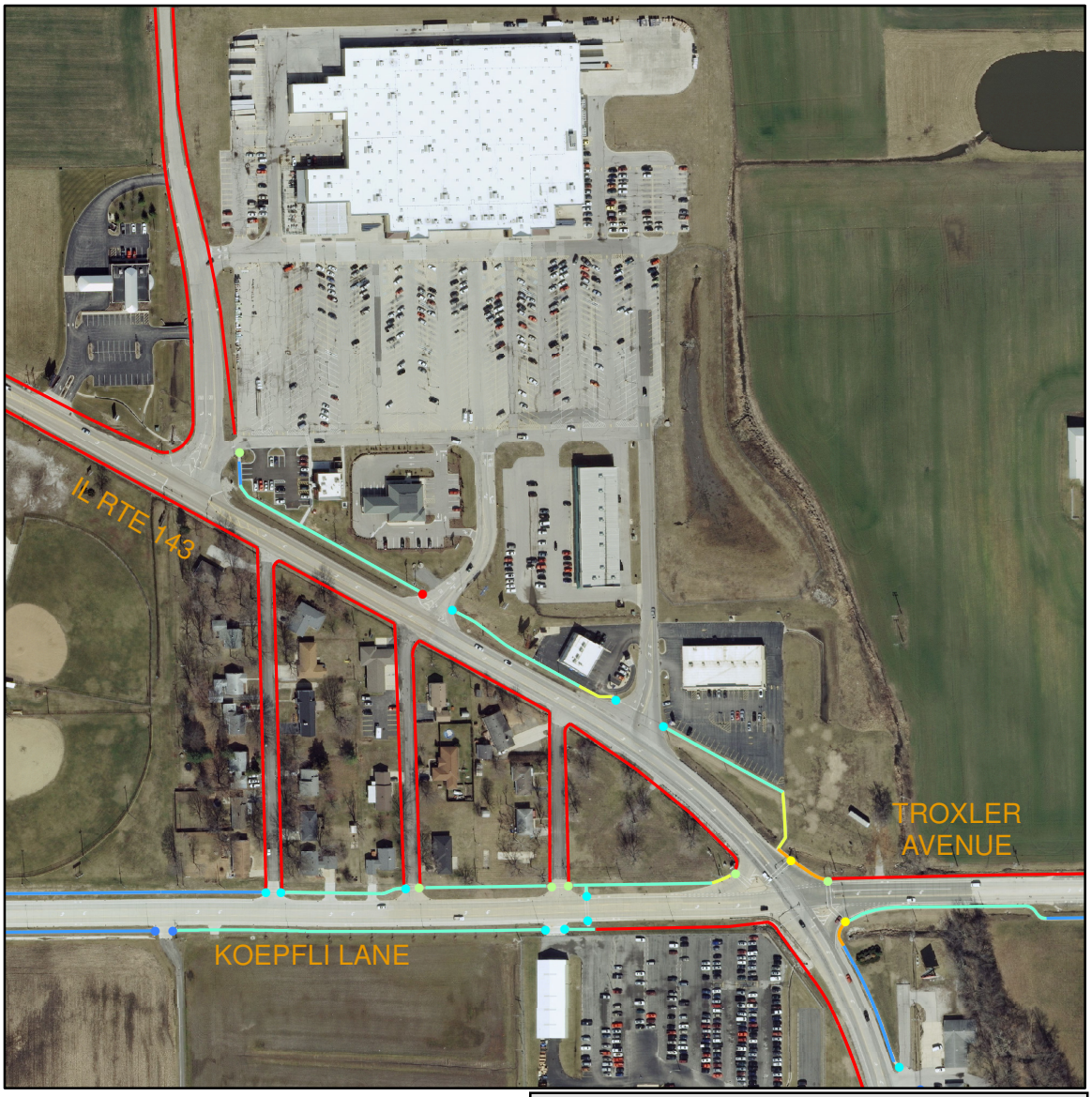
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 5



N

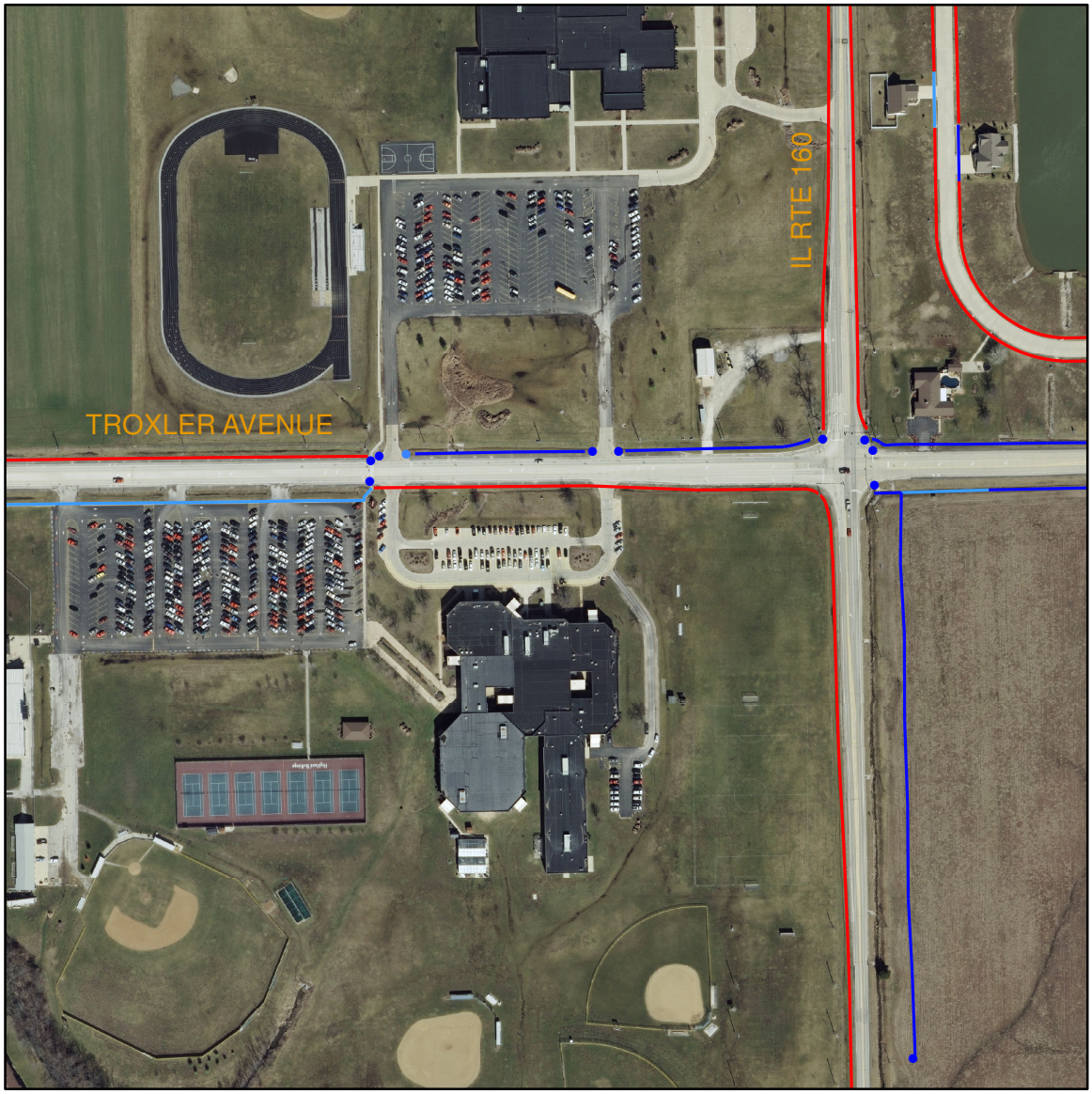
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 6



N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

ADA TRANSITION PLAN
GRID 7

N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

ADA TRANSITION PLAN
GRID 8

N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

ADA TRANSITION PLAN
GRID 9

N

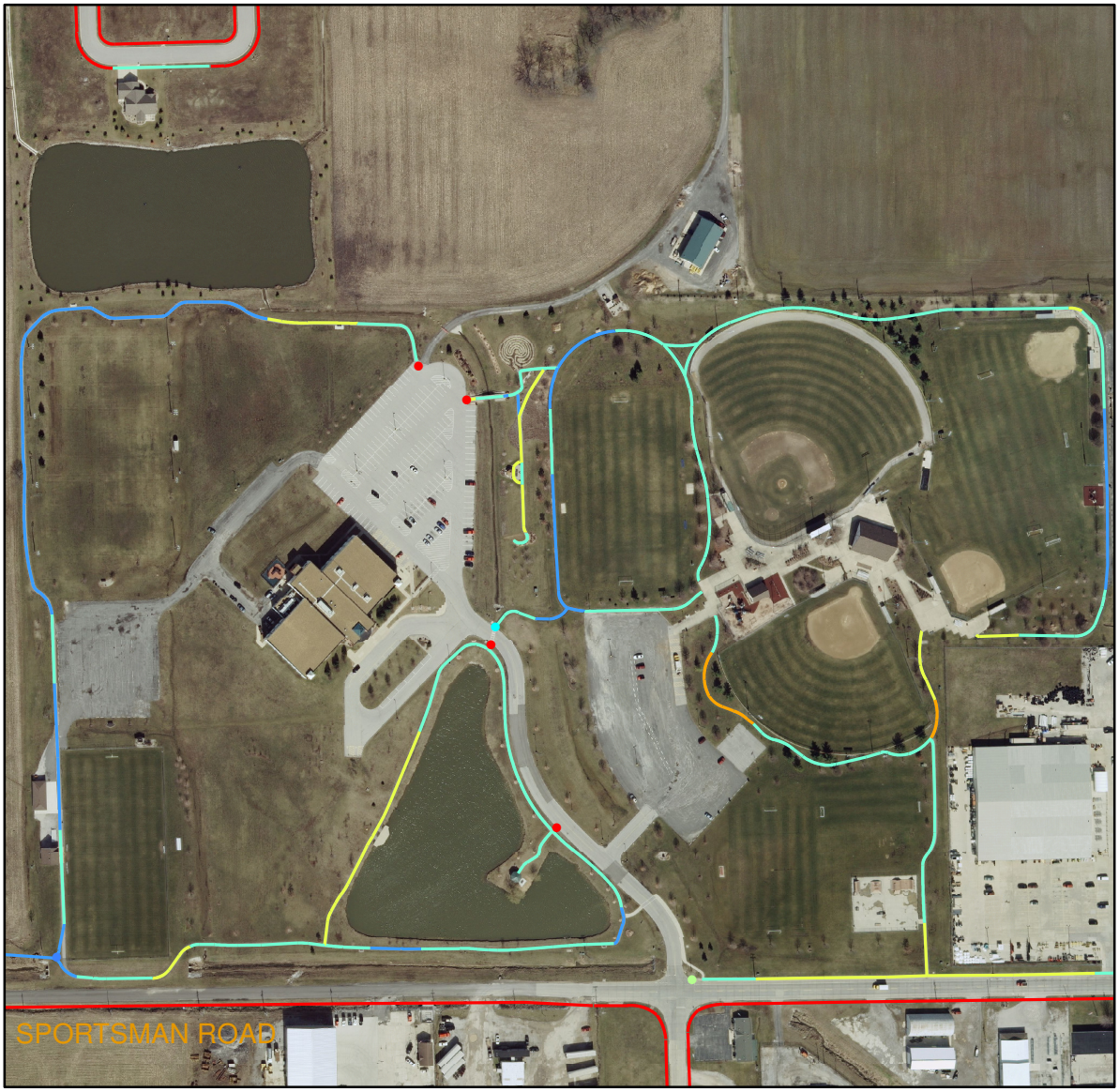
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 10 - GLIK PARK



N

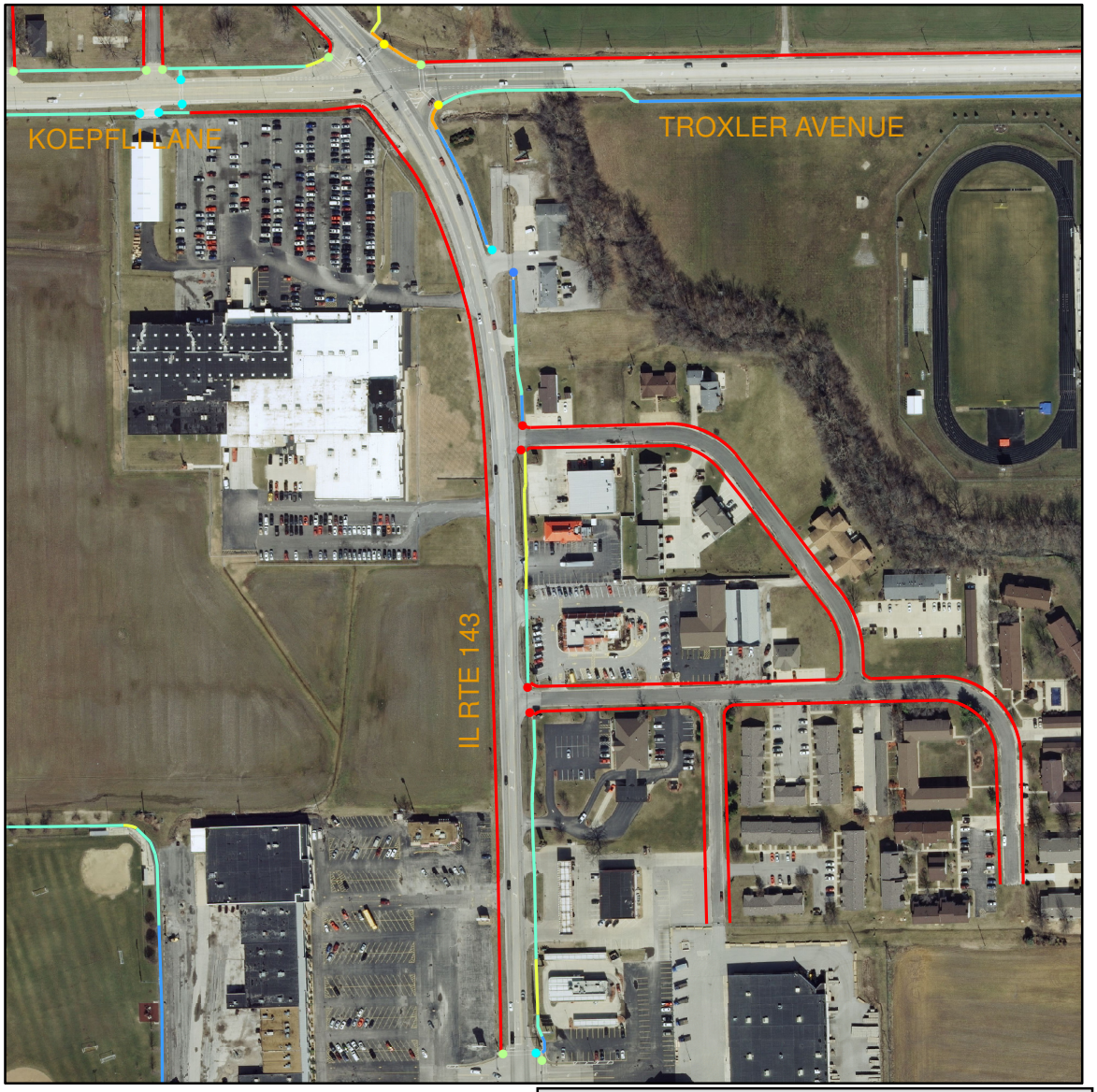
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 11



N

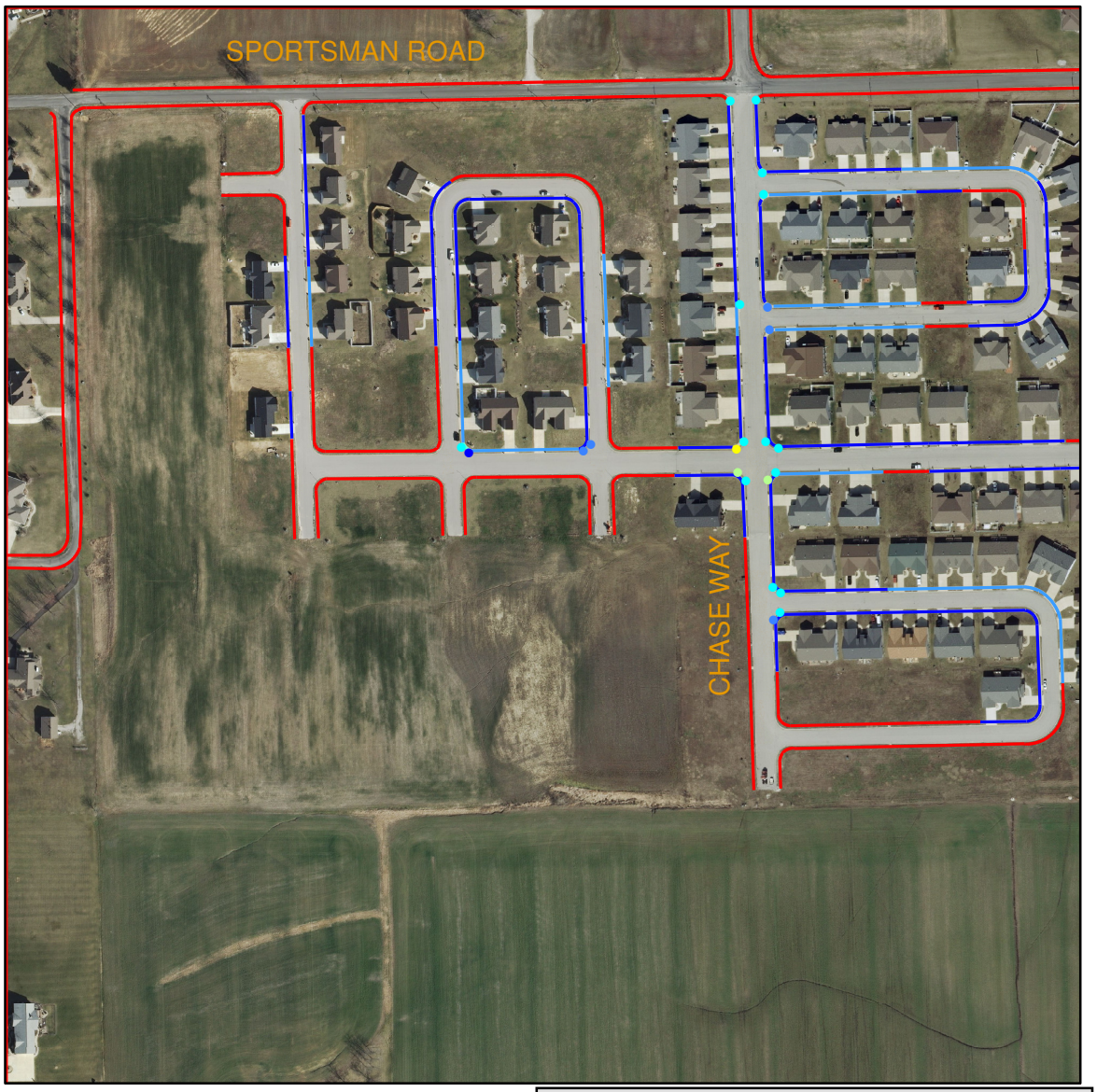
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 12



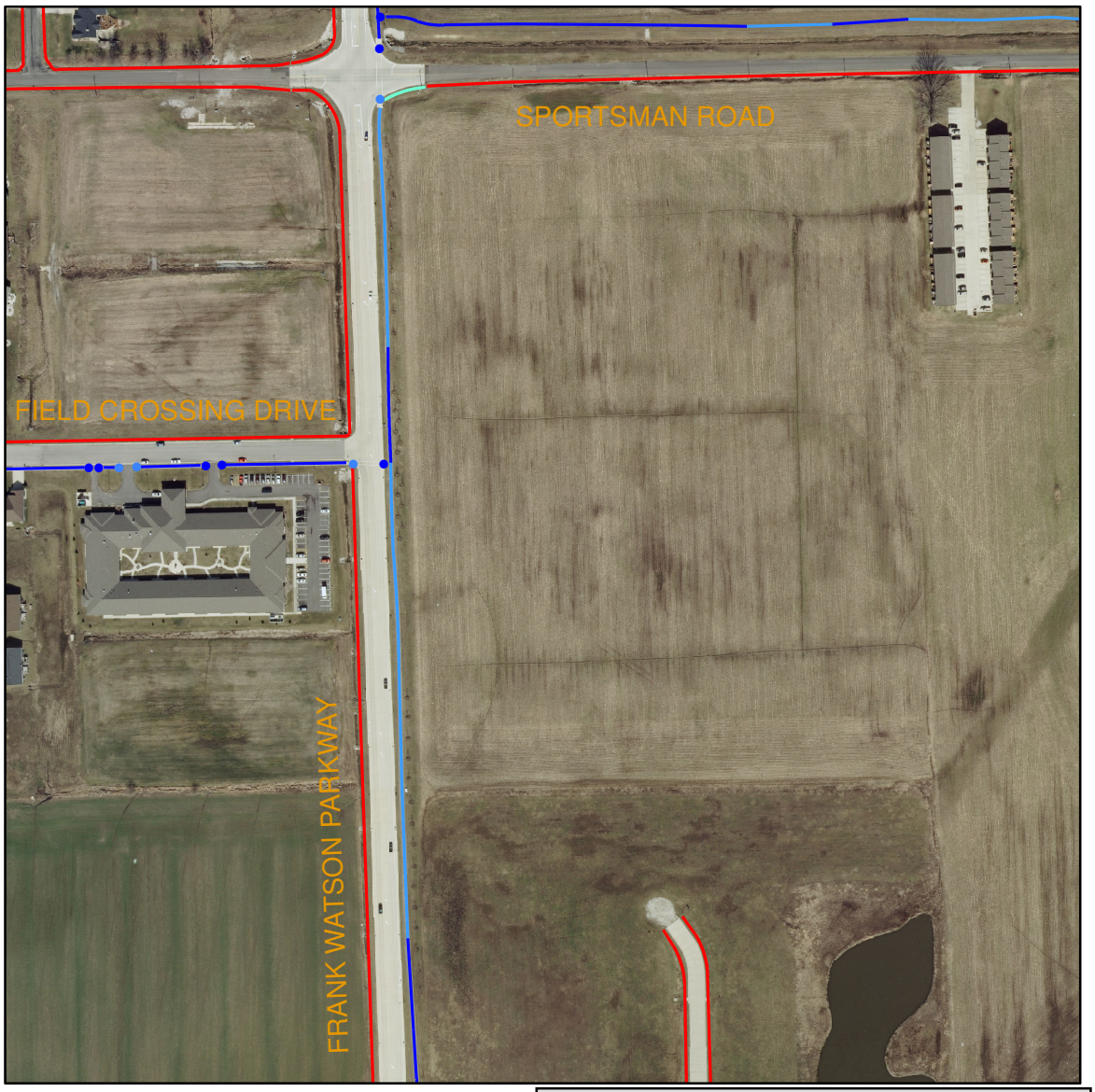
N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

ADA TRANSITION PLAN
GRID 13



N

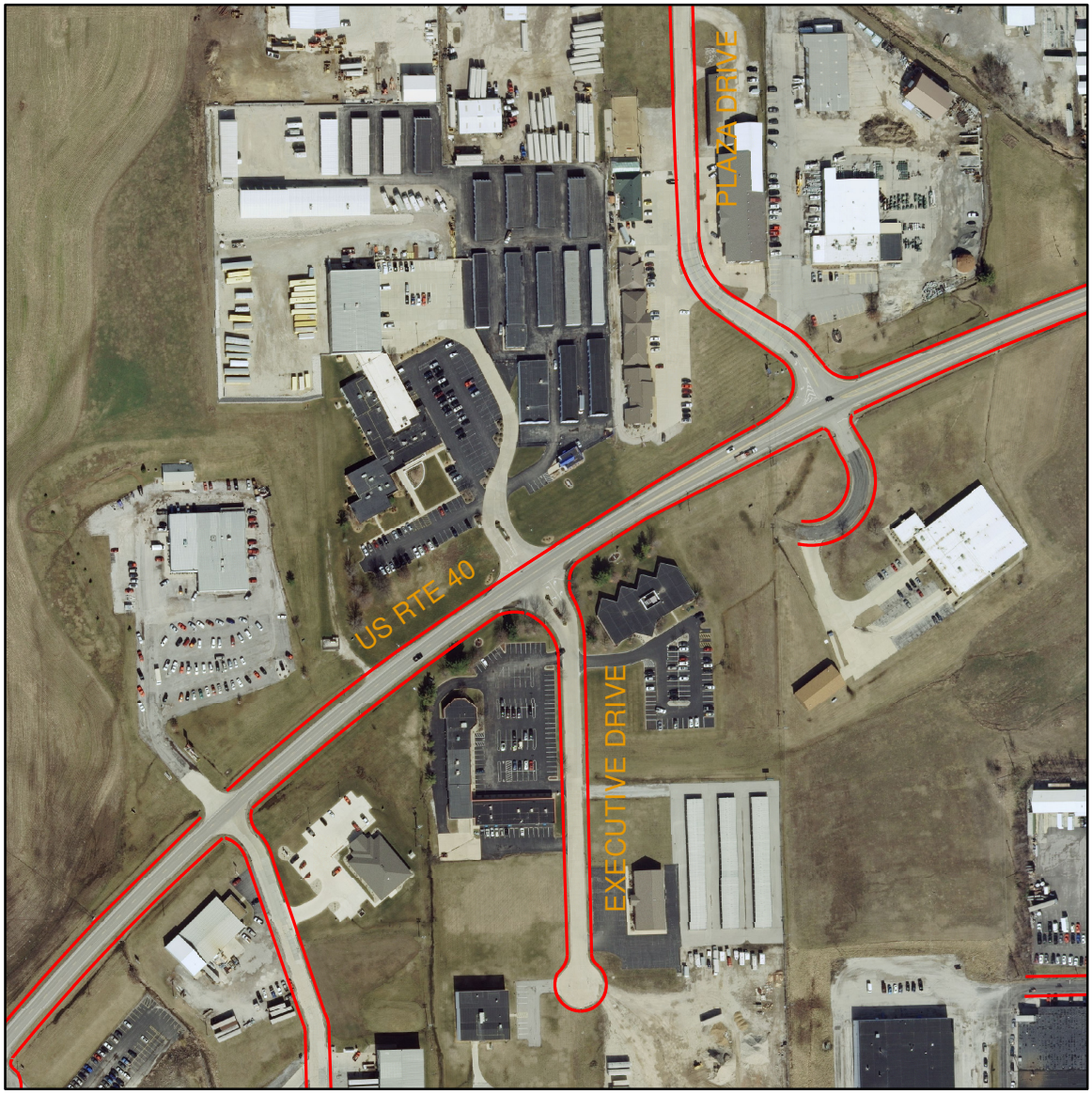
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 14



N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 15

N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

ADA TRANSITION PLAN
GRID 16

N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

ADA TRANSITION PLAN
GRID 17

N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

ADA TRANSITION PLAN
GRID 18

N

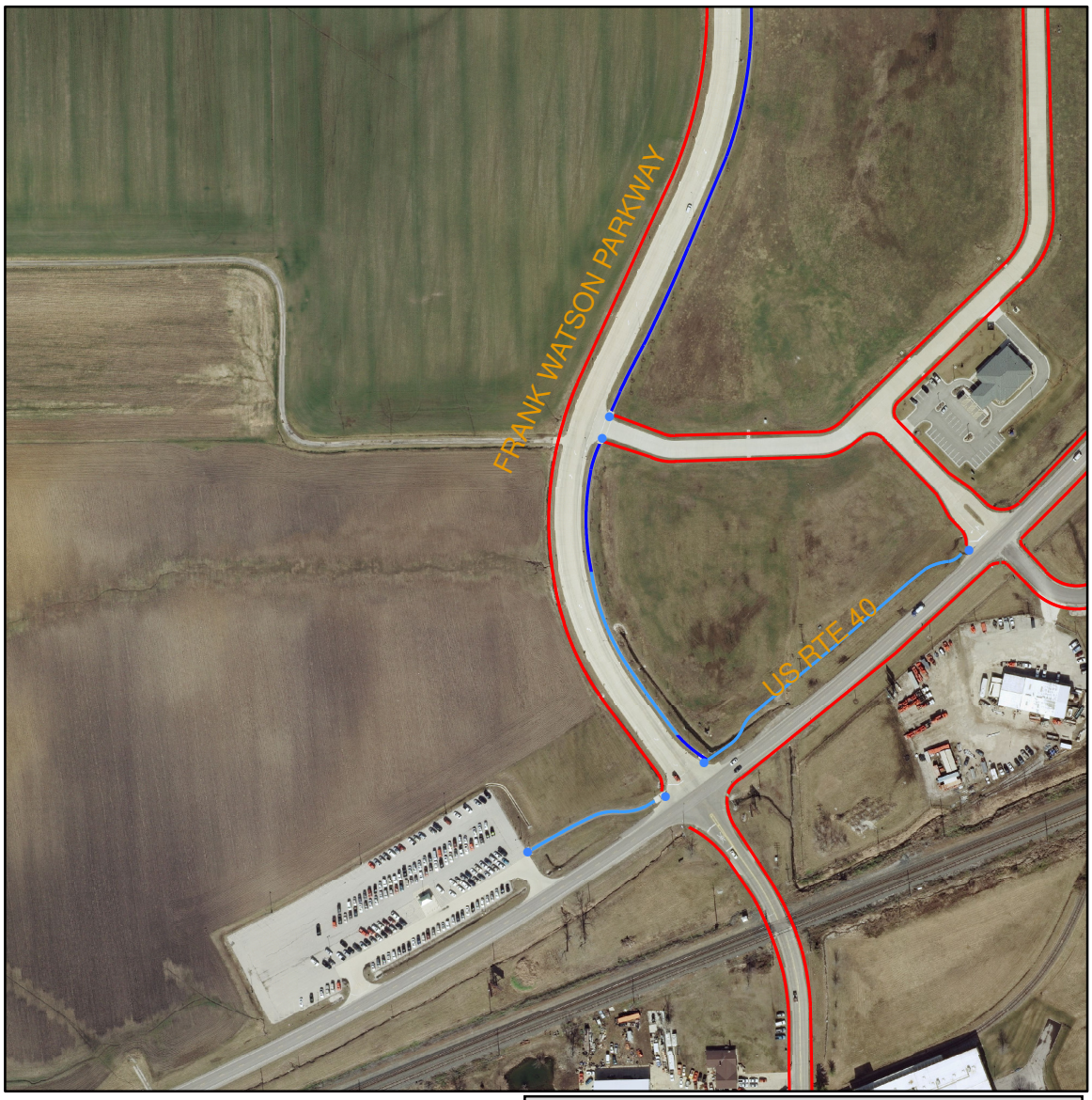
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 19



N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 20

N

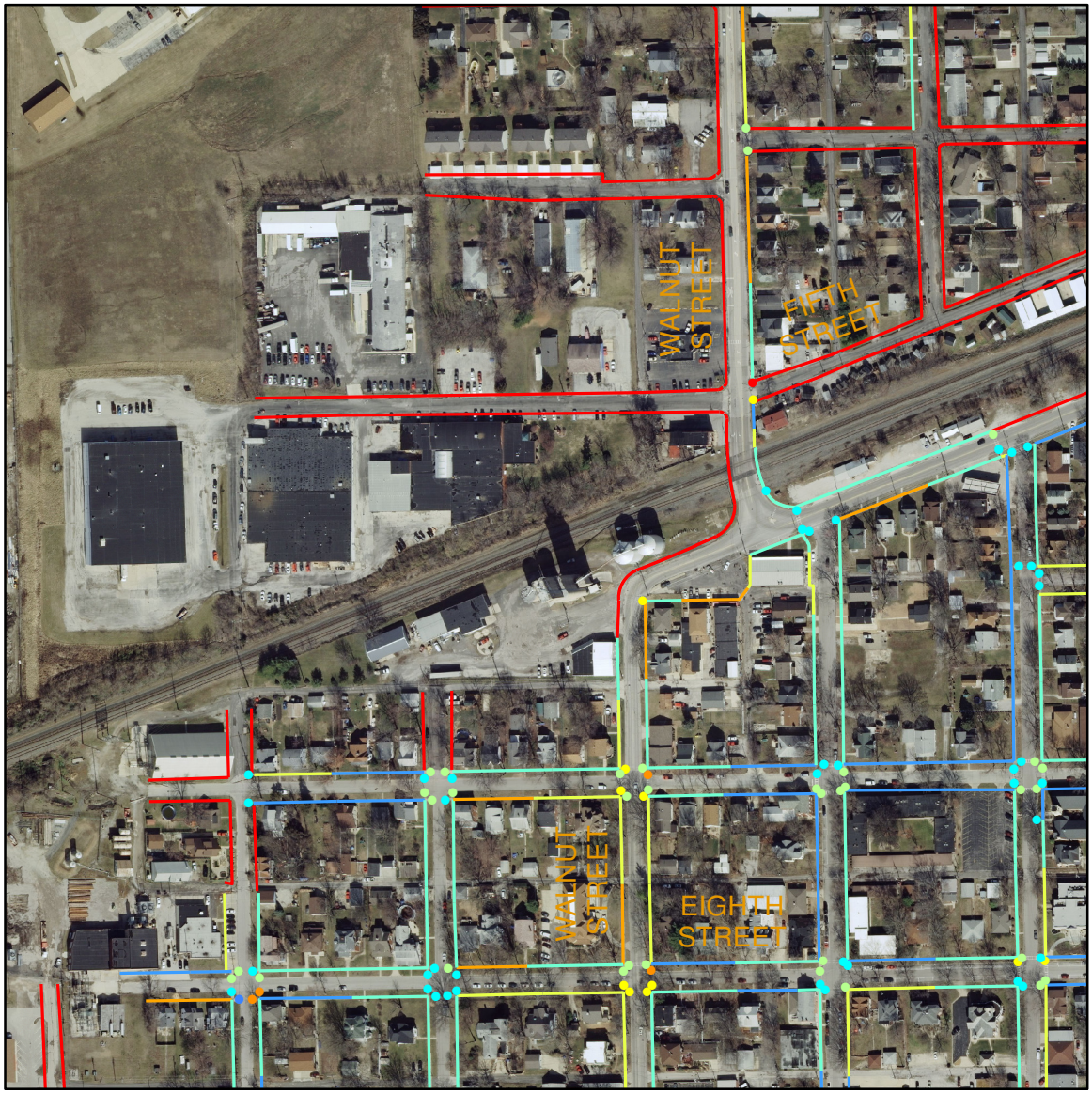
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 21



N

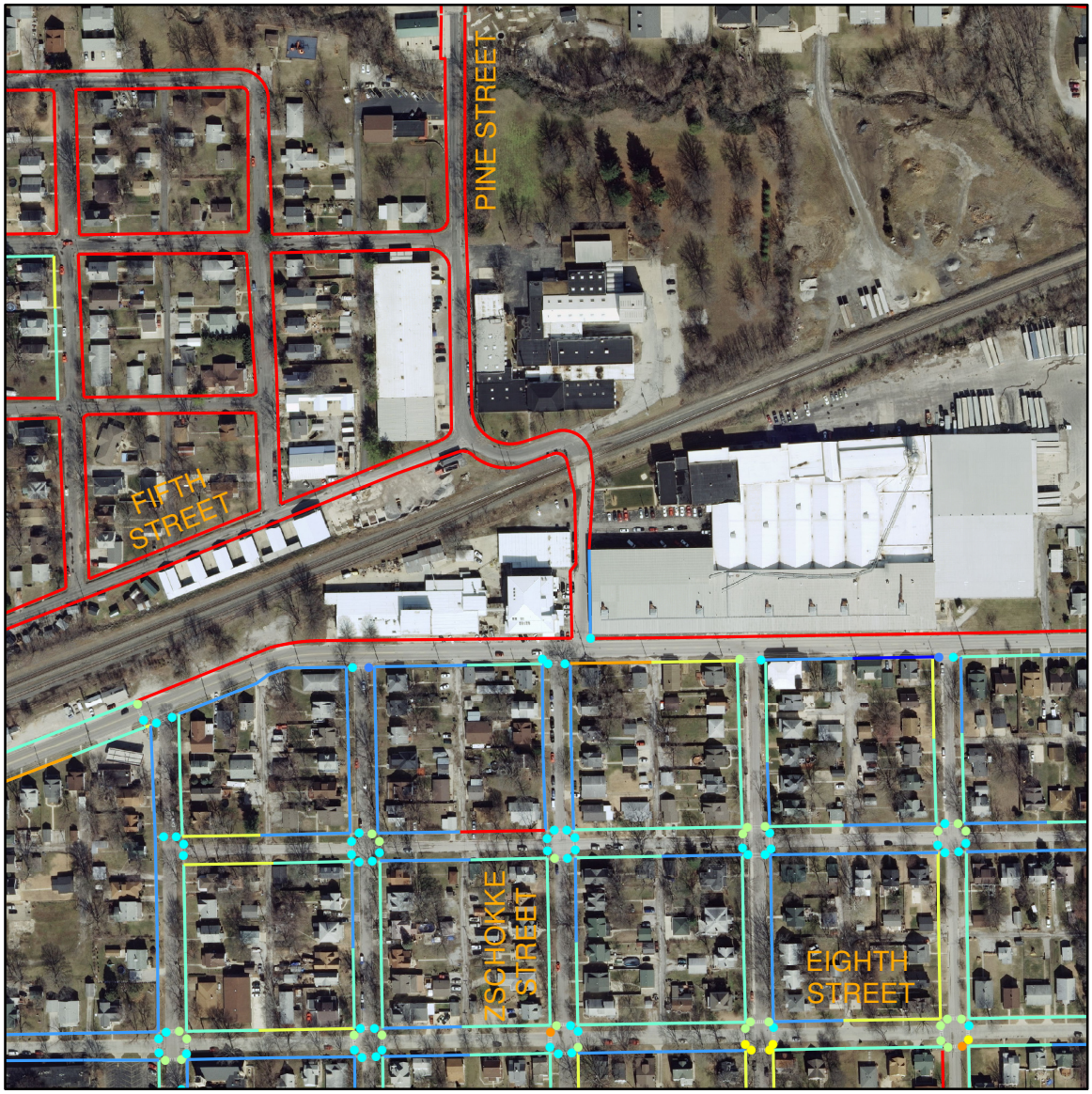
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 22



N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 23

N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 24

N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

ADA TRANSITION PLAN
GRID 25

N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 26

N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 27 - SPINDLER PARK

N

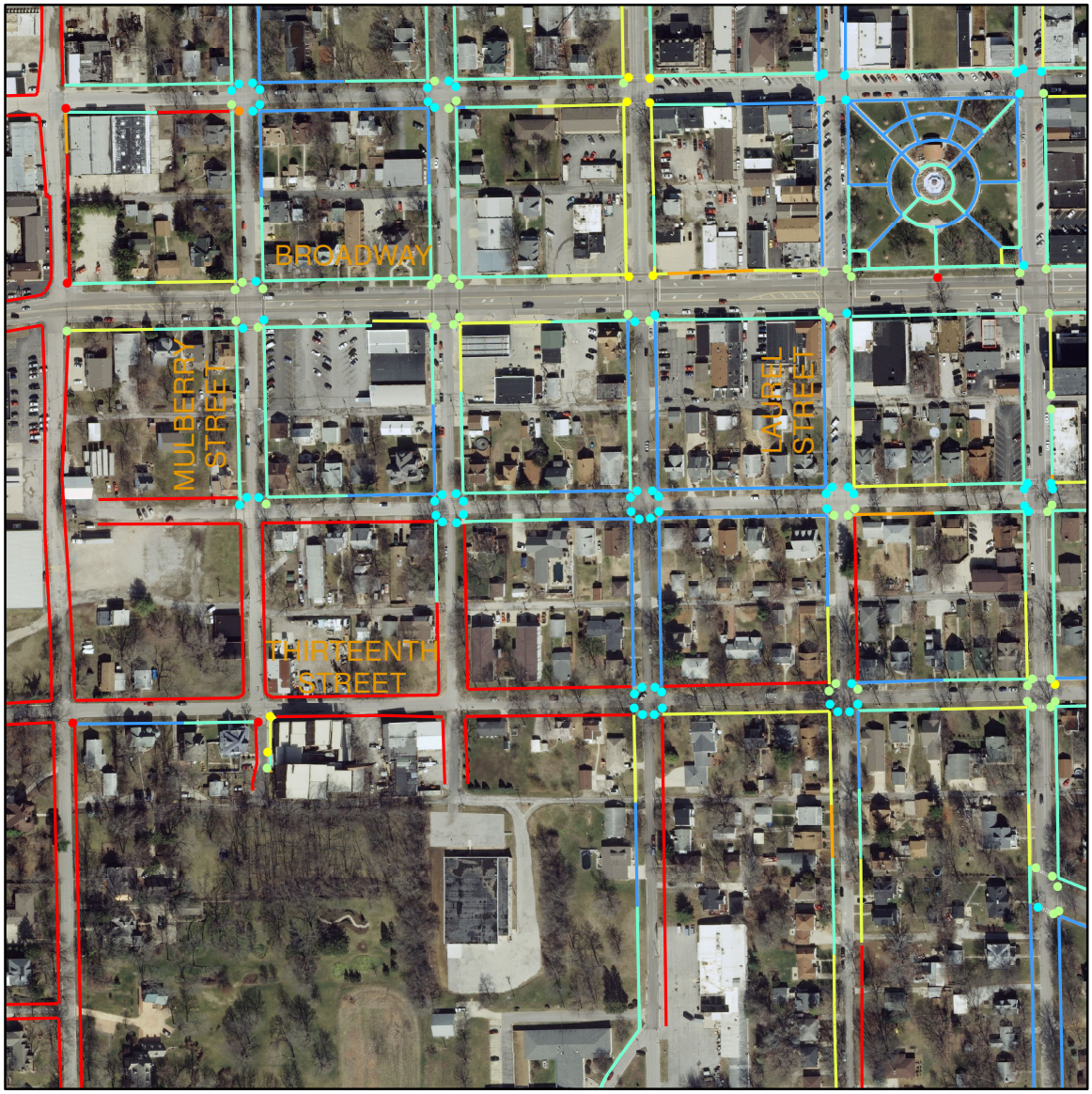
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 28



N

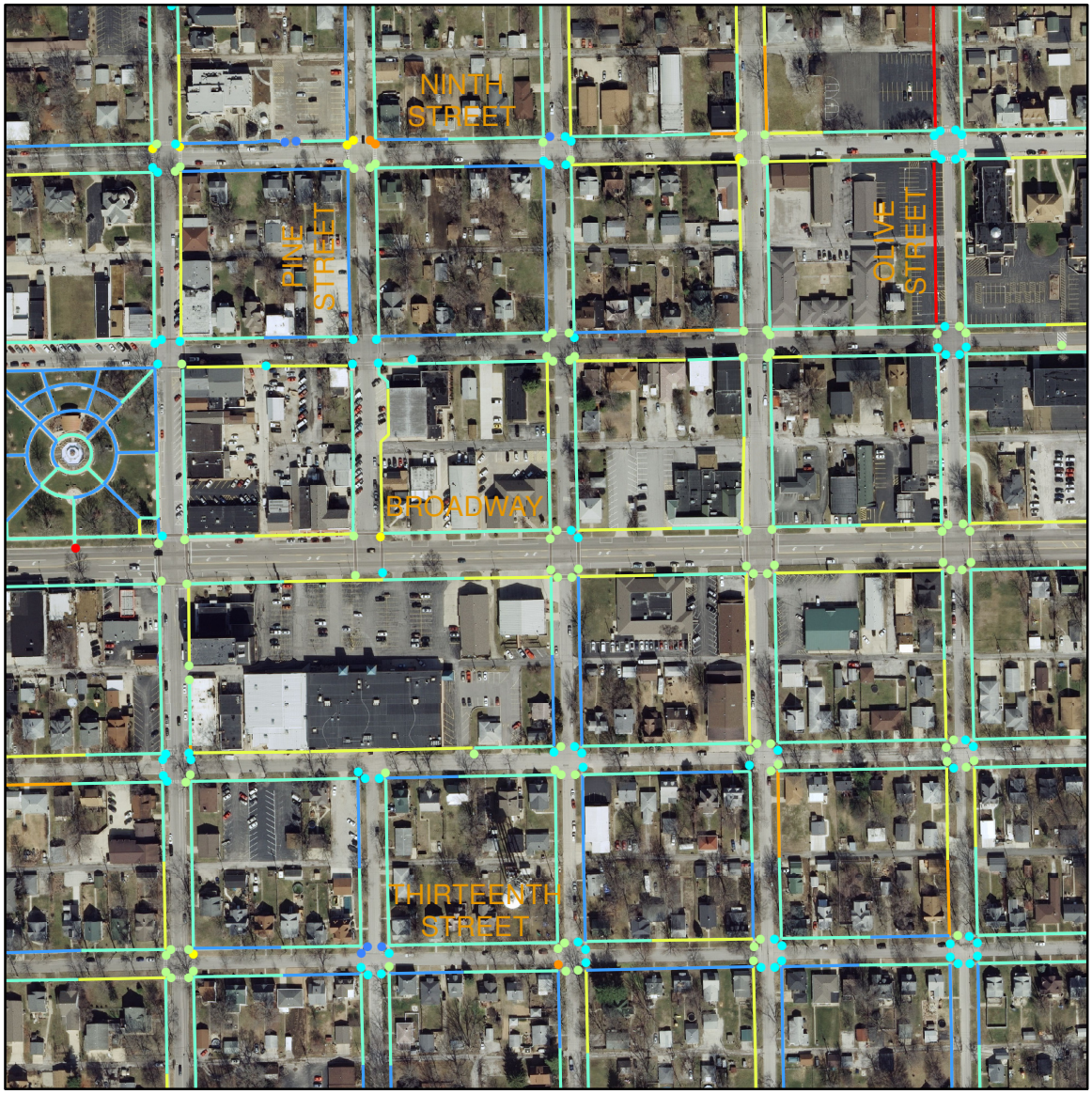
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 29



N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 30

N

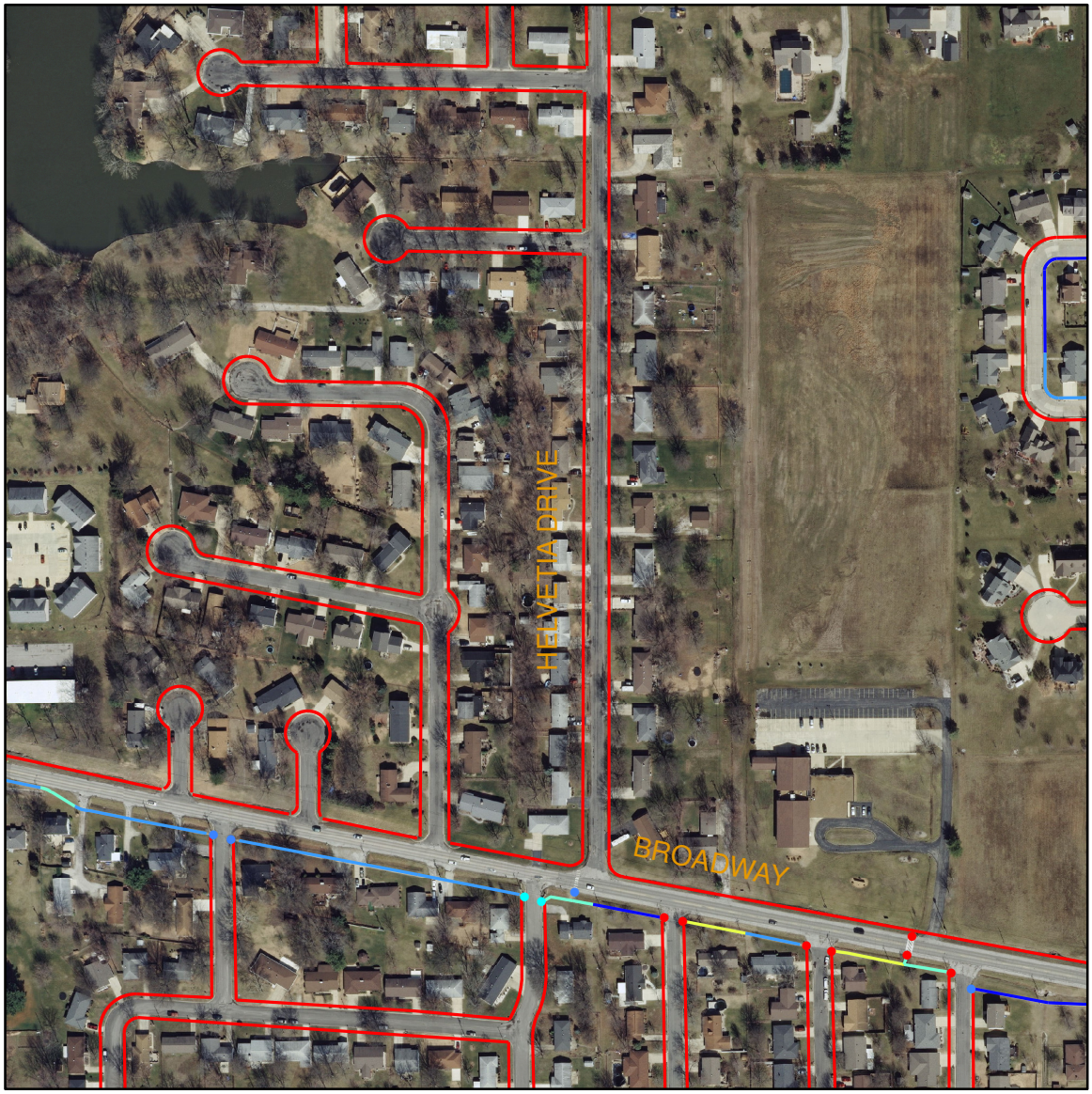
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 31



N

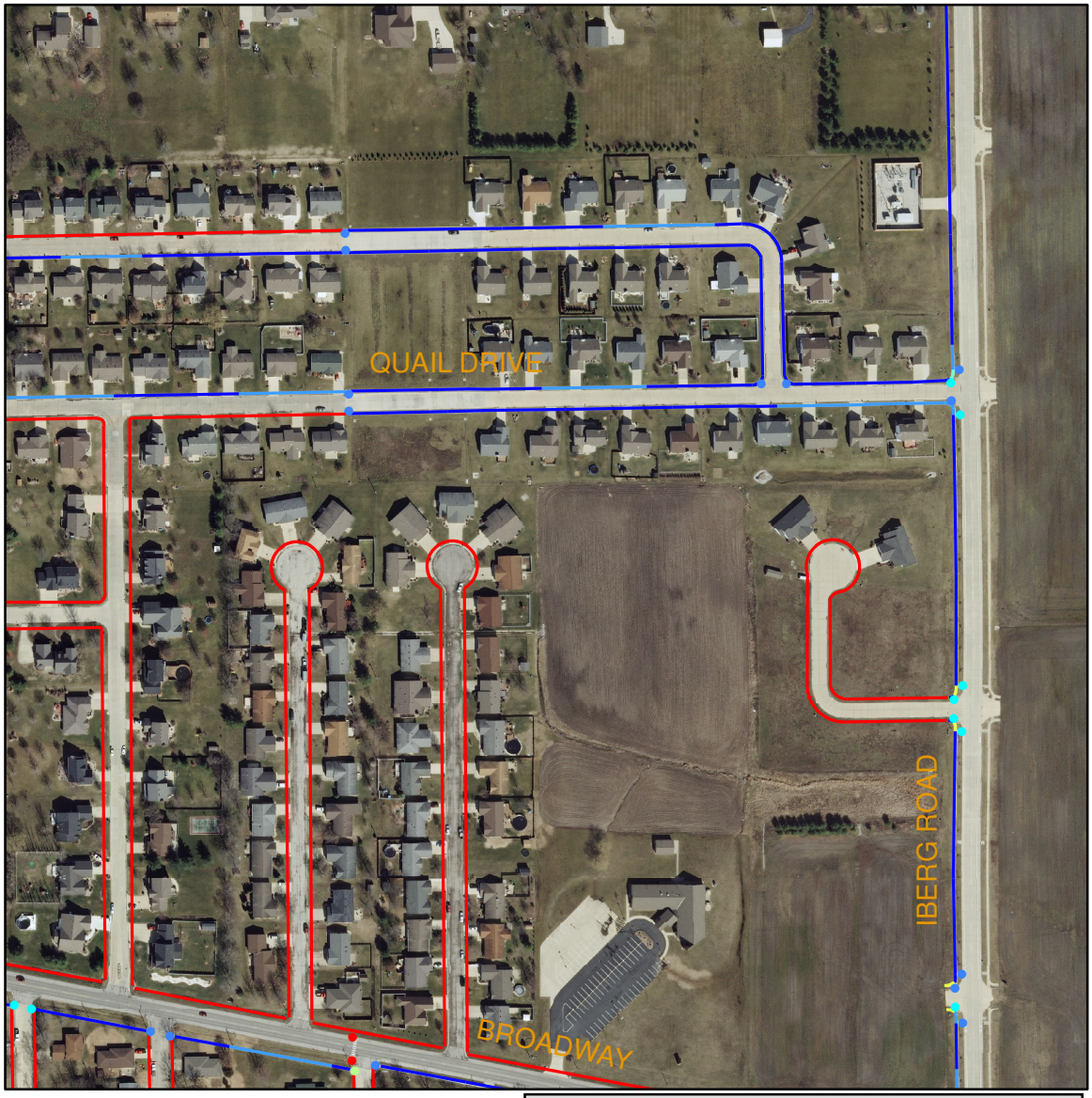
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 32



N

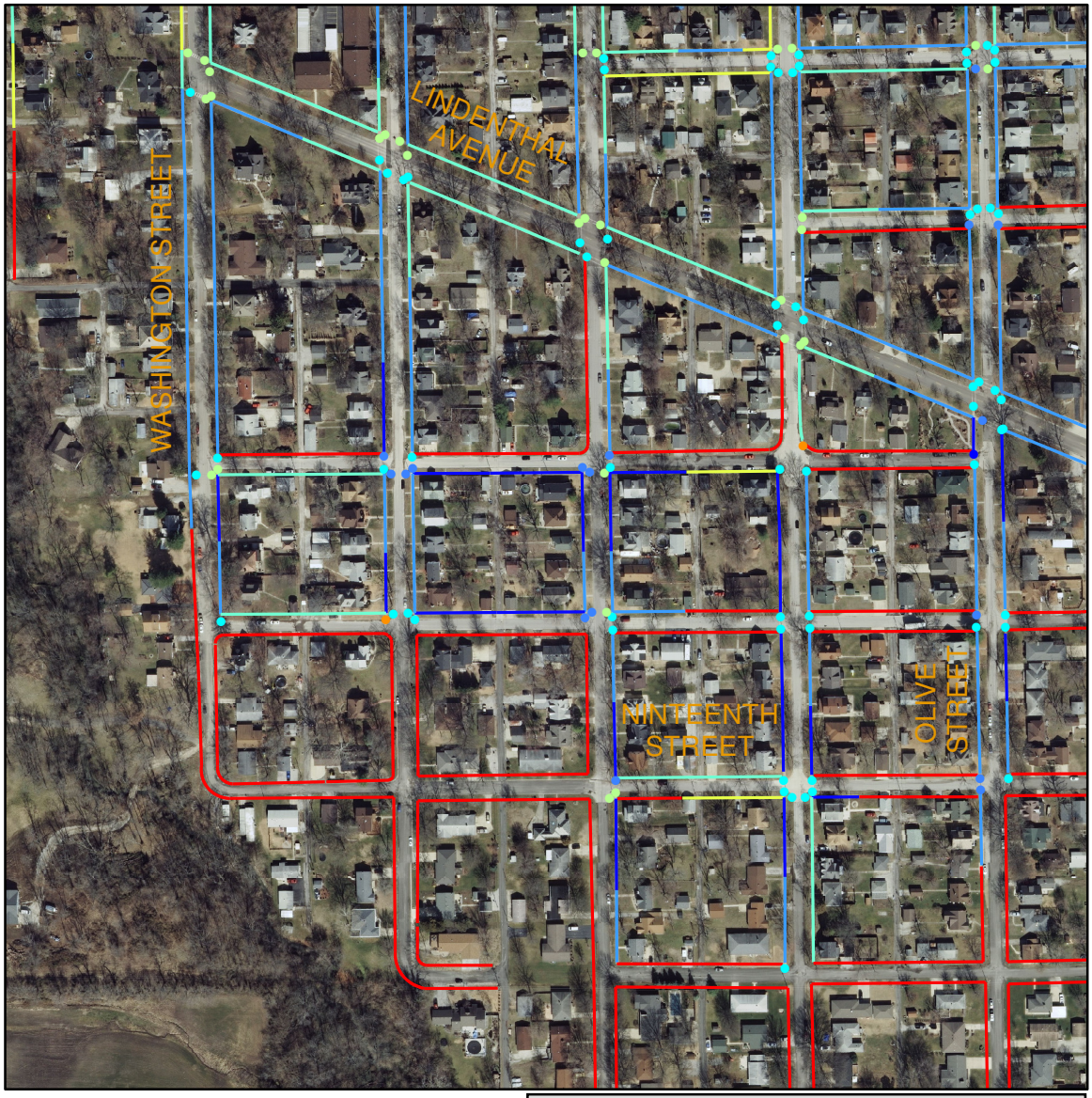
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 33



N

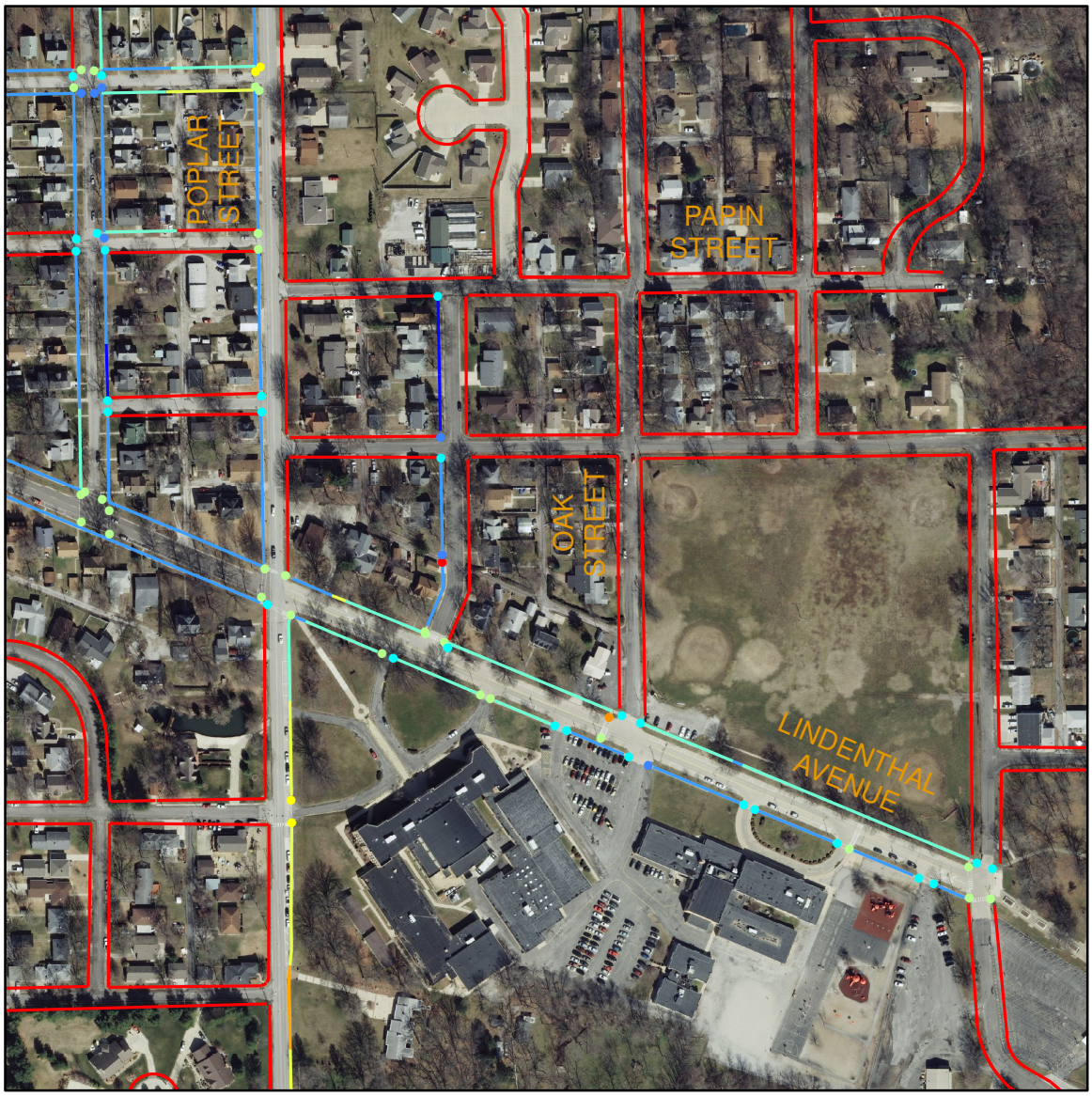
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 34



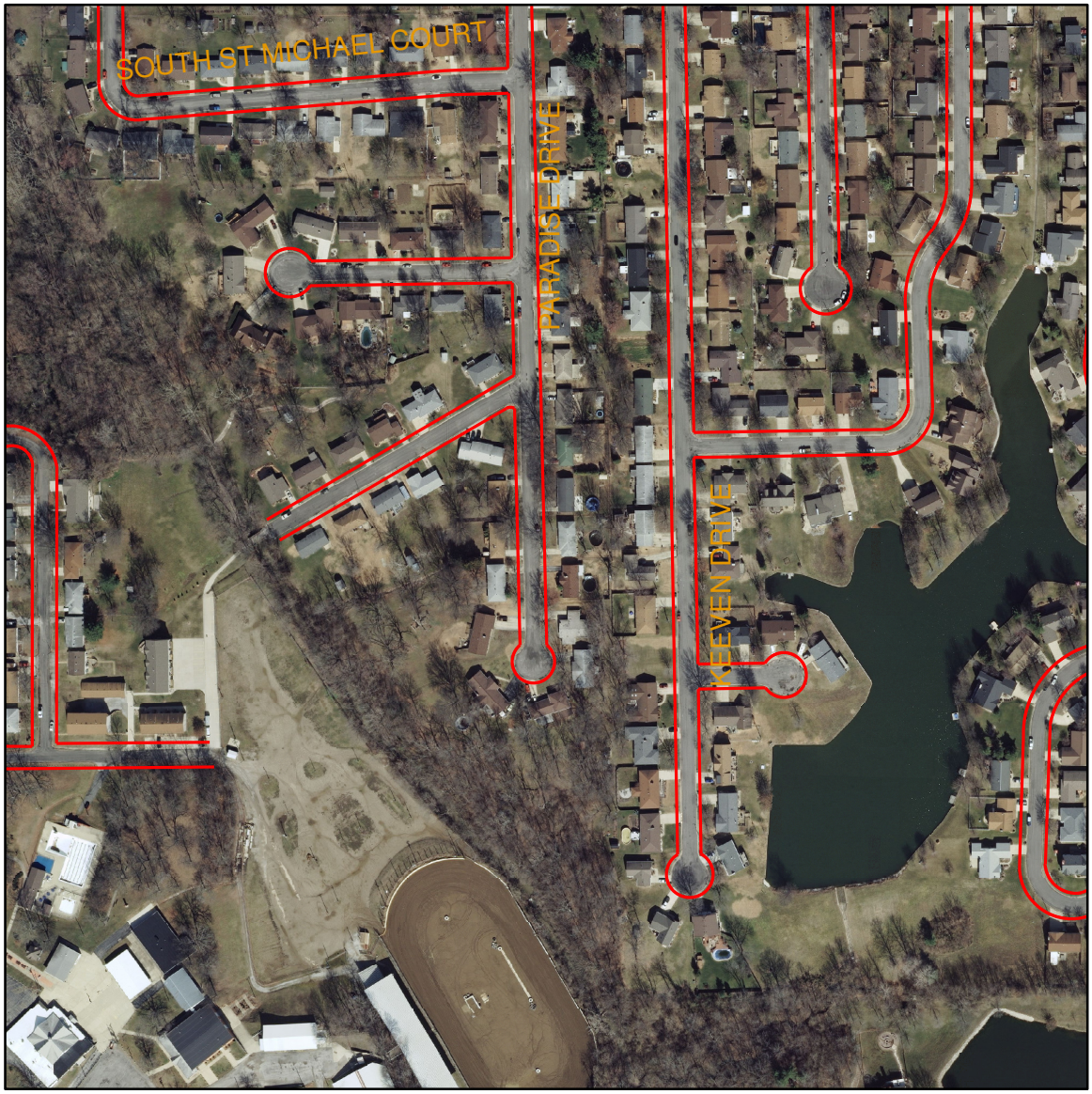
N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

ADA TRANSITION PLAN
GRID 35



N

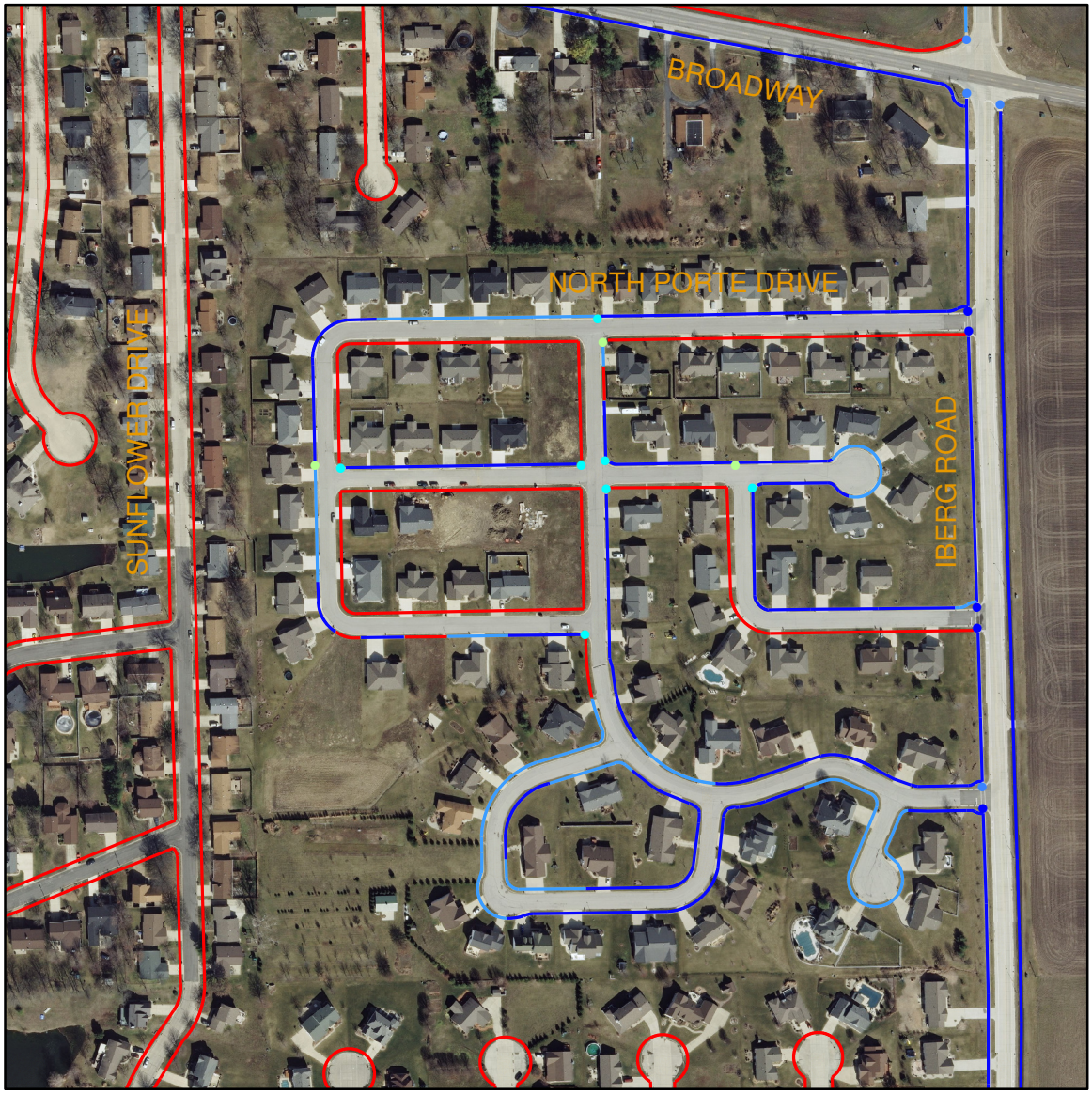
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 36



N

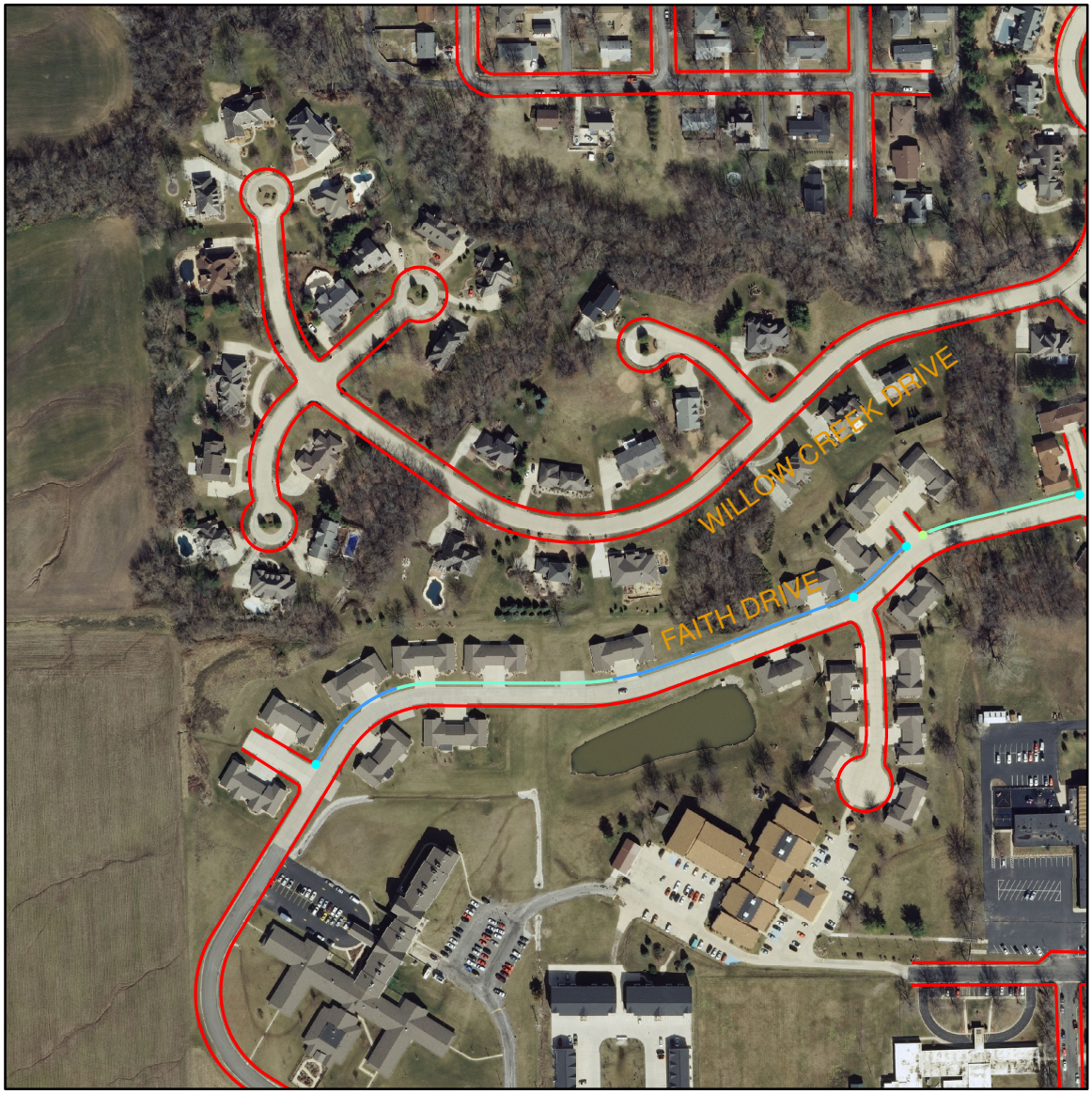
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 37



N

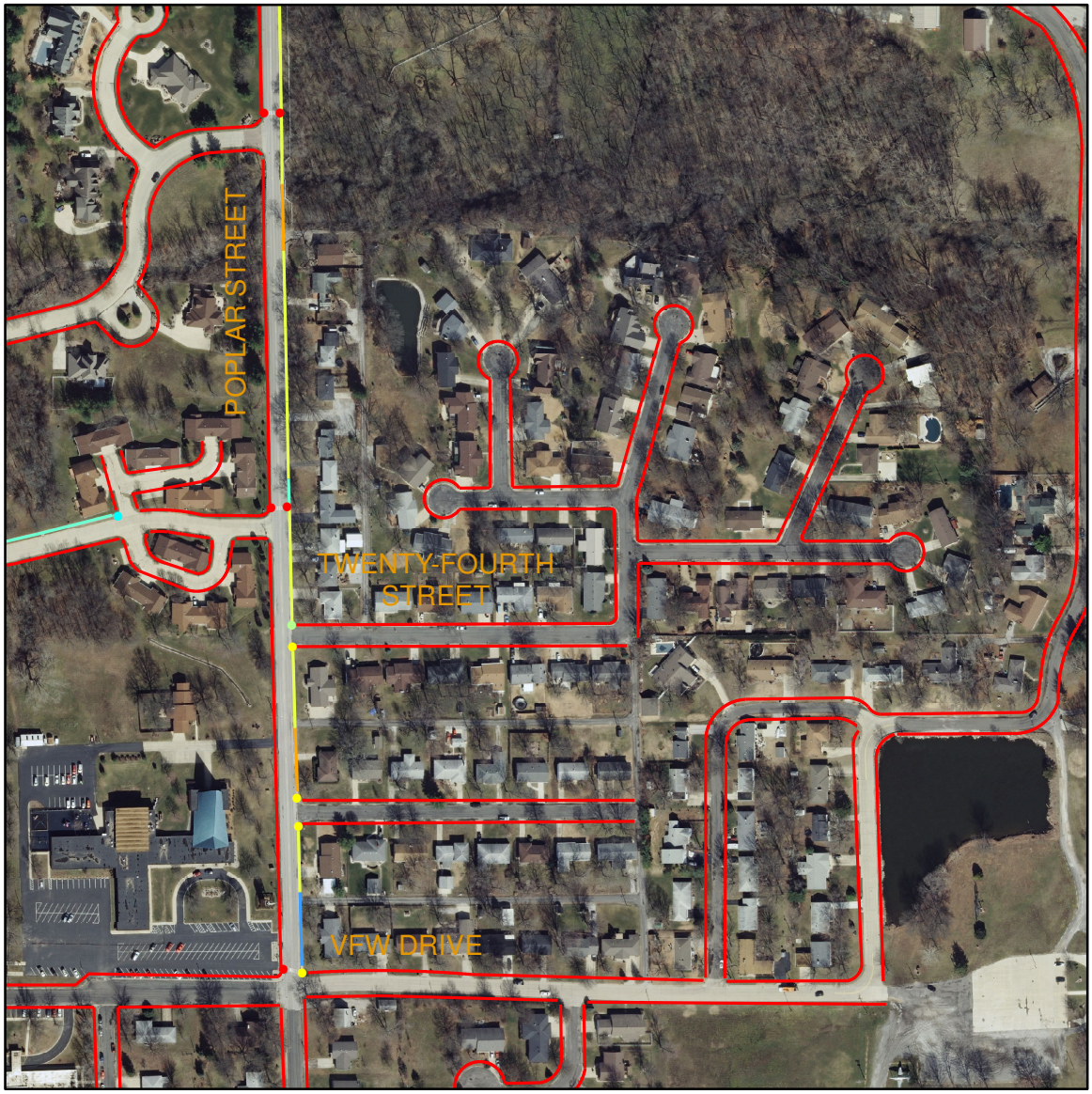
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 38



N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 39

N

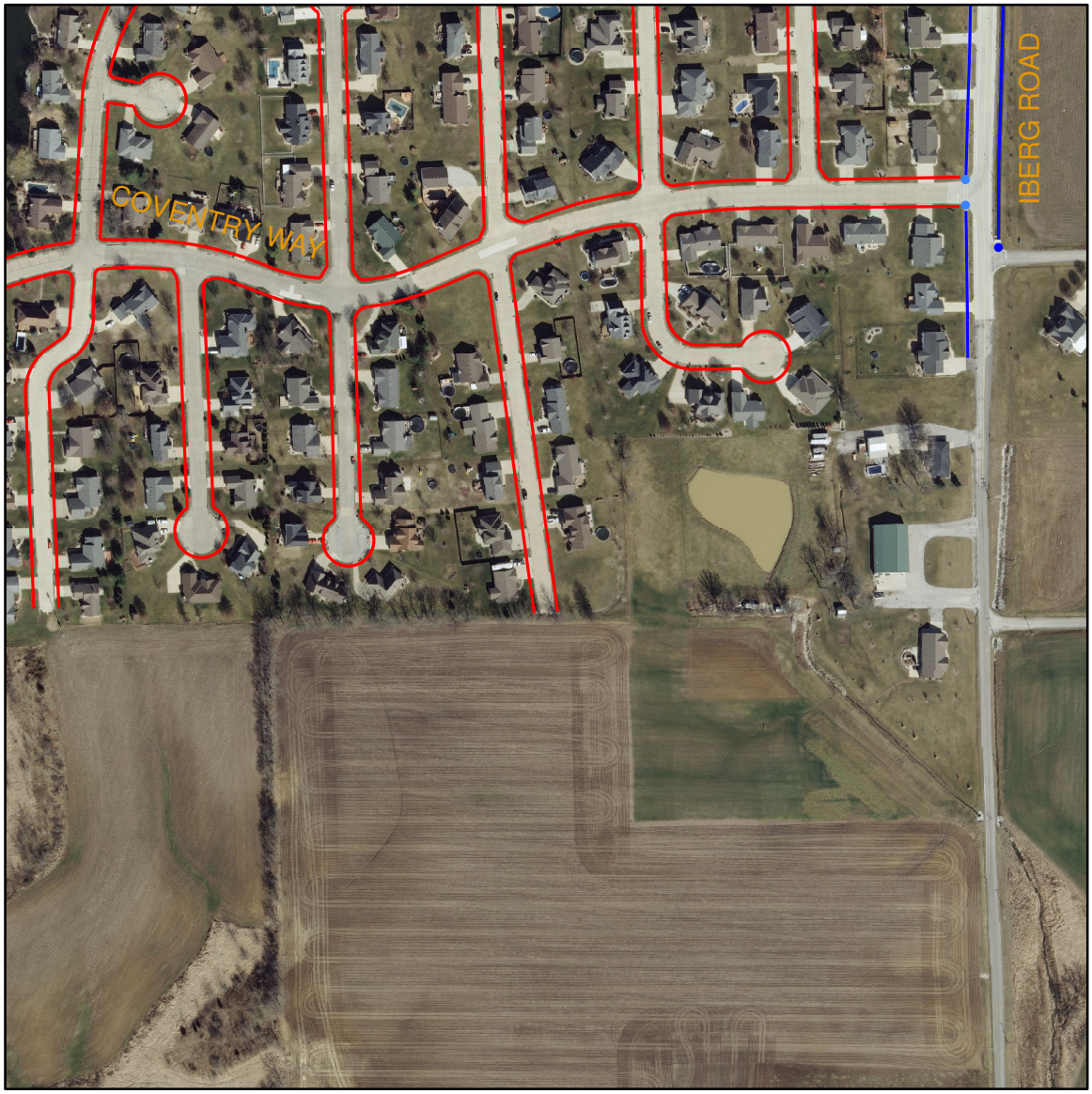
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 40



N

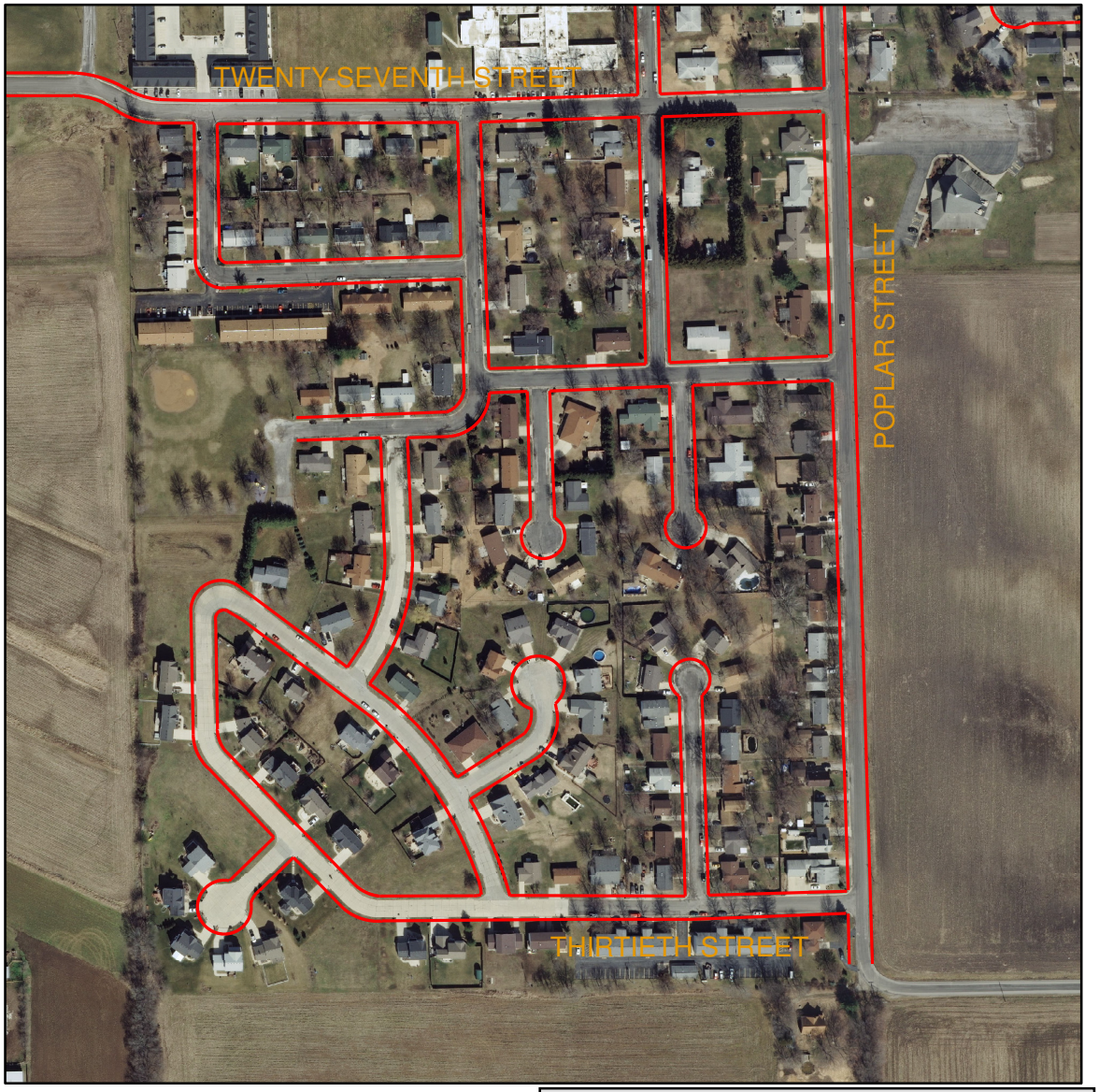
0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GRID 41



N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

1. SUMMARY OF WORK

Oates Associates, Inc. inventoried and mapped the existing sidewalks, bike trails and walking paths of the City of Highland in order to determine their compliance with the Americans with Disabilities Act (ADA). Information regarding the state and conditions of these pedestrian facilities was collected by Oates Associates staff and compiled using ArcGIS. The methodology of collecting this information is detailed in Section 5.1 of the ADA Transition Plan. The compiled maps categorize the City's pedestrian facilities according to a scale of compliance with the ADA developed jointly by Oates Associates, Inc., the City of Highland and the public. It should be understood that the ADA does not differentiate between levels of compliance. Rather, these maps were developed to show what areas are in most crucial need of replacement or maintenance, and what areas are not of immediate concern. The scoring was chiefly based on an impedance score, which measured the degree to which a segment or curb ramp was obstructed by ADA violations, and an activity score, which measured the importance of a given segment or curb ramp based on its proximity to established traffic generators.

2. MAP ORGANIZATION

A grid system was laid out over the extent of the city. Forty-one grids detail all the pedestrian facilities in the City. If a section of the City is not covered by a grid, then there are no pedestrian facilities present in that area. A map showing the layout of these grids can be found under the title "Reference Map" in Appendix 1.9.

In general, the grids were laid out in relative rows and columns over the city. In order to better display the information, this pattern was broken in places, and some grids may overlap. The numbering scheme is from north to south and from west to east.

3. MAP SYMBOLOGY

Each grid map is accompanied by a legend as shown below. A score was assigned to each segment of sidewalk and to each curb ramp in the City. The scoring system is detailed in Appendix 1 of the ADA Transition Plan. Those segments of roadway that lack sidewalk are shown in red. The red dot, indicating no curb ramp, only appears at locations where pedestrian facilities are present, but there is no curb ramp. The scoring system is meant to yield higher numbers to those pedestrian facilities that are least encumbered by ADA violations and lower numbers to those pedestrian facilities that more severely in violation of the ADA. For instance, a segment of sidewalk that scores a 15 has many problems facing it and should be addressed before a segment scoring an 85, which has few problems facing it. That being said, an 85 is not a perfect score, and the segment should still be considered to be in violation of the ADA, but less severely so by the parameters established for the purpose of this plan. The legend shows the categories of scoring and the colors associated with each category (See Figure 1).

Legend			
Curb Ramp Score		Sidewalk Score	
	No Ramp		No Ramp
	Obstructed Ramp		5-35
	5-35		36-50
	36-50		51-65
	51-65		66-80
	66-80		81-100
	81-100		

Figure 1: Color coded scoring legend

4. COST ESTIMATING

A cost estimate of upgrading each curb ramp and sidewalk segment to full ADA compliance was developed for each component. The cost estimate was calculated using an algorithm in ArcGIS that took into account all the defects with a given segment or curb ramp.

Curb Ramps

Curb ramps fall into two categories: those that require full removal and replacement, and those that can be repaired without full removal and replacement. When performing the cost estimate, the obstructions that were thought to require full replacement include a running or cross slope not meeting compliance standards, a vertical displacement greater than one inch and a ramp width of less than four feet. The curb ramp impedance score is detailed in Appendix 1.7.3 of the ADA Transition plan. This score accounts for all the obstructions that may impede a disabled pedestrian. It was found that, though these obstructions may be repaired individually, at a certain point it becomes more cost effective to replace the curb ramp entirely. This threshold was established to be an impedance score of 30, and all curb ramps scoring lower than this threshold were considered to require full removal and replacement as well. Additionally, curb ramps that included fixed obstructions (such as broken sidewalk) were deemed to require full removal and replacement.

Once all the curb ramps to be replaced were established, a cost was assigned to each. For perpendicular ramps, a cost of $2,000 was assumed. For parallel ramps, a cost of $2,500 was assumed. For Diagonal Ramps, a cost of $3,000 was assumed. It should be noted that throughout much of the city's sidewalk network, there are two curb ramps per intersection quadrant.

Some curb ramps do not require full removal and replacement. If the curb ramp was impeded by an improperly placed utility pedestal, water valve, manhole, or other utility box, the cost of repair was assumed to be $1,000. Other impediments include a gutter slope greater than 5%, a vertical displacement less than one inch and greater than ¼ inch, a lack of proper detectable warnings, and a landing area that is either less than four feet square or has a slope in excess of 2%. If a ramp

included a gutter slope greater than 5%, the cost was assumed to be $1,000. If it included a vertical displacement, a lack of detectable warnings, or a problem with the landing area, each of these obstructions was assumed to cost $250. If a curb ramp included all of these violations, it would cost $1,750 to repair. If it included only one, it may cost as little as $250 to repair. Costs were assigned to curb ramps according to the combination of violations present at that location.

Sidewalk Segments

For the sidewalk segments, the cost was determined by the surface material, whether or not curb was present, and the number and severity of the obstructions impeding a segment. If no sidewalk was present and curb was present, the cost of adding sidewalk was assumed to be $50 per linear foot. If no sidewalk was present and no curb was present either, the cost was assumed to be $80 per linear foot to account for the cost of having to construct curb as well. A complete cost for adding sidewalk where no sidewalk is currently present was not included in this report. The city is not required to construct new sidewalk, but if it chooses to add sidewalk in locations, it should look at the individual cost per segment provided in the ArcGIS file. It should also consider various options of adding sidewalk on both or one side of the street.

In cases where sidewalk was already present, a cost for repairing each obstruction was determined. Utility pole relocation was assumed to cost $2,000. An obstruction by a utility pedestal was assumed to cost $1,000. Mast arm relocation was assumed to cost $4,000. If the obstruction was a vertical displacement between ¼ inch and one inch, it was assumed to cost $250 to repair. If the vertical displacement exceeded one inch, it was assumed to cost $500 to repair. To repair inlets that featured a vertical displacement of ¼ inch to one inch, the cost was assumed to be $250, and it was assumed to be $1000 for inlets that featured a vertical displacement in excess of one inch. Broken sidewalk was assumed to cost $250, a driveway slope in excess of 2% was assumed to cost $800, an unsatisfactory flare slope was assumed to cost $500, and water valves, manholes, and other utility boxes impeding the walkway were assumed to cost $250. If any of these obstructions has a length associated with it, the cost was assumed to be the cost of replacing the sidewalk: $50 per linear foot.

Once each obstruction had a cost assigned to it, the costs were summed per sidewalk segment. If the cost exceeded the cost of replacing the sidewalk (at $50 per linear foot), then the final cost assigned was that of replacing the sidewalk. If the cost was less than replacement of the sidewalk, the final cost was given as the cost of repairing each obstruction individually. The sidewalk was also deemed necessary of replacement if the segment's cross slope was in excess of 2%.

If the segment was asphalt as opposed to concrete, as was the case in most parks and on bike trails, the cost of segment replacement was calculated as $20 per linear foot. Segments of brick sidewalk replacement were calculated at a rate of $100 per linear foot.

Cost Summary

After tabulating costs for each sidewalk segment and curb ramp, the total cost for bringing all the segments or curb ramps within a scoring category into complete ADA compliance was determined. The table below details these costs (See Figure 2).

Cost Estimate					
Curb Ramps			**Walkways**		
Scoring Category	**Cost of Repairs**	**Number of Ramps in Category**	**Scoring Category**	**Cost of Repairs**	**Number of Segments in Category**
No Ramp	$102,000	34	**No Sidewalk**		802
Obstructed Ramp	$29,000	16	**5 to 35**	$137,286	37
5 to 35	$129,000	58	**36 to 50**	$562,746	184
36 to 50	$650,500	355	**51 to 65**	$835,317	433
51 to 65	$598,750	386	**66 to 80**	$493,626	364
66 to 80	$121,500	96	**81 to 100**	$377,700	243
81 to 100	$11,250	17			
All ADA Improvements Excluding New Sidewalk					
Total	$1,642,000	962	**Total**	$2,406,675	1,261

Total Estimate	$4,048,675

Figure 2: Estimate of Probable Cost

5. Downtown Parking

Parking is allowed along the streets of Highland except where signed. The majority of this parking is unmarked parallel parking adjacent to the travel lanes. Businesses and multi-unit housing complexes are responsible for their own parking, including handicap parking, with the exception of Downtown Highland. The general boundaries of Downtown Highland for the purpose of evaluating on-street parking was between Zschokke Street and Pestalozzi Street traveling from the East to the West and from 9th Street to 12th Street traveling North to South (See Figure 4). The majority of businesses located within Downtown Highland are serviced by on-street parking with little to no off street parking available in this section of the City. The requirements of accessible parking space were derived based on the table, Figure 41-6C (See Figure 3), located in the Illinois Department of Transportation's "Bureau of Local Roads and Streets Manual".

Total Number of Marked or Metered Parking Spaces on the Block Perimeter	Minimum Required Number of Accessible Parking Space
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 and over	4 percent of total

Figure 3: Number of Accessible Spaces

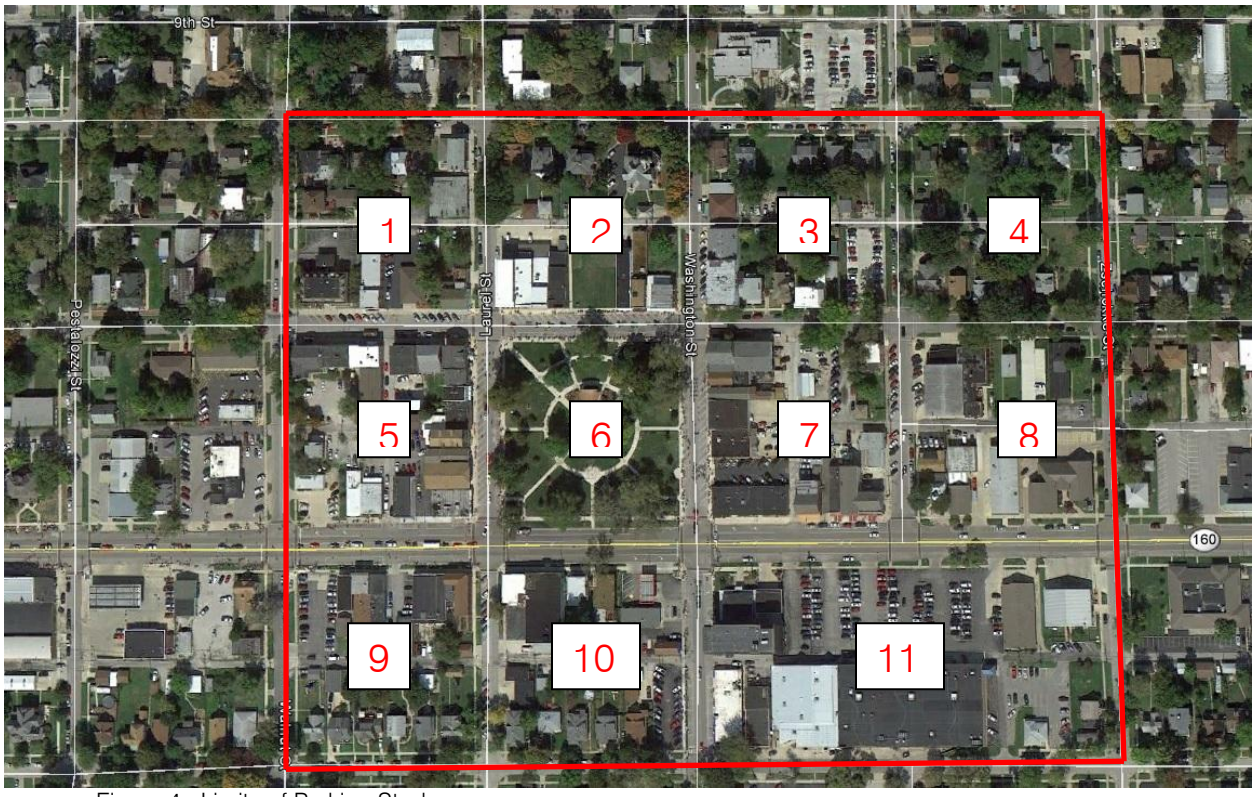


Figure 4: Limits of Parking Study

The number of accessible spaces required per block was determined by counting the number of marked spaces of the entirety of the block perimeter. The location of the accessible parking spaces should be based on the private development located within the block. For example, if one leg of a block was commercial development and the remaining three legs of the block were residential development the accessible spaces should go near the commercial development. In general accessible parallel parking spaces should be located in the adjacent space to an existing curb ramp, where feasible, accessible parking should not be signed along Broadway due to the high traffic counts. The location of accessible diagonal parking spaces will be based on two requirements; the slopes must be less than 2% in all directions, and a ramp will need to be constructed to provide access from the accessible parking space to the pedestrian access route. Ideally the accessible parking spaces will be located next to a sidewalk that is a minimum of 8 feet wide. The final location of the accessible parking spaces should be based on field observations and surveys.

Block Number	Number of Marked of Metered Spaces	Minimum Required Accessible Spaces
1	32	2
2	38	2
3	21	1
4	0	0
5	34	2
6	44	2
7	38	2
8	20	1
9	24	1
10	13	1
11	12	1

Figure 5: Downtown Parking Analysis

APPENDIX 2.1

BUILDING FACILITY REPORTS

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- 1.9

  Non-compliance: The accessible spaces are not located on an accessible route.
  Solution: Provide an accessible route from the parking spaces to the sidewalk.
  Cost: $1,000

- 1.11

  Non-compliance: There are no signs that read "van accessible" at the accessible parking sign.
  Solution: Provide signs that read "van accessible".
  Cost: $50

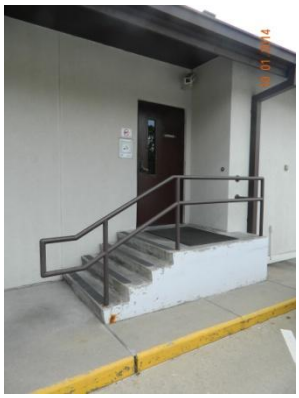
1.37 - 1.49: Entrance

- 1.39

  Non-compliance: The non-accessible entrances do not have signs indicating the location of the nearest accessible entrance.

  Solution: Provide signs indicating the location of the nearest accessible entrance.

  Cost: $200




- 1.43

  Non-compliance: The entry door threshold is not compliant.

  Solution: Install compliant threshold.

  Cost: $300

- 

- 1.49

  Non-compliance: The edges of the entry mat are not securely attached to the floor.

  Solution: Securely attach entry mat to the floor.

  Cost: $50

Priority 2: Access to Goods & Services:

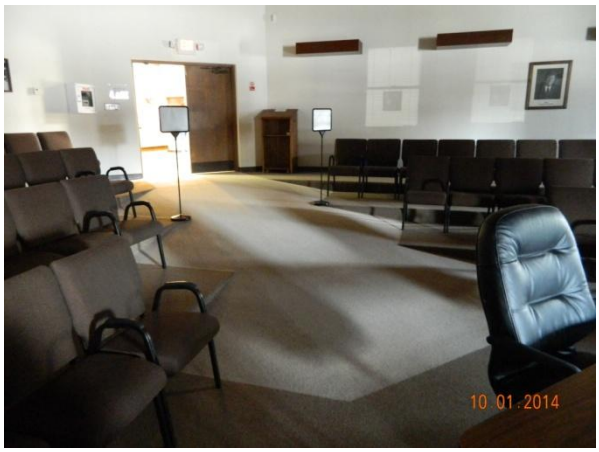
2.10 - 2.21: Ramps

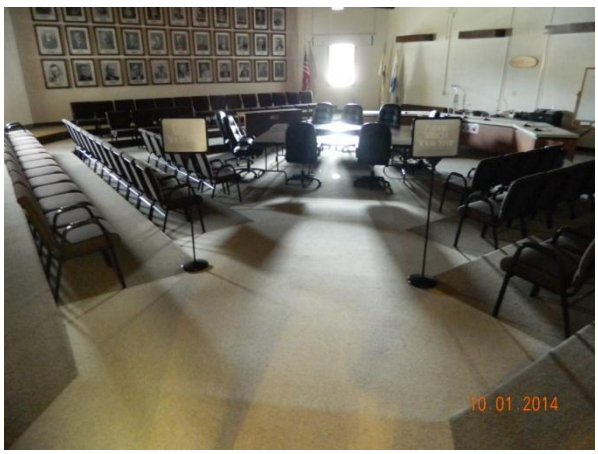
- 2.15

  Non-compliance: The ramp in the Council Chambers does not have handrails.

  Solution: Install continuous compliant handrails on both sides of the ramp.

  Cost: $1,500





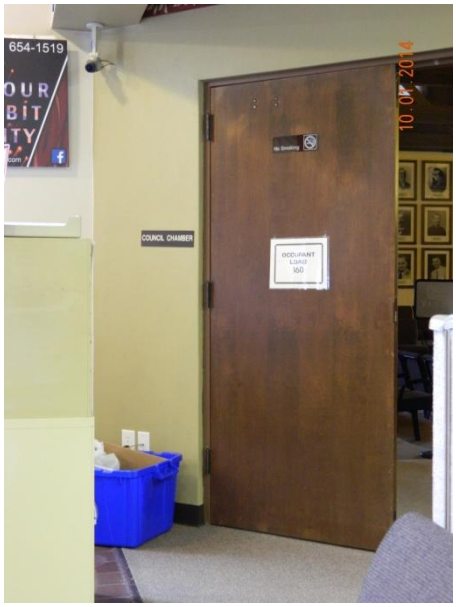
2.38 - 2.39: Signs (Note: "Tactile characters" are read using touch, i.e. raised characters and Braille)

- 2.38

  Non-compliance: The Council Chamber room sign is located in a non-accessible location.

  Solution: Move sign to the inactive leaf or to the wall to right of the right leaf.

  Cost: $50



2.40 - 2.46: Interior Doors (non-toilet room)

- 2.45

  Non-compliance: There are various doors (approximately five) which exceed 5 lbs max. to open.

  Solution: Adjust/replace closers.

  Cost: $750

- 2.46

  Non-compliance: The Council Chamber door takes less than 5 seconds to close from 90° to 12°.

  Solution: Adjust/replace closer.

  Cost: Cost is covered under 2.45

2.47 - 2.49: Rooms and Spaces

- 2.49

  Non-compliance: The edges of the mats in the building are not securely attached to avoid tripping hazards.

  Solution: Secure the edges of the mats.

  Cost: $50

2.50 - 2.51: Controls - light switches, thermostats, emergency / alarm boxes, etc.

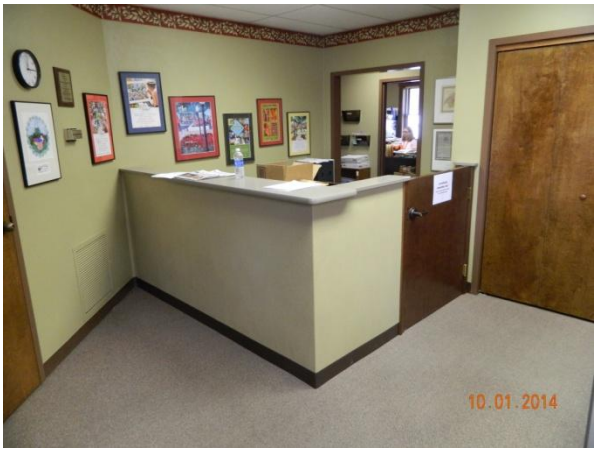
- 2.50
  Non-compliance: Not all of the light switches have a clear floor space of 30” x 48”.
  Solution: Move furniture or rework walls where necessary.
  Cost: $100

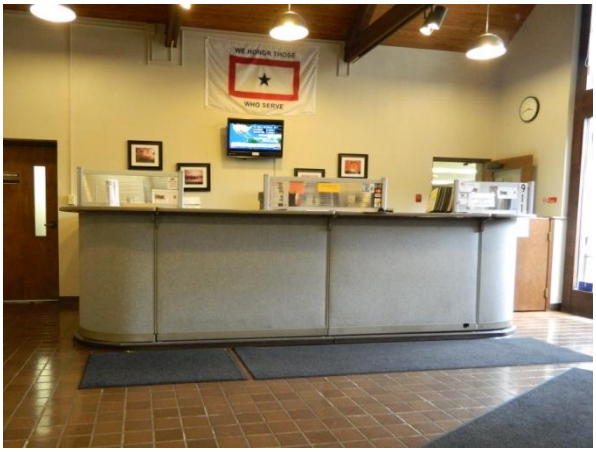
2.52-2.63: Seating: Assembly Areas- theatres, auditoriums, stadiums, theater style classrooms, etc.

- 2.52
  Non-compliance: There are no dedicated wheelchair spaces within the council chambers
  Solution: Remove several chairs at top level of seating within council chamber to provide spaces for wheelchairs. Provide microphone for speakers in wheelchair spaces
  Cost: $500

2.76 - 2.80: Sales and Service Counter

- 2.76
  Non-compliance: The reception counters are higher than 36".
  Solution: Rework counter top to provide a minimum 36" long section of counter that does not exceed 36" in height.
  Cost: $1500





Priority 3: Toilet Rooms:

3.6 - 3.15: Entrance

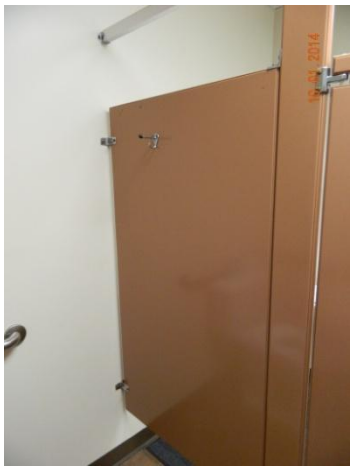
- 3.11
  Non-compliance: The doors to the men's and women's toilets exceed 5 lbs to open.

Solution: Adjust/replace closers.
Cost: $100

- 3.12
  Non-compliance: The door to the men's toilet takes less than 5 seconds to close from 90° to 12°.
  Solution: Adjust/replace closer.
  Cost: Cost covered under 3.11

3.16 - 3.20: In the Toilet Room

- 3.20
  Non-compliance: The coat hooks in the men's and women's toilets exceed 48" above the floor.
  Solution: Relocate / adjust height of existing coat hooks, or provide additional coat hooks (15” min. A.F.F. / 48” max. A.F.F.).
  Cost: $50



3.30 - 3.40: Water Closets (Note: 2010 Standards refer to toilets as water closets)

- 3.30
  Non-compliance: The centerline of the water closet is 23" from the wall in the men’s and women’s toilets.
  Solution: Move the water closet so the centerline is 18" from the wall or build out the wall so the centerline of the toilet is 18” from the wall.
  Cost: $2000

- 3.37

  Non-compliance: The flush control is not on the open side of the water closet in the men's toilet.

  Solution: Replace tank.

  Cost: $250

3.41 - 3.50: Toilet Compartments (Stalls)

- 3.26

  Non-compliance: In both toilets the toilet compartments are less than 60" wide.

  Solution: Move partition.

  Cost: $500

Estimated Total Costs	
Priority 1: Total Cost	$1,600.00
Priority 2: Total Cost	$4,450.00
Priority 3: Total Cost	$2,900.00
Total Cost	$8,950.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- 1.9

  Noncompliance: The two accessible spaces at the south end of the turn-around drive do not adjoin an accessible route.

  Solution: Provide an accessible route to the main entrance of the building. Restripe two accessible spaces due north of existing accessible parking along East side of building.

  Cost: $10,000 or $500

- 1.11

  Noncompliance: There is no sign that reads "van accessible" designating at least one accessible space as van accessible.

  Solution: Provide sign(s) that reads "van accessible" designating at least one space as van accessible.

  Cost: $50

Priority 2: Access to Goods & Services:

2.22 - 2.37: Elevators & LULA (Limited Use, Limited Application

- 2.31
  Noncompliance: There isn't a tactile star on the jambs at the main entry level.
  Solution: Install signs with tactile stars.
  Cost: $100

2.38 - 2.39: Signs (Note: "Tactile characters" are read using touch, i.e. raised characters and Braille)

- 2.38
- **Noncompliance:** The signs at the child care room, second floor conference room, the second floor meeting rooms and the fitness game room are not located in a compliant location.
- **Solution:** Relocate tactile signs.
- **Cost:** $300

2.40 - 2.46: Interior Doors (non-toilet room)

- 2.41
  Noncompliance: Some doors in the building have less than 18" clear on the pull side due to furniture.
  Solution: Move furniture.
  Cost: $50
- 2.45
  Noncompliance: The doors to the reception area, the laundry room, and the pool office require more than 5lbs max to open.
  Solution: Adjust closers.
  Cost: $150
- 2.46
  Noncompliance: The doors to the reception area and the pool office take less than 5 seconds to close from 90° to 12°.
  Solution: Adjust / replace closers.
  Cost: Cost covered under 2.45

2.69 - 2.70: Benches

- 2.70
  Noncompliance: The benches in the men's and women's locker rooms are only 15" deep.
  Solution: Rework a 42" min. section of bench so it is at least 20" deep and no greater than 24" deep.
  Cost: $2000

2.81 - 2.88: Food Service Lines – cafeterias, salad bars, eat-in food establishments, etc.

- 2.84

  Noncompliance: The dispensing device is higher than 46" above the floor.

  Solution: Rework counter top so that the dispensing device does not exceed 46" above the floor.

  Cost: $2000

Priority 3: Toilet Rooms:

First Floor Toilets

- 3.5: Signs at Toilet Rooms

  Noncompliance: The room signs for the men's and women's toilets are mounted on the door.

  Solution: Move the signs so they are mounted on the latch side of the door, and so the baseline of the lowest character is at least 48" above the floor and the baseline of the highest character is no more than 60" above the floor.

  Cost: $100

3.6 - 3.15: Entrance

- 3.11

  Noncompliance: The doors to the men's and women's toilets exceed 5 lbs to open.

  Solution: Adjust closers.

  Cost: $100

3.16 - 3.20: In the Toilet Room

- 3.20

  Noncompliance: The coat hook in each toilet is mounted higher than 48" above the floor.

  Solution: Lower coat hooks or provide additional coat hooks.

  Cost: $50

3.21 - 3.27: Lavatories (Note: 2010 Standards refer to sinks in toilet rooms as lavatories)

- Miscellaneous – see photos from 3.26

  Noncompliance: The trash can located between the lavatories in each toilet obstruct the clear floor space for the lavatories.

  Solution: Move trash cans.

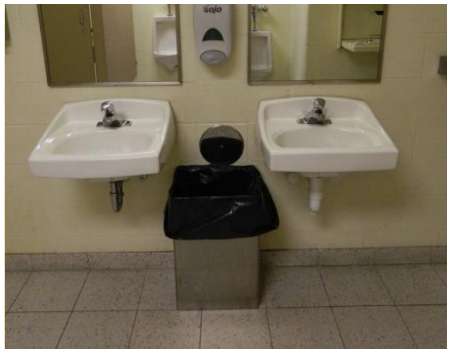
  Cost: $25

- 3.26

  Noncompliance: In both toilets not all of the lavatories' pipes are insulated.

  Solution: Insulate pipes.

  Cost: $100



3.30- 3.40: Water Closets (Note: 2010 Standards refer to toilets as water closets)

- 3.33

  Noncompliance: The side wall grab bar in the women's toilet does not extend at least 54" from the rear wall.

  Solution: Move grab bar.

  Cost: $50

3.41 - 3.50: Toilet Compartments (Stalls)

- 3.43

  Noncompliance: In the men's toilet the partition door is not self-closing.

  Solution: Repair or replace hinges.

  Cost: $100

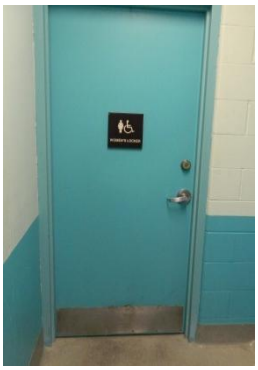
Locker Rooms

- 3.5: Signs at Toilet Rooms

  Noncompliance: The room signs for the men's and women's locker rooms are mounted on the doors.

  Solution: Move the signs so they are mounted on the latch side of the door, and so the baseline of the lowest character is at least 48" above the floor and the baseline of the highest character is no more than 60" above the floor.

  Cost: $100




3.6 - 3.15: Entrance

- 3.7

  Noncompliance: The doors (at corridor) to the men's and women's locker rooms do not have 18" clear maneuvering space on the pull side at the latch side of the door.

  Solution: Reverse swing of door.

  Cost: $500

- 3.11

  Noncompliance: The doors (4) to the men's and women's toilets exceed 5 lbs to open.

  Solution: Adjust/replace closers.

  Cost: $200

3.16 - 3.20: In the Toilet Room

- 3.20

  Noncompliance: The coat hook at the lavatories in the men's locker room is mounted higher than 48" above the floor. The coat hook in the accessible stall in the women's locker room is mounted higher than 48" above the floor.

  Solution: Lower the coat hook in the accessible stall in the women's locker room and at least one coat hook in the men's locker room or provide additional coat hooks at no more than 48" above the floor.

  Cost: $50

3.21 - 3.27: Lavatories (Note: 2010 Standards refer to sinks in toilet rooms as lavatories)

- 3.26

  Noncompliance: In both locker rooms not all of the lavatories' pipes are insulated.

  Solution: Insulate pipes.

  Cost: $150

3.41 - 3.50: Toilet Compartments (Stalls)

- 3.43

  Noncompliance: In both locker rooms the partition doors are not self-closing

  Solution: Repair or replace hinges.

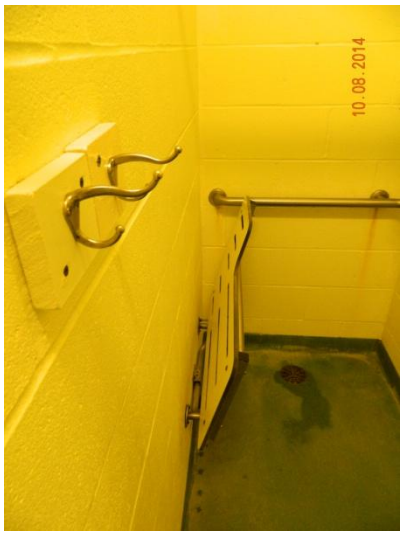
  Cost: $200

- Miscellaneous

  Noncompliance: The accessible shower seat in the women's locker room rubs on the grab bar, which makes it difficult to lower completely. The showerhead is not handheld.

  Solution: Adjust seat so it does not rub on the grab bar. Provide handheld showerhead.

  Cost: $250



Family Changing Room (Inside Natatorium)

- 3.5: Signs at Toilet Rooms

  Noncompliance: The room sign for the family changing room is mounted on the door.

  Solution: Move the sign so it is mounted on the latch side of the door, and so the baseline of the lowest character is at least 48" above the floor and the baseline of the highest character is no more than 60" above the floor.

  Cost: $50

- 3.11

  Noncompliance: The door to the family changing room exceeds 5 lbs to open.

  Solution: Adjust/replace closer.

  Cost: $50

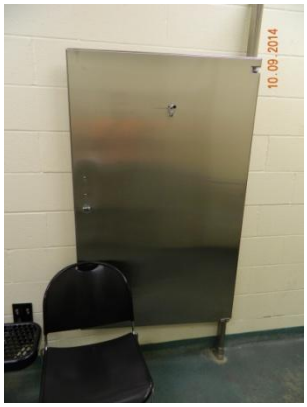
3.16 - 3.20: In the Toilet Room

- 3.20

  Noncompliance: The coat hooks at the shower and in the toilet compartment are mounted higher than 48" above the floor.

  Solution: Lower the coat hooks or provide additional coat hooks at no more than 48" above the floor.

  Cost: $100



Second Floor Toilets

- 3.5: Signs at Toilet Rooms

  Noncompliance: The room signs for the men's and women's toilets are mounted on the door.

  Solution: Move the signs so they are mounted on the latch side of the door, and so the baseline of the lowest character is at least 48" above the floor and the baseline of the highest character is no more than 60" above the floor.

  Cost: $100

3.6 - 3.15: Entrance

- 3.11

  Noncompliance: The doors to the men's and women's toilets exceed 5 lbs to open.

  Solution: Adjust/replace closers.

  Cost: $100

3.16 - 3.20: In the Toilet Room

- 3.20

  Noncompliance: The coat hook in the women's toilet is mounted higher than 48" above the floor.

  Solution: Lower coat hook or provide additional coat hook.

  Cost: $50

3.28 - 3.29: Soap Dispensers and Hand Dryers

- 3.29
  Noncompliance: In the women's toilet the hand dryer is installed too high.
  Solution: Lower the hand dryer so the controls do not exceed 48" above the floor.
  Cost: $100

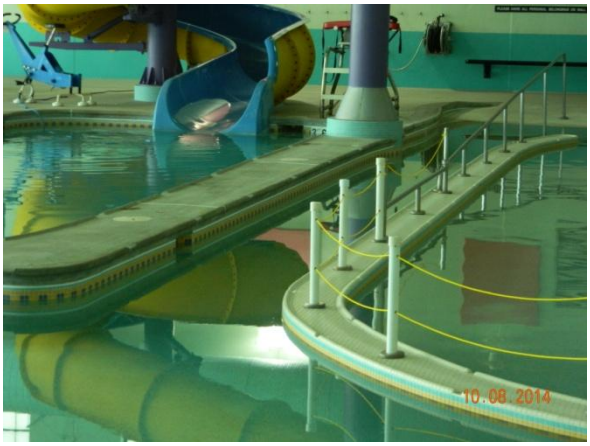
3.41 - 3.50: Toilet Compartments (Stalls)

- 3.43
  Noncompliance: In the men's toilet the partition door is not self-closing.
  Solution: Repair or replace hinges.
  Cost: $100

Swimming Pools Wading Pools & Spas:

- P7
  Noncompliance: The hot tub does not have a lift, transfer wall or sloped entry
  Solution: Install a grab bar on top of the hot tub wall to create a transfer wall.
  Cost: $150

- P22
  Verify that the pool lift has a weight capacity of at least 300lbs. If it does not comply, provide a new pool lift that does comply.
- P25
  Noncompliance: The water depth at the end of the sloped entry is greater than 30”
  Solution: Provide a landing located between 24 inches and 30 inches below the water level.
  Cost: $5,000



- P30
  Noncompliance: The sloped entry does not have handrails on both sides.
  Solution: Install compliant stainless steel handrails.
  Cost: $10,000

Estimated Total Costs	
Priority 1: Total Cost	$10,050.00
Priority 2: Total Cost	$4,600.00
Priority 3: Total Cost	$2,650.00
Swimming Pools, Wading Pools & Spas: Total Cost	$15,150.00
Total Cost	$32,450.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- 1.11

  Non-compliance: There isn't a sign that reads "van accessible" at the accessible parking sign.
  Solution: Provide sign that reads "van accessible".
  Cost: $50

- 1.12

  Non-compliance: The accessible space is not located on the closest accessible route.
  Solution: Relocate the accessible space to the north and provide curb ramp.
  Cost: $2,000

- Miscellaneous -

  Non-compliance: The public parking lot to the east of the community center is used often for events at the community center and there is not an accessible route provided from the parking lot to the sidewalk.

  Solution: Provide an accessible route from the accessible parking spaces to the public sidewalk.

  Cost: $2,000

1.37 - 1.49: Entrance

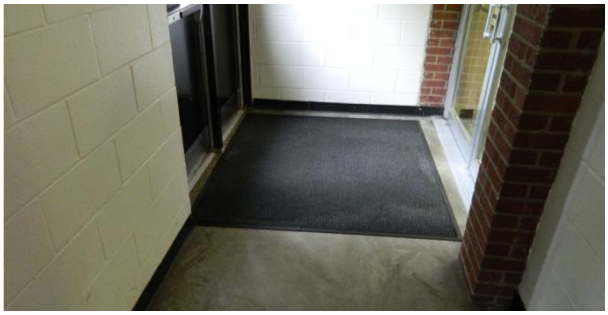
- 1.43

  Non-compliance: The concrete sidewalk at the entry door has settled and there is a 1/2" lip at the threshold.

  Solution: Rework sidewalk to eliminate lip and provide even transition.

  Cost: $500

- 1.49
  Non-compliance: The edges of the entry mat are not securely attached to the floor.
  Solution: Securely attach entry mat to the floor.
  Cost: $50



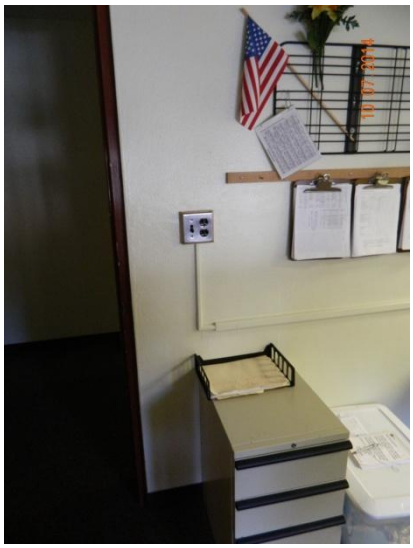
Priority 2: Access to Goods & Services:

2.2 - 2.9: Interior Accessible Route

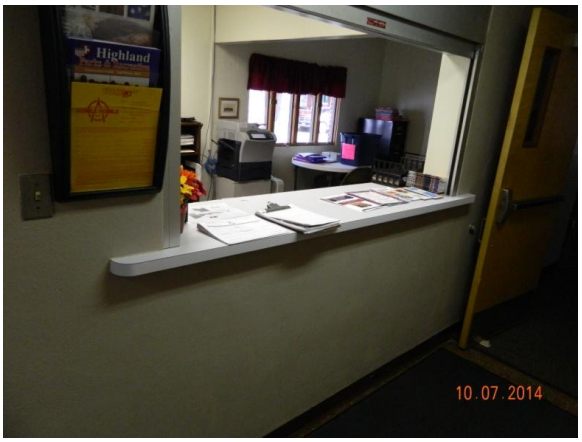
- 2.2 & 2.9
  Non-compliance: Not all public spaces are located on an accessible route. The second floor is accessed only by stairs.
  Solution: Provide an wheelchair lift or elevator or move meetings or events to a space that is on an accessible route when a wheelchair bound person is present.
  Cost: $15,000 or $65,000
- 2.8
  Non-compliance: The shelf / wall-mounted coat rack sticks out into the circulation path more than four inches.
  Non-compliance: Add physical warning to alert vision impaired cane-users to protrusion above 27”, such as a permanent planter, bench or partial wall.
  Cost: $1000

2.40 - 2.46: Interior Doors (non-toilet room)

- 2.43
  Non-compliance: Doors (approximately (4)) have knobs.
  Solution: Replace knobs with lever hardware.
  Cost: $1,000
- 2.45
  Non-compliance: The door near the reception counter exceeds 5 lbs to open.
  Solution: Adjust/replace closer.
  Cost: $50 - $500
- 2.50
  Non-compliance: The light switch in the reception area does not have a 30" x 48" clear floor space.
  Solution: Move the furniture.
  Cost: $50



- 2.76
  Non-compliance: The reception counter is higher than 36".
  Solution: Rework counter top to provide a minimum 36" long section of counter that does not exceed 36" in height.
  Cost: $1,500



Priority 3: Toilet Rooms:

- 3.5: Signs at Toilet Rooms
  Non-compliance: The sign for the women's toilet is not on the latch side of the door.
  Solution: Relocate sign to latch side of door.
  Cost: $50

3.6 - 3.15: Entrance

- 3.11
  Non-compliance: The doors to the men's and women's toilets exceed 5 lbs to open.
  Solution: Adjust/replace closers.
  Cost: $100
- 3.12
  Non-compliance: The doors to the men's and women's toilets take less than 5 seconds to close from 90° to 12°.
  Solution: Adjust/replace closers.
  Cost: Covered under 3.11

3.21 - 3.27: Lavatories (Note: 2010 Standards refer to sinks in toilet rooms as lavatories)

- 3.26
  Non-compliance: In both toilets the pipes below the lavatories are not insulated.
  Solution: Insulate pipes.
  Cost: $100

3.30 - 3.40: Water Closets (Note: 2010 Standards refer to toilets as water closets)

- 3.30
  Violation: The centerline of the water closet is 19" in the men's toilet and 20" in the women's toilet from the wall.
  Solution: Move the water closets so the centerlines are 18" from the wall.
  Cost: $3,000

3.41 - 3.50: Toilet Compartments (Stalls)

3.43

Non-compliance: The accessible stall door in the women's toilet is not self closing.

Solution: Repair or replace hinges.

Cost: $100

Estimated Total Costs	
Priority 1: Total Cost	$4,600.00
Priority 2: Total Cost	$18,600.00
Priority 3: Total Cost	$3,350.00
Total Cost	$26,550.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

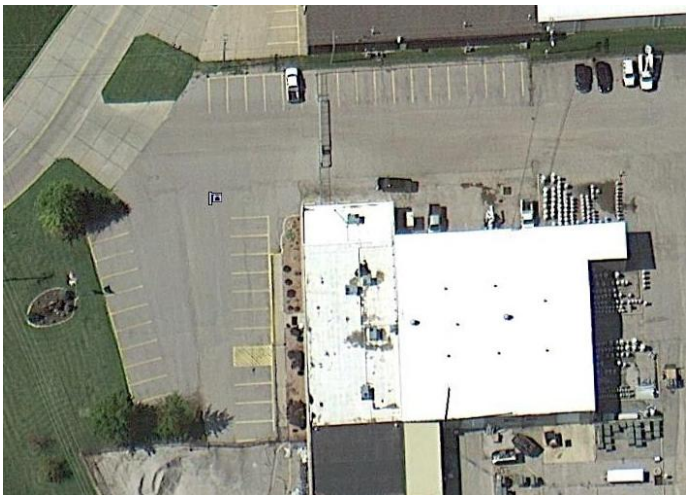
1.2 - 1.12: Parking

- 1.2

  Non-compliance: There are not enough accessible spaces designated for the amount of parking provided (lacking one space in the front and one space in the employee parking area).

  Solution: Designate more spaces. Stripe one additional parking space at the front entrance of the building. Stripe one parking space in the employee parking area and stripe access path across driveway to employee entrance. Provide new striping and accessible parking signs.

  Cost: $1,00



- 1.11

  Non-compliance: There is no sign that reads "van accessible" at the accessible parking space.

  Solution: Provide sign that reads "van accessible".

  Cost: $50

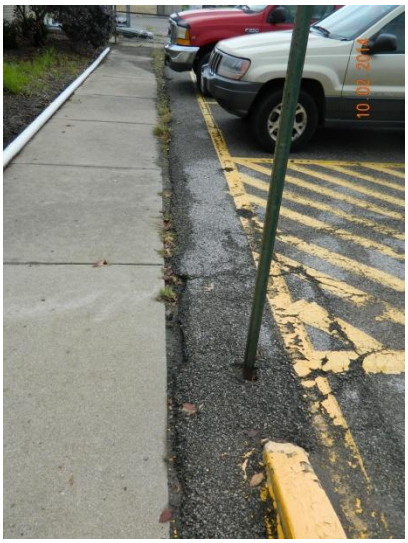
1.13 - 1.18: Exterior Accessible Route

- 1.13

  Non-compliance: The pavement at the accessible space is cracked and uneven, and there is a large crack between the sidewalk and the asphalt pavement.

  Solution: Patch joint between the asphalt paving and the sidewalk.

  Cost: $500



- 1.16

  Non-compliance: The openings on the grate crossing the sidewalk run parallel to the path of travel.

  Solution: Replace grate so the openings are perpendicular to the path of travel.

  Cost: $500

1.37 - 1.49: Entrance

- Miscellaneous

  Non-compliance: The employee entrance located on the other side of the gate is not accessible.

  Solution: Repave pavement adjacent to employee entrance to a slope less than 1:48 in all directions.

  Cost: $3,000

- 1.46

  Non-compliance: The entrance door takes less than 5 seconds to close from 90° to 12°.

  Solution: Adjust/replace closer.

  Cost: $50

- 1.49

  Non-compliance: The edges of the mats are not securely attached to avoid tripping hazards.

  Solution: Secure the edges of the mats.

  Cost: $50

Priority 2: Access to Goods & Services:

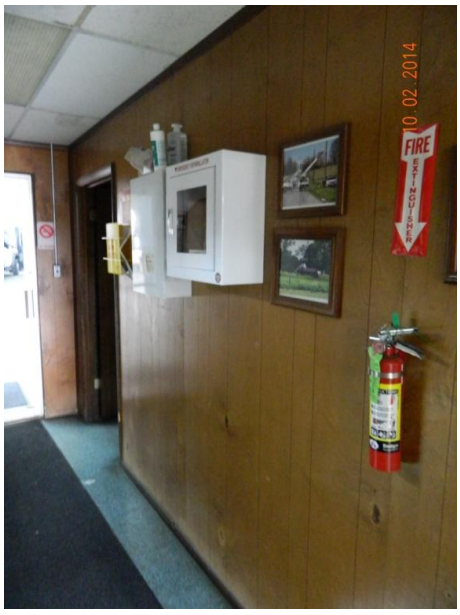
2.2 - 2.9: Interior Accessible Route

- 2.8

  Non-compliance: The medicine cabinet and defibrillator cabinet sticks out into the circulation path more than four inches.

  Solution: Move cabinets from circulation path or add physical warning to alert vision impaired cane-users to protrusion above 27", such as a permanent planter or partial wall.

  Cost: $1000



2.38 - 2.39: Signs (Note: "Tactile characters" are read using touch, i.e. raised characters and Braille)

- 2.38

  Non-compliance: The sign for the Building and Zoning office does not comply.

  Solution: Install compliant tactile sign.

  Cost: $100

2.40 - 2.46: Interior Doors (non-toilet room)

- 2.45 - 2.46

  Non-compliance: Various doors (approximately five) in the building require more than 5lbs max to open and take less than 5 seconds to close from 90° to 12°.

  Solution: Adjust / replace closers.

  Cost: $1,000

2.47 - 2.49: Rooms and Spaces

- 2.49

  Non-compliance: The edges of the mat in the reception area are not securely attached to avoid tripping hazards.

  Solution: Secure the edges of the mats.

  Cost: $50

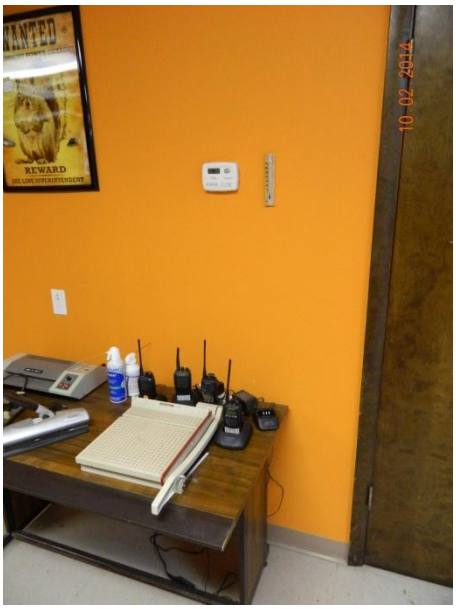
2.50 - 2.51: Controls - light switches, thermostats, emergency / alarm boxes, etc.

- 2.50

  Non-compliance: The thermostat controls are 60” above the floor and there is a table within the clear floor space.

  Solution: Change height of control and move table.

  Cost: $200



- 2.68: Seating: General – Reception areas, waiting rooms, etc.

  Non-compliance: There is no designated space (36” x 48”) at the waiting area in the building and zoning area for a wheelchair.

  Solution: Move existing furniture to provide a 36” x 48” space.

  Cost: $50

2.76 - 2.80: Sales and Service Counters

- 2.76

  Non-compliance: The counters in the building and zoning office and general office area are higher than 36".

  Solution: Rework counter tops to provide a minimum 36" long section of counter that does not exceed 36" in height.

  Cost: $1500

Priority 3: Toilet Rooms:

- 3.2

  Non-compliance: The non-accessible toilet by the break room does not have a sign giving directions to the accessible toilets.

  Solution: Provide sign(s) giving directions to the accessible toilets.

  Cost: $100

3.16 - 3.20: In the Toilet Room

- 3.19

  Non-compliance: The bottom of the reflecting surface of the mirror in the women's toilet is higher than 40".

  Solution: Lower mirror.

  Cost: $50

3.30- 3.40: Water Closets (Note: 2010 Standards refer to toilets as water closets)

- 3.37

  Non-compliance: The flush control is not on the open side of the water closet in the men's toilet.

Solution: Replace tank.
Cost: $250

Estimated Total Costs	
Priority 1: Total Cost	$5,150.00
Priority 2: Total Cost	$3,900.00
Priority 3: Total Cost	$450.00
Total Cost	$9,500.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

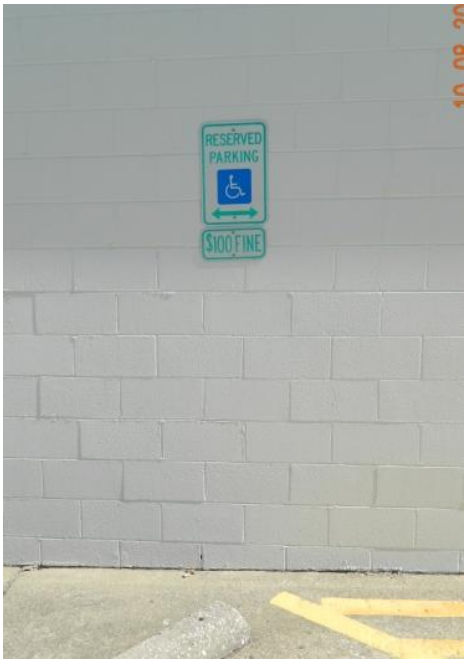
1.2 - 1.12: Parking

- 1.11

  Noncompliance: There is no sign that reads "van accessible" at the accessible parking spaces.

  Solution: Provide sign that reads "van accessible".

  Cost: $50



1.37 - 1.49: Entrance

- 1.46

  Noncompliance: The entrance/exit doors take less than 5 seconds to close from 90° to 12°.

  Solution: Adjust/replace closers.

  Cost: $50

Priority 2: Access to Goods & Services:

- 2.13 & 2.41

  Noncompliance: The existing double swinging doors at the top of the ramp leading into the break room do not allow for an unobstructed landing. The ramp does not allow for a level maneuvering clearance at the doors.
  Solution: Remove doors.
  Cost: $100

2.50 - 2.51: Controls - light switches, thermostats, emergency / alarm boxes, etc.

- 2.50
  Noncompliance: The thermostat controls are 72" + above the floor.
  Solution: Change height of control.
  Cost: $200

2.76 - 2.80: Sales and Service Counter

- 2.76

  Noncompliance: The counters in the main reception area are higher than 36".

  Solution: Rework counter tops to provide a minimum 36" long section of counter that does not exceed 36" in height.

  Cost: $1,250

Priority 3: Toilet Rooms:

- 3.5: Signs at Toilet Rooms

  Noncompliance: The sign for the women's toilet is not on the latch side of the door.

  Solution: Relocate sign to latch side of door.

  Cost: $50

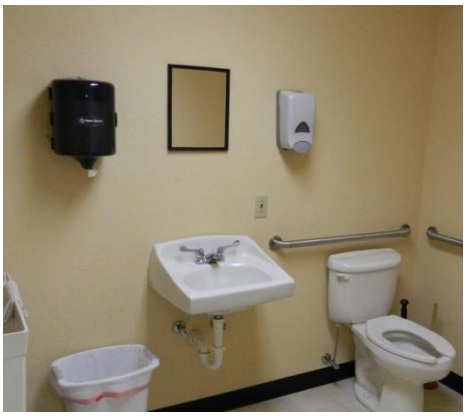
3.16 - 3.20: In the Toilet Room

3.19

Noncompliance: The bottom of the reflecting surface of the mirror in toilet is higher than 40"

Solution: Install new mirror.

Cost: $150



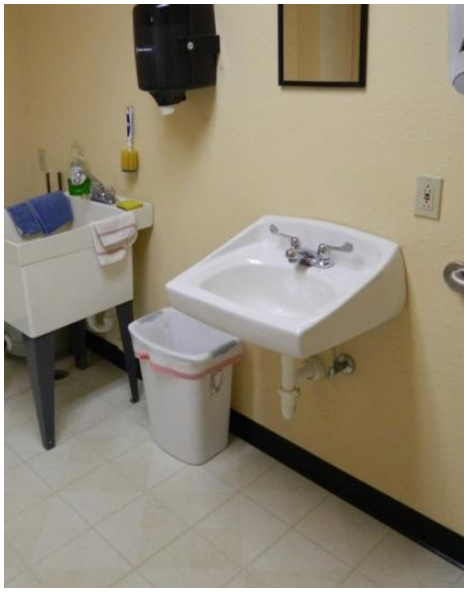
3.21 - 3.27: Lavatories (Note: 2010 Standards refer to sinks in toilet rooms as lavatories)

- 3.26

  Noncompliance: The pipes below the lavatory are not insulated.

  Solution: Insulate pipes.

  Cost: $50



3.28 - 3.29: Soap Dispensers and Hand Dryers

- 3.28-3.29 – see photo from 3.19

  Noncompliance: The soap dispenser and paper towel dispenser exceed 48” above the floor.

  Solution: Lower the soap dispenser and paper towel dispenser.

  Cost: $100

3.30 - 3.40: Water Closets (Note: 2010 Standards refer to toilets as water closets)

- 3.30

  Noncompliance: The centerline of the water closet is 19" from the wall.

  Solution: Fur out the side wall so that the centerline of the water closet is 18" from the wall.

  Cost: $300

- 3.33
  Noncompliance: The grab bar along the side wall in the toilet does not extend at least 54" from the rear wall.
  Solution: Move grab bar.
  Cost: $50

- 3.34 – see photo from 3.33
  Noncompliance: The grab bar along the rear wall in the toilet does not extend at least 24" to the open side from the centerline of the toilet.
  Solution: Move grab bar.
  Cost: $50

Estimated Total Costs	
Priority 1: Total Cost	$50.00
Priority 2: Total Cost	$1,550.00
Priority 3: Total Cost	$750.00
Total Cost	$2,350.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

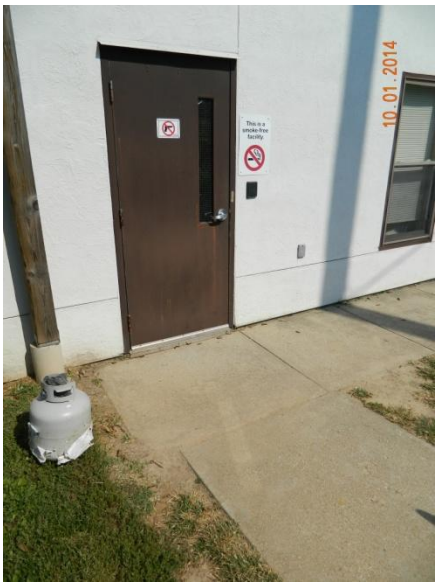
Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

The city of Highland's Fire Station #1 was built before the 1991 ADA was implemented, therefore, it does not meet current code requirements. There have been no major renovations to the building requiring it to be made fully compliant. The following is an overview of the non-compliant items requiring a substantial renovation to address. Specific non-compliance issues are not listed due to the nature of necessary renovation to meet ADA compliance. A general description of the compliance issues are provided below in addition to a planning level cost estimate to update the building.

Priority 1: Approach and Entrance:

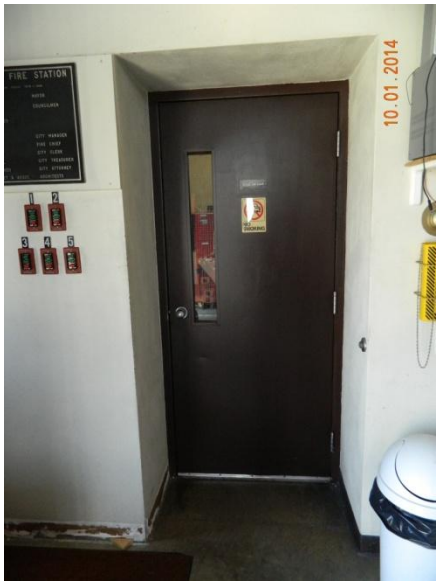
The single accessible space provided is not striped. The space cannot be striped with an access aisle because the aisle would encroach into the overhead door opening. The layout of the site does not allow the space to be moved to a better location. Provide striping at the edges of the accessible space but not for an access aisle. There is a sloped driveway, which acts as the approach to the main entrance, with a slope which exceeds 1:20. The handrail provided along the drive leading to the main entrance does not have 12" extensions at the top and bottom.

The main entry door is 2"-3" above the sidewalk. At some point concrete was poured to make a transition from the sidewalk into the building. The concrete transition is cracked and deteriorated. The main entry door takes less than 5 seconds to close. The back entrance does not have a sign showing the location of the nearest "accessible" entrance.

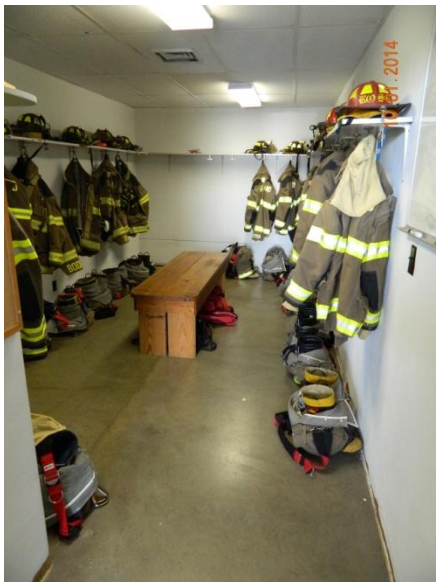


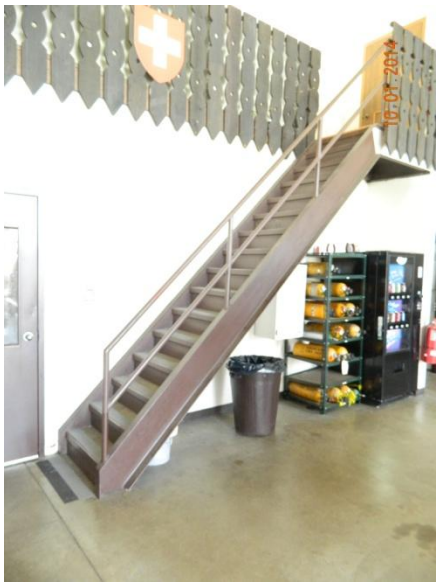
Priority 2: Access to Goods & Services:

None of the room signs are compliant. The signs are not tactile (Note: “Tactile characters” are read using touch, i.e. raised characters and Braille) and do not have raised characters, nor are they mounted in the correct location. All of the interior doors have noncompliant hardware and require more than 5 lbs max. to open. Some of the doors take less than 5 seconds to close.



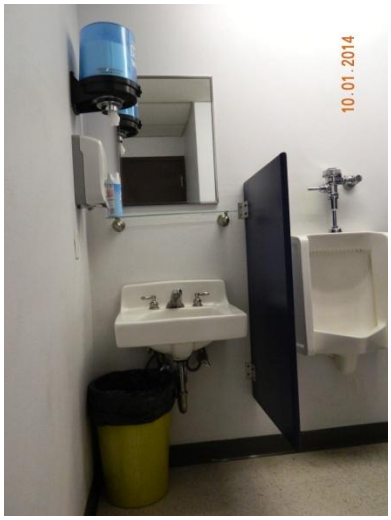
The bench in the dressing room is 22" high. This exceeds the allowable accessible height. There is no accessible route to the upstairs sleeping rooms.





Priority 3: Toilet Rooms:

The men's and women's toilets / showers are not accessible. The doors leading into the toilets are 2'-4" wide, and there is no room to easily make them 3'-0". The required floor clearances for toilets and showers cannot be met in the existing spaces. There are no grab bars located on the walls, nor is there space on the rear walls to install compliant grab bars.



Estimated Total Costs	
Total Cost	$125,000 - $150,000

* Estimated cost is for accessibility upgrades only and includes the renovations of the toilet rooms, stairs and the addition of an elevator.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

CHAPEL BUILDING

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

Noncompliance: Accessible parking spaces are not provided.

Solution: Provide an accessible parking space, access aisle and signage.

Cost: $5,000

1.3 - 1.18: Accessible Route

- 1.17

Noncompliance: The running slope of the route to the chapel exceeds 1:20. There are stairs leading to the entrance.

Solution: Provide compliant accessible route and ramp(s) and reconstruct stairs.

Cost: $15,000

1.37 - 1.49: Entrance

- 1.41
  Noncompliance: The clear opening width of the entrance door is less than 32".
  Solution: Replace doors.
  Cost: $3,000
- 1.43
  Noncompliance: The threshold height exceeds 3/4 inches.
  Solution: Replace threshold.
  Cost: $100

- 1.44
  Noncompliance: The door hardware requires grasping and twisting.
  Solution: Replace with compliant door hardware.
  Cost: $300

Statement regarding Historic Buildings and Facilities

If the City believes that compliance with the requirements for any of these elements would threaten or destroy the historic significance of the building or facility, they should consult with the State Historic Preservation Officer.

Estimated Total Costs	
Priority 1: Total Cost	$23,400.00
Priority 2: Total Cost	$0.00
Priority 3: Total Cost	$0.00
Total Cost	$23,400.00

MAINTENANCE BUILDING

Upgrades to the Highland cemetery maintenance building should occur when an employee is hired that requires responsible accommodations to perform their job tasks within the maintenance building.

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

Noncompliance: Accessible parking spaces are not provided.

Solution: Provide an accessible parking space, access aisle and signage.

Cost: $2,500

1.37 - 1.49: Entrance

- 1.37

Noncompliance: The entrance is not accessible because of a 3 inch high step up to the door.

Solution: Provide compliant accessible route, approach and maneuvering clearance at door.

Cost: $1,000

- 1.43
  Noncompliance: The threshold height exceeds 3/4 inches.
  Solution: Replace threshold.
  Cost: $100

- 1.44
  Noncompliance: The door hardware requires grasping and twisting.
  Solution: Replace with compliant door hardware.
  Cost: $150

Priority 2: Access to Goods & Services:

2.2 – 2.9: Interior Accessible Route

- 2.2
  Noncompliance: There is a 1 1/2 inch change in level between the office and the work space and between the restroom and the work space.
  Solution: Construct landing and short compliant ramp in work area.
  Cost: $1000

2.40 - 2.49: Interior Doors

- 2.40

  Noncompliance: The door between the office and the work space does not provide a 32 inch clear opening.

  Solution: Modify wall and replace door.

  Cost: $1000

- 2.43

  Noncompliance: The interior office door hardware requires grasping and twisting.

  Solution: Replace with compliant door hardware.

  Cost: $150

Priority 3: Toilet Rooms:

3.6 - 3.15: Entrance

- 3.6

  Noncompliance: The restroom door does not provide a minimum 32 inch clear opening.

  Solution: Modify wall and replace door.

  Cost: $1000

- 3.9

  Noncompliance: The restroom door hardware requires grasping and twisting.

  Solution: Replace with compliant door hardware.

  Cost: $150

3.16 - 3.20: In the Toilet Room

- 3.17

  Noncompliance: There is not a turning space within the restroom.

  Solution: Enlarge restroom.

  Cost: $2500

- 3.19

  Noncompliance: The bottom of the mirror (medicine cabinet) is greater than 40 inches above the floor.

  Solution: Lower mirror.

  Cost: $50

3.21 - 3.27: Lavatories

- 3.21 - 3.25

  Noncompliance: The lavatory does not have a clear floor space for front approach or knee/toe clearance.

  Solution: Replace sink/vanity with compliant lavatory.

  Cost: $750

3.30 - 3.40: Toilets

- 3.30

  Noncompliance: The toilet is more than 18" from the side wall.

  Solution: Relocate/replace toilet or fur out wall.

  Cost: $750

- 3.31

  Noncompliance: The clear floor space at the toilet is less than 60 inches wide.

  Solution: Reconfigure/enlarge restroom.

  Cost: $2500

- 3.32

  Noncompliance: The height of the toilet seat is less than 17 inches.

  Solution: Replace toilet.

  Cost: $500

- 3.33 & 3.34

  Noncompliance: There are not grab bars at the side and back of the toilet.

  Solution: Install compliant grab bars.

  Cost: $500

Estimated Total Costs	
Priority 1: Total Cost	$3,750.00
Priority 2: Total Cost	$2,150.00
Priority 3: Total Cost	$8,700.00
Total Cost	$14,600.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- 1.10
  Noncompliance: The bottom of the accessible parking sign is not 60 inches or more above the ground.
  Solution: Raise sign.
  Cost: $100

- 1.11
  Noncompliance: The van accessible space is not identified.
  Solution: Provide "Van Accessible" signage.
  Cost: $100

1.37 - 1.49: Entrance

- 1.42
  Noncompliance: The entrance door does not have 18 inch maneuvering clearance beyond the latch side.
  Solution: Increase paved area.
  Cost: $250

- 1.46
  Noncompliance: The force to open the entrance door exceeds 5 pounds and the door closes in less than 5 seconds.
  Solution: Adjust closer.
  Cost: $25

Priority 2: Access to Goods and Services:

- 2.41
  Noncompliance: The door to the office on the left at the end of the hallway does not have the required maneuvering clearance.
  Solution: Reconfigure wall and door.
  Cost: $1,500
- 2.45 & 2.46
  Noncompliance: The force needed to open the door to the work/vehicle area exceeds 5 pounds and the door closes in less than 5 seconds.
  Solution: Adjust closer.
  Cost: $25
- Miscellaneous
  Noncompliance: The sink in the break room does not have a clear space for forward approach with knee and toe clearance and is higher than 34 inches above the floor.
  Solution: Rework cabinets and countertop to provide lower wink with required clearances.
  Cost: $500

Noncompliance: The operable parts on the microwave in the break room are higher than 48".
Solution: Provide a microwave with operable parts no higher than 48" above the floor.
Cost: $250

Priority 3: Toilet Rooms:

Private Restroom accessed through Director's office.

- 3.19
  Noncompliance: The height of the mirror is more than 40 inches above the floor.
  Solution: Lower the mirror/medicine cabinet.
  Cost: $100

- 3.37
  Noncompliance: The flush handle is not located on the open side of the toilet.
  Solution: Replace tank.
  Cost: $250

Main Restroom off Hallway.

3.16 - 3.20: In the Toilet Room

- 3.19
  Noncompliance: The height of the mirror is more than 40 inches above the floor.
  Solution: Lower the mirror/medicine cabinet.
  Cost: $100

3.21 - 3.27: Lavatories

- 3.27
  Noncompliance: The faucet requires tight grasping, pinching or twisting to operate.
  Solution: Install compliant faucet.
  Cost: $300

3.28 - 3.29: Soap Dispensers and Hand Dryers

- 3.29
  Noncompliance: The paper towel dispenser is located more than 48” above the floor.
  Solution: Lower the paper towel dispenser.
  Cost: $50

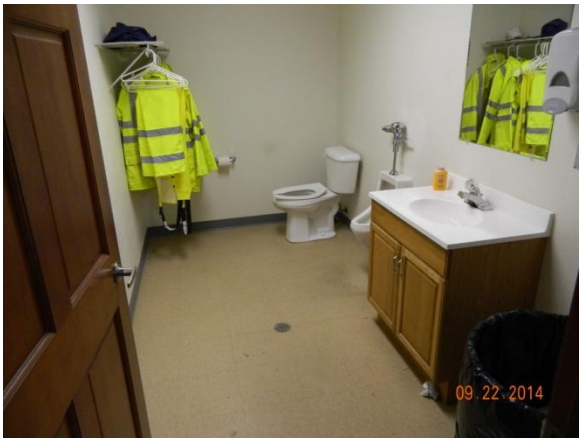
3.30 - 3.40: Toilets

- 3.33
  Noncompliance: The side wall grab bar does not extend at least 54 inches from the back wall and is not at least 42 inches long.
  Solution: Install new compliant grab bar.
  Cost: $200

- 3.34
  Noncompliance: The rear wall grab bar is not at least 36 inches long.
  Solution: Install new compliant grab bar.
  Cost: $200

Restroom off Work/Vehicle Area (inaccessible)

- 3.2 & 3.3
  Noncompliance: There is not signage giving directions to an accessible toilet room. There is not a sign at the accessible restroom.
  Solution: Install compliant signage.
  Cost: $200



Estimated Total Costs	
Priority 1: Total Cost	$475.00
Priority 2: Total Cost	$2,275.00
Priority 3: Total Cost	$1,400.00
Total Cost	$3,150.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- 1.7
  Noncompliance: The accessible parking space and access aisle are not clearly marked.
  Solution: Restripe accessible parking space and access aisle.
  Cost: $150

- 1.10
  Noncompliance: The bottom of the accessible parking sign is not 60 inches or more above the ground.
  Solution: Raise sign.
  Cost: $50

- 1.11
  Noncompliance: There is no sign identifying the accessible parking space as van accessible.
  Solution: Provide van accessible parking sign.
  Cost: $100

1.37 - 1.49: Entrance

- 1.42

  Noncompliance: The slope of the maneuvering clearance at the entrance exceeds 1:48.

  Solution: Replace concrete paving to provide level area at door and compliant route from parking.

  Cost: $2,000

- 1.46

  Noncompliance: The force to open the entrance door exceeds 5 pounds and the door closes in less than 5 seconds.

  Solution: Adjust closer.

  Cost: $25

Priority 2: Access to Goods and Services:

- 2.41
  Noncompliance: The door to the break room does not have the required maneuvering clearances on either side of the door.
  Solution: Remove door closer.
  Cost: $25

- 2.45 & 2.46
  Noncompliance: The force required to open the office door exceeds 5 pounds and door closes in less than 5 seconds.
  Solution: Adjust or replace closer.
  Cost: $25 - $250

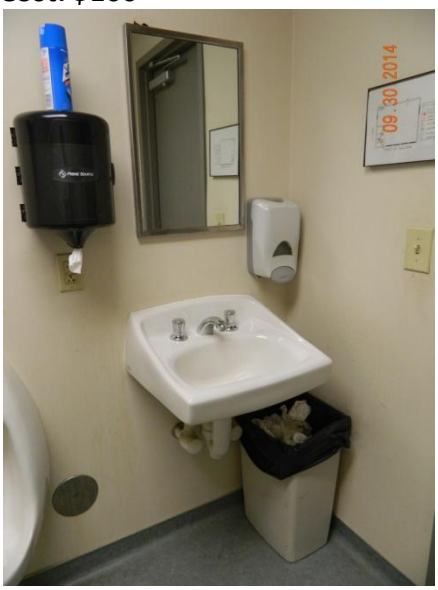
- Miscellaneous
  Noncompliance: The sink in the break room does not have a clear space for forward approach with knee and toe clearance and is higher than 34 inches above the floor.
  Solution: Rework cabinets and countertop to provide lower sink with required clearances.
  Cost: $500

Priority 3: Toilet Rooms:

- 3.5
  Noncompliance: The signage at the restrooms is mounted below 48 inches above the floor.
  Solution: Relocate the signs to be between 48 and 60 inches above the floor.
  Cost: $100

- 3.7
  Noncompliance: The restroom doors do not have the required maneuvering clearance outside the room.
  Solution: Relocate fire extinguisher and emergency eye wash. Relocate drinking fountain or provide drinking fountain that does not impede on maneuvering clearances.
  Cost: $3,500

- 3.19
  Noncompliance: The mirrors in both restrooms are mounted higher than 40 inches above the floor.
  Solution: Relocate mirrors so that the bottom of the reflecting surface is 40 inches or less above the floor.
  Cost: $100



- 3.33 & 3.34
  Noncompliance: The grab bars are mounted with the top 37 inches above the floor.
  Solution: Reinstall grab bars with the top between 33 and 36 inches above the floor.
  Cost: $150

- 3.38
  Noncompliance: The toilet paper dispensers are mounted less than 7" from the front of the toilet.
  Solution: Relocate toilet paper dispensers so that they are between 7 and 9 inches from the front of the toilet.
  Cost: $50

Estimated Total Costs	
Priority 1: Total Cost	$2,325.00
Priority 2: Total Cost	$550.00
Priority 3: Total Cost	$3,900.00
Total Cost	$6,775.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

Noncompliance: There are no accessible parking spaces.

Solution: Provide an accessible parking space.

Cost: $2,500

1.13 - 1.18: Exterior Accessible Route

Noncompliance: There is a 1/2 to 1 inch change in level just in front of the door.

Solution: Repair concrete paving.

Cost: $250

1.37 - 1.49: Entrance

- 1.39 & 1.40

  Noncompliance: Signage is not provided at the inaccessible entrance indicating the location of the accessible entrance. There is no signage identifying the accessible entrance.

  Solution: Provide compliant signage.

  Cost: $500

- 1.46

  Noncompliance: The force to open the entrance door exceeds 5 pounds and the door closes in less than 5 seconds.

  Solution: Adjust closer.

  Cost: $25

Priority 2: Access to Goods and Services:

- 2.2
  Noncompliance: The offices are not located on an accessible route.
  Solution: Relocate offices and provide landings and short ramps as needed.
  Cost: $5,000

Priority 3: Toilet Rooms:

- 3.4
  Noncompliance: The restroom is not located on an accessible route.
  Solution: Provide an accessible restroom on the main level.
  Cost: $10,000

Estimated Total Costs	
Priority 1: Total Cost	$3,275.00
Priority 2: Total Cost	$5,000.00
Priority 3: Total Cost	$10,000.00
Total Cost	$18,275.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

Noncompliance: No accessible parking is provided.

Solution: Construct required, compliant accessible parking space, access aisle, signage and accessible route to entrance.

Cost: $5,000

1.37 - 1.49: Entrance

Noncompliance: No accessible entrance is provided into building with lab.

Solution: Replace doors and construct compliant ramp.

Cost: $5,000

Priority 2: Access to Goods and Services:

2.40 - 2.46: Interior Doors

- 2.40
  Noncompliance: Clear door width into lab is less than 32”**.**
  Solution: Reconstruct wall and replace door.
  Cost: $2500

Priority 3: Toilet Rooms:

- 3.2
  Noncompliance: Inaccessible toilet room near lab does not have sign giving directions to accessible restroom.
  Solution: Provide signage.
  Cost: $100
- 3.5
  Noncompliance: Accessible restroom does not have an identification sign.
  Solution: Provide compliant sign at restroom.
  Cost: $100

3.16 - 3.20: In the Toilet Room

- 3.19
  Noncompliance: Bottom edge of reflecting surface of mirror is greater than 40” above finish floor.
  Solution: Replace mirror, install at 40” above finish floor.
  Cost: $100

- 3.20
  Noncompliance: Robe/towel hooks by shower are greater than 48” above the floor.
  Solution: Reinstall robe/towel hooks.
  Cost: $50

3.21 - 3.27: Lavatories (Note: 2010 Standards refer to sinks in toilet rooms as lavatories)

- 3.26

  Noncompliance: The lavatory in the locker room does not have pipe protection.

  Solution: Provide protection of pipes below lavatory.

  Cost: $100

3.30- 3.40: Water Closets (Note: 2010 Standards refer to toilets as water closets)

- 3.31

  Noncompliance: The clear floor space around the water closet is less than 60" wide.

  Solution: Reconfigure or remove partitions and move urinal.

  Cost: $1,000

- 3.33 & 3.34

  Noncompliance: Grab bars are not provided.

  Solution: Provide and install grab bars.

  Cost: $300

Priority 4: Additional Access:

4.1 - 4.9: Drinking fountains

- 4.6

  Noncompliance: The drinking fountain spout is higher than 36” above the floor.

  Solution: Lower drinking fountain

  Cost: $250

Miscellaneous Non-Checklist Items:

Locker Room

Noncompliance: The bench is not at least 42” long, between 20” and 24” deep and does not have back support.

Solution: Replace bench

Cost: $250

Shower

Noncompliance: The shower is not 36” by 36” or 30” minimum by 60” minimum, does not have required grab bars, compliant controls/shower head and has curb at the entry.

Solution: Alter shower

Cost: $5000

Estimated Total Costs	
Priority 1: Total Cost	$10,000.00
Priority 2: Total Cost	$3,000.00
Priority 3: Total Cost	$1,750.00
Priority 4: Total Cost	$5,500.00
Total Cost	$20,250.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- 1.2
  Noncompliance: There is no designated accessible parking space.
  Solution: Provide accessible parking space and access aisle.
  Cost: $2,500

1.37 - 1.49: Entrance

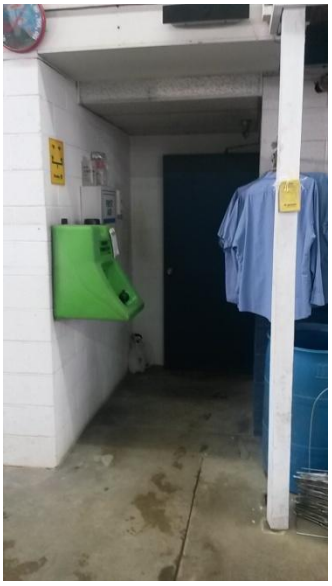
- 1.44
  Noncompliance: The hardware on the entrance door requires tight grasping, pinching or twisting to operate.
  Solution: Replace with compliant lever hardware.
  Cost: $250

- 1.46
  Noncompliance: The force to open the entrance door exceeds 5 pounds and the door closes in less than 5 seconds.
  Solution: Adjust closer.
  Cost: $25

Priority 2: Access to Goods and Services:

2.2 - 2.9: Interior Accessible Route

- 2.8
  Noncompliance: The emergency eyewash, office air conditioner, hand sanitizer, time clock and first aid kit protrude more than 4 inches from the wall and are greater than 27 inches above the floor.
  Solution: Relocate protruding objects.
  Cost: $250



- 2.41
  Noncompliance: The door into the break room does not have the required maneuvering clearance.
  Solution: Reconfigure wall and door so that it is at least 48 inches from the stairs and railing.
  Cost: $1,500

- 2.41
  Noncompliance: The door into the southwest work room does not have the required maneuvering clearances.
  Solution: Remove door closer.
  Cost: $25

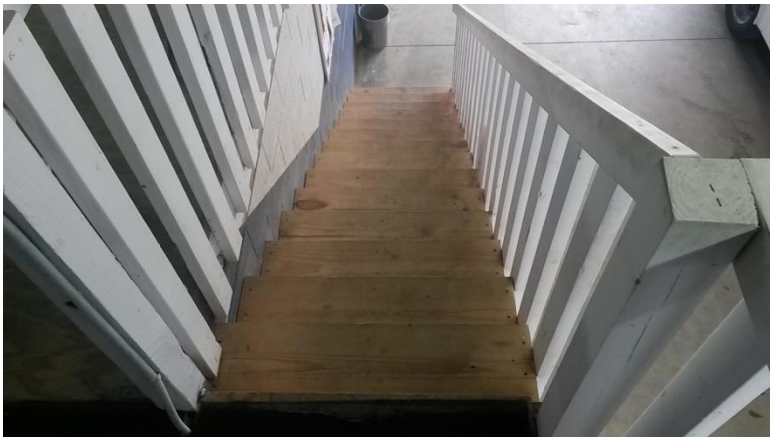
- 2.41

  Noncompliance: The main (west) egress door does not have the required 12 inch maneuvering clearance at the latch side.
  Solution: Reverse the hinge side of the door.
  Cost: $250

- 2.43
  Noncompliance: The hardware on the doors throughout the facility (Approx. 10) requires tight grasping, pinching or twisting to operate.
  Solution: Replace with compliant lever hardware.
  Cost: $2,500

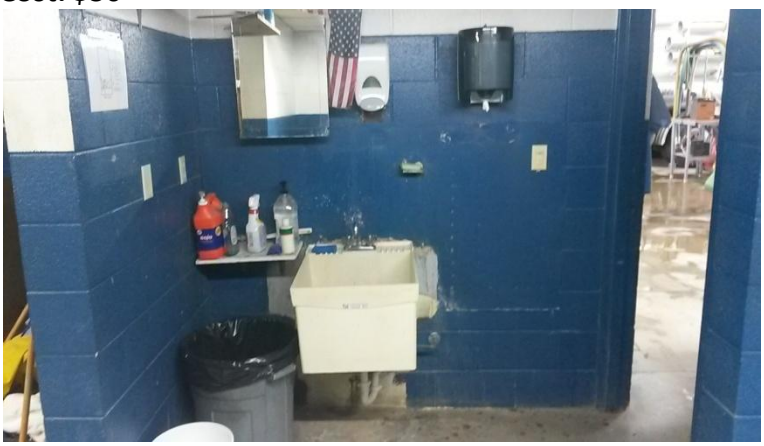
- 2.45 & 2.46
  Noncompliance: The force required to open the doors with closers (approx. 4) exceeds 5 pounds and the doors close in less than 5 seconds.
  Solution: Adjust closers.
  Cost: $100

  Noncompliance: The stairs to the mezzanine do not have compliant handrails on both sides.
  Solution: Provide compliant handrails.
  Cost: $250



Priority 3: Toilet Rooms:

- 3.19
  Noncompliance: The mirror in the restroom is mounted higher than 40 inches above the floor.
  Solution: Relocate mirrors so that the bottom of the reflecting surface is 40 inches or less above the floor.
  Cost: $50



3.21 - 3.27: Lavatories

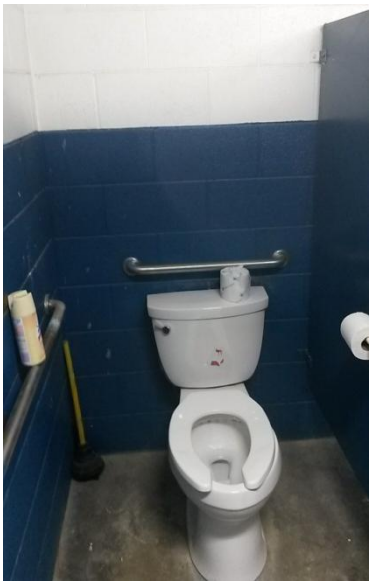
- 3.22
  Noncompliance: The sink does not have knee and toe clearance beneath it.
  Solution: Replace with compliant lavatory.
  Cost: $1,600

3.28 - 3.29: Soap Dispensers and Hand Dryers

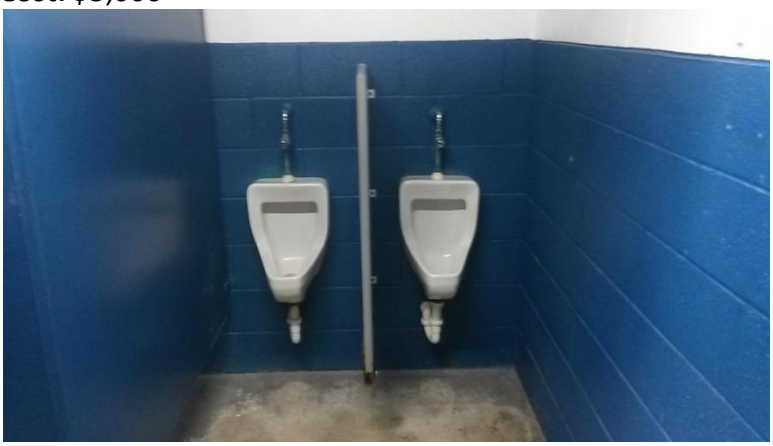
- 3.28 & 3.29
  Noncompliance: The soap dispenser and towel dispenser are mounted greater than 48 inches above the floor.
  Solution: Lower soap dispenser and towel dispenser.
  Cost: $50

3.30 - 3.40: Water Closets

- 3.30
  Noncompliance: The water closet is not located between 17 and 19 inches from the side wall.
  Solution: Relocate water closet or fur out wall.
  Cost: $500



- 3.31
  Noncompliance: The water closet does not have the required clear floor space of 60 inches by 56 inches.
  Solution: Relocate adjacent water closet, remove one of the urinals and reconfigure toilet partitions.
  Cost: $5,000



- 3.33
  Noncompliance: The side grab bar does not extend at least 54 inches from the back wall.
  Solution: Reinstall grab bar in the correct location.
  Cost: $50
- 3.34
  Noncompliance: The back grab bar is not at least 36 inches long.
  Solution: Provide compliant grab bar in the correct location.
  Cost: $150
- 3.37
  Noncompliance: The flush control is not located on the open side of the toilet.
  Solution: Replace tank.
  Cost: $200
- 3.38
  Noncompliance: The toilet paper dispenser is mounted on the wrong side of the stall.
  Solution: Relocate toilet paper dispenser so that it is between 7 and 9 inches from the front of the toilet.
  Cost: $25

Estimated Total Costs	
Priority 1: Total Cost	$2,775.00
Priority 2: Total Cost	$4,875.00
Priority 3: Total Cost	$7,625.00
Total Cost	$15,275.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- 1.2

  Noncompliance: There is no designated accessible parking space.

  Solution: Stripe parking lot to provide accessible parking space and access aisle.

  Cost: $150

1.37 - 1.49: Entrance

- 1.46

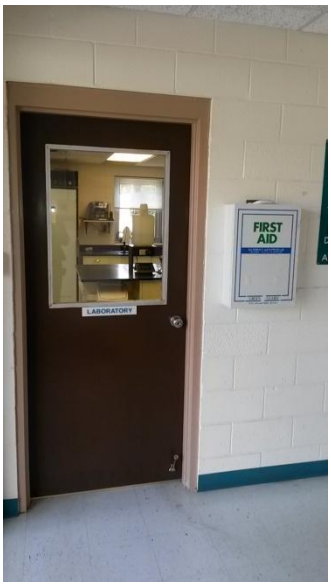
  Noncompliance: The force to open the entrance door exceeds 5 pounds and the door closes in less than 5 seconds.

  Solution: Adjust closer.

  Cost: $25

Priority 2: Access to Goods and Services:

- 2.8
  Noncompliance: The time clock and first aid kit protrude greater than 4 inches from the wall and are between 27 and 80 inches above the floor.
  Solution: Lower items so that bottom is 27 inches or less above the floor or provide a permanent barrier below items that is.
  Cost: $500



- 2.41
  Noncompliance: The exit door at the office off the laboratory does not have the required maneuvering clearance.
  Solution: Reverse hinge side of door.
  Cost: $500

- 2.41
  Noncompliance: The office door at the end of the hallway does not have the required maneuvering clearance.
  Solution: Remove the door closer.
  Cost: $25

- 2.41
  Noncompliance: The door from the laboratory to the lobby does not have the required maneuvering clearance.
  Solution: Remove the door closer.
  Cost: $25

- 2.43
  Noncompliance: Most of the doors have hardware that requires tight grasping, pinching or twisting to operate (approx. 22).
  Solution: Replace the knob hardware with lever hardware.
  Cost: $5,500

- 2.45 & 2.46
  Noncompliance: The force needed to open the interior doors that have closers (approx. 10) exceeds 5 pounds and the door closes in less than 5 seconds.
  Solution: Adjust closers.
  Cost: $250

- Miscellaneous
  Noncompliance: The sink in the break room does not have a clear space for forward approach with knee and toe clearance and is higher than 34 inches above the floor.
  Solution: Rework cabinets and countertop to provide lower wink with required clearances.
  Cost: $500

Priority 3: Toilet Rooms:

- 3.2 & 3.3
  Noncompliance: The inaccessible toilet room off the laboratory does not have signage giving direction to an accessible restroom. The accessible restroom does not have signage identifying it as accessible.
  Solution: Provide signage.
  Cost: $250

- 3.19
  Noncompliance: The mirror in the locker room is mounted with the bottom higher than 40 inches above the floor.
  Solution: Remove soap dispensers and lower mirror.
  Cost: $100

- 3.20
  Noncompliance: The hooks in the shower area are mounted above 48 inches above the floor.
  Solution: Lower hooks or provide new hooks below 48" above the floor.
  Cost: $50

3.21 - 3.27: Lavatories

- 3.26
  Noncompliance: The pipes below the lavatories are not insulated or protected against contact.
  Solution: Provide insulation on the pipes.
  Cost: $75

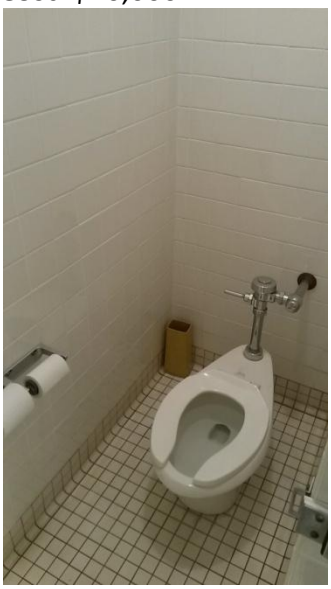
3.30 - 3.40: Water Closets

- 3.31

  Noncompliance: The water closet does not have a 60 inch wide by 56 inch deep clear floor place.

  Solution: Reconfigure toilet room to provide required clearances.

  Cost: $10,000



Showers

Noncompliance: The showers are not either 36" by 36" or 30" minimum by 60" minimum, do not have required grab bars, compliant controls/shower head and have curbs at the entry.

Solution: Alter showers.

Cost: $5,000

Noncompliance: The bench is not between 20" and 24" deep.

Solution: Replace bench.

Cost: $150

Locker Room

Noncompliance: The bench is not between 20" and 24" deep and does not have back support.

Solution: Replace bench.

Cost: $150

Priority 4: Additional Access:

4.1 – 4.9: Drinking Fountains

- 4.6

  Noncompliance: The spout of the drinking fountain is higher than 36 inches above the floor.

  Solution: Lower drinking fountain.

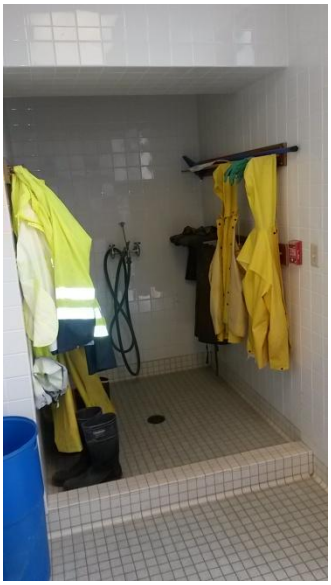
  Cost: $250

Laundry Room

Noncompliance: There is a raised curb preventing access to the washdown area.

Solution: Remove curb.

Cost: $250



Noncompliance: The hanging rods and hooks are mounted greater than 48 inches above the floor.

Solution: Provide hanging space that is 48 inches or less above the floor.

Cost: $100

Laboratory

Noncompliance: The emergency eyewash and shower does not have a 30 inch wide by 48 inch deep clear floor space.

Solution: Relocate emergency eyewash and shower or modify adjacent equipment.

Cost: $750

Noncompliance: The work surfaces in the lab are higher than 34 inches above the floor.

Solution: Provide a work surface at 34 inches above the floor with knee and tow clearances.

Cost: $1,000

Estimated Total Costs	
Priority 1: Total Cost	$175.00
Priority 2: Total Cost	$7,300.00
Priority 3: Total Cost	$15,775.00
Priority 4: Total Cost	$2,350.00
Total Cost	$25,600.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The police department is currently planning on moving to a new public safety building. The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

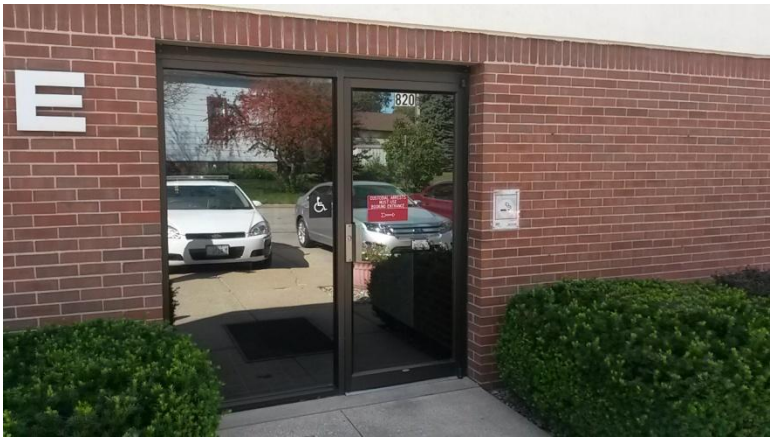
- 1.9
  Non-compliance: The access aisle does not connect to an accessible route.
  Solution: Provide curb ramp.
  Cost: $2,000

- 1.10
  Non-compliance: The bottom of the accessible parking sign is not 60 inches or more above the ground.
  Solution: Raise sign.
  Cost: $100

- 1.11
  Non-compliance: The van accessible space is not identified.
  Solution: Provide "Van Accessible" signage.
  Cost: $100

1.37 - 1.49: Entrance

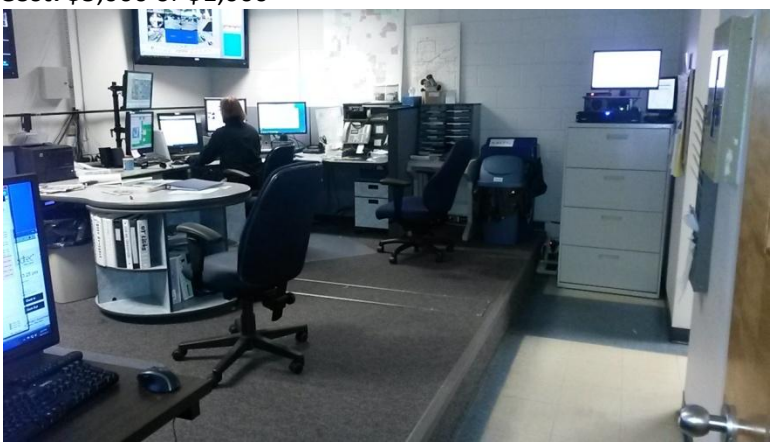
- 1.46
  Non-compliance: The force to open the entrance door and vestibule doors exceeds 5 pounds and the doors close in less than 5 seconds.
  Solution: Adjust closers.
  Cost: $50



Priority 2: Access to Goods and Services:

2.2 – 2.9: Interior Accessible Route

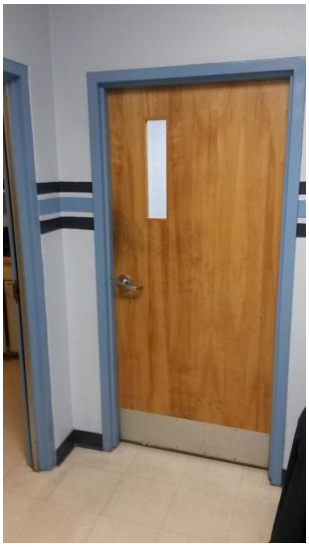
- 2.2
  Non-compliance: The dispatchers' workstations are not located on an accessible route because of raised platform.
  Solution: Incorporate an accessible ramp or provide alternate accommodations that are accessible.
  Cost: $5,000 or $1,000



- 2.8
  Non-compliance: The drinking fountain and the fire extinguisher in the basement protrude greater than 4 inches from the wall and are between 27 and 80 inches above the floor.
  Solution: Lower drinking fountain and fire extinguisher so that bottom is 27 inches or less above the floor. Another option is to provide a permanent barrier below items that is 27 inches or less above the floor, examples include a permanent planter or partial wall.
  Cost: $500

- 2.9
  Non-compliance: Stories are not connected by an elevator or wheelchair lift.
  Solution: Install wheelchair lift or elevator.
  Cost: $15,000 or $65,000

- Miscellaneous
  Non-compliance: The doors from Shift/Squad Room to the garage do not have the required clearance of 48 inches plus the width of the in-swinging door between the doors.
  Solution: Remove the "interior" door.
  Cost: $50



- 2.41
  Non-compliance: The remaining door (see item directly above) from Shift/Squad Room to the garage does not have the required maneuvering clearance.
  Solution: Remove door closer or install door operator.
  Cost: $50 or $5,500

- 2.41
  Non-compliance: The door from Shift/Squad Room to the reception area does not have the required maneuvering clearance.
  Solution: Install door operator.
  Cost: $5,500

- 2.41
  Non-compliance: The door into Booking does not have the required maneuvering clearance.
  Solution: Reverse swing of door or Install door operator.
  Cost: $250 or $5,500

- 2.41
  Non-compliance: The door into the conference room does not have the required maneuvering clearance.
  Solution: Reconfigure furniture.
  Cost: $500

- 2.43
  Non-compliance: Multiple doors (approx 17) have hardware that requires tight grasping, pinching or twisting to operate.
  Solution: Install lever hardware.
  Cost: $4,000

- 2.45 & 2.46
  Non-compliance: The force needed to open the doors with closers (approx. 13) exceeds 5 pounds and the door closes in less than 5 seconds.
  Solution: Adjust and/or replace door closers.
  Cost: $1,400

- Miscellaneous
  Non-compliance: The sink in the break room does not have a clear space for forward approach with knee and toe clearance and is higher than 34 inches above the floor.
  Solution: Rework cabinets and countertop to provide lower wink with required clearances.
  Cost: $500

Priority 3: Toilet Rooms:
Inaccessible Restrooms (Lower Level, Dispatch & Squad Room)

- 3.2 & 3.3
  Non-compliance: There is not signage giving directions to an accessible toilet room. There are not signs identifying the accessible restrooms.
  Solution: Install compliant signage.
  Cost: $300

Accessible Restroom (Behind Reception Area)
3.16 - 3.20: In the Toilet Room

- 3.17
  Non-compliance: There is not enough clear floor space available for a wheelchair to turn around.
  Solution: Enlarge room.
  Cost: $5,000

3.21 - 3.27: Lavatories

- 3.21
  Non-compliance: The lavatory does not have a 48 inch by 30 inch clear floor space due to the door swing.
  Solution: Reverse swing of door.
  Cost: $250

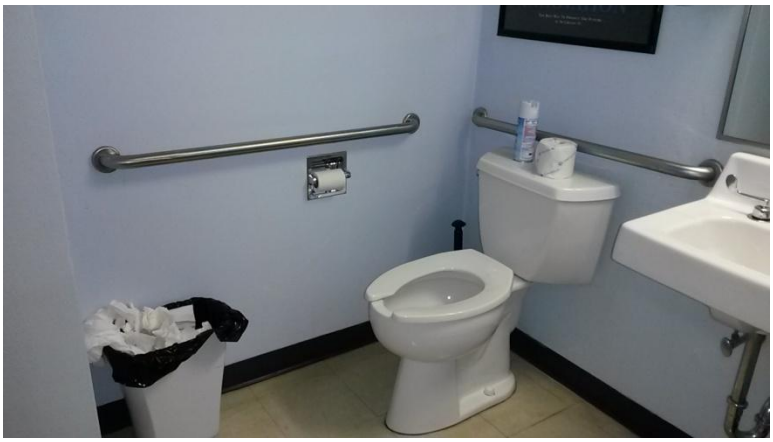
- 3.26
  Non-compliance: The piping beneath the lavatory is not protected from contact.
  Solution: Provide insulation on piping.
  Cost: $50

3.30 - 3.40: Toilets

- 3.34
  Non-compliance: The rear wall grab bar does not extend 24 inches on the open side of the toilet.
  Solution: Move lavatory and grab bar.
  Cost: $500

- 3.37
  Non-compliance: The flush handle is not located on the open side of the toilet.
  Solution: Replace tank.
  Cost: $250

- 3.38
  Non-compliance: The toilet paper dispenser is not located between 7 and 9 inches from the front of the toilet.
  Solution: Move toilet paper dispenser.
  Cost: $100



Priority 4: Additional Access:

4.1 – 4.9: Drinking Fountains

- 4.6
  Non-compliance: The spout on the drinking fountain is greater than 36 inches above the floor.
  Solution: Lower drinking fountain.
  Cost: $250

Estimated Total Costs	
Priority 1: Total Cost	$2,250.00
Priority 2: Total Cost	$28,750.00
Priority 3: Total Cost	$6,450.00
Priority 4: Total Cost	$250.00
Total Cost	$37,700.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- 1.10
  Noncompliance: The bottom of the accessible parking sign is not 60 inches or more above the ground.
  Solution: Raise sign.
  Cost: $100

- 1.11
  Noncompliance: The van accessible space is not identified.
  Solution: Provide "Van Accessible" signage.
  Cost: $100

1.37 - 1.49: Entrance

- 1.42
  Noncompliance: The entrance door does not have an 18 inch maneuvering clearance beyond the latch side.
  Solution: Increase paved area.
  Cost: $250

- 1.46
  Noncompliance: The force to open the entrance door exceeds 5 pounds and the door closes in less than 5 seconds.
  Solution: Adjust closer.
  Cost: $25

Priority 3: Toilet Rooms:

3.21 – 3.27: Lavatories

- 3.26
  Noncompliance: The piping below the lavatories is not insulated or otherwise protected from contact.
  Solution: Install pipe insulation.
  Cost: $100

3.30 - 3.40: Toilets

- 3.33
  Noncompliance: The side wall grab bars do not extend at least 54 inches from the back wall.
  Solution: Move grab bars.
  Cost: $100
- 3.34
  Noncompliance: The rear wall grab bars are not at least 36 inches long.
  Solution: Replace grab bars.
  Cost: $200

- 3.37
  Noncompliance: The flush valve in the men's restroom is located on the wrong side of the toilet.
  Solution: Replace tank.
  Cost: $250

Miscellaneous:

Noncompliance: The exit door does not have the required 12 inch maneuvering clearance at the latch side.
Solution: Reverse hinge side of door.
Cost: $500

Estimated Total Costs	
Priority 1: Total Cost	$475.00
Priority 2: Total Cost	$0.00
Priority 3: Total Cost	$650.00
Miscellaneous: Total Cost	$500.00
Total Cost	$1,625.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

APPENDIX 2.2

PARK FACILITY REPORTS

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

- Miscellaneous

  Noncompliance: There is a section of concrete near Wirz Field #2 that is raised ½" – 1" above the adjacent concrete.

  Solution: Remove and replace the section of concrete to provide an even surface.

  Cost: $1000

- Miscellaneous

  Noncompliance: The top of the concessions counters are at 39" above the ground.

  Solution: Lower a section of counter (minimum 36" wide) so the top is no more than 36" above the ground.

  Cost: $2000

- Miscellaneous

  Noncompliance: The sidewalk near the left field dugout at Optimist Field is uneven.

  Solution: Replace the section of sidewalk to provide an even surface.

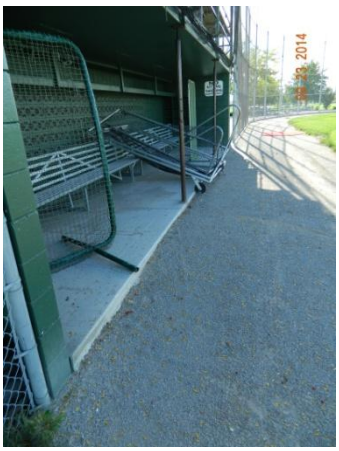
  Cost: $500

- Miscellaneous

  Noncompliance: There is no accessible route from the concrete to the interior of the dugouts at Optimist Field. It requires walking on the turf and cinder walk and there is a 1" transition from the ground to the top of the dugout floor.

  Solution: Replace the section of sidewalk to provide an even surface.

  Cost: $2500

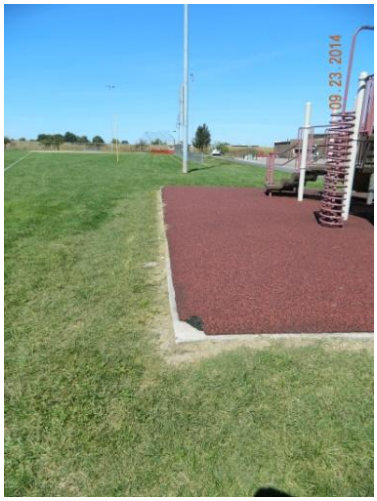


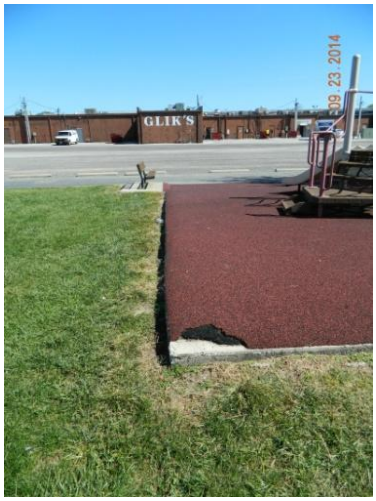
- Miscellaneous

  Noncompliance: The transition from the asphalt walk to the playground on the east side of the park is uneven and there is a +/- 1" gap between the rubber and the asphalt. The slope of the poured rubber playground is 1:12 and the top of the rubber is 4-5" above the adjacent ground.

  Solution: Regrade the slope of the poured rubber playground to 1:48 and provide an even transition from the asphalt walk to the rubber. Provide some sort of edge protection to keep a wheelchair from slipping off the sides of the playground.

  Cost: $6000





- Miscellaneous

  Noncompliance: The sidewalk and the asphalt walking path near the Wirz Field #3 dugout is uneven with a gap of 1" – 1 ½".

  Solution: Fill in the gap to make an even transition.

  Cost: $500

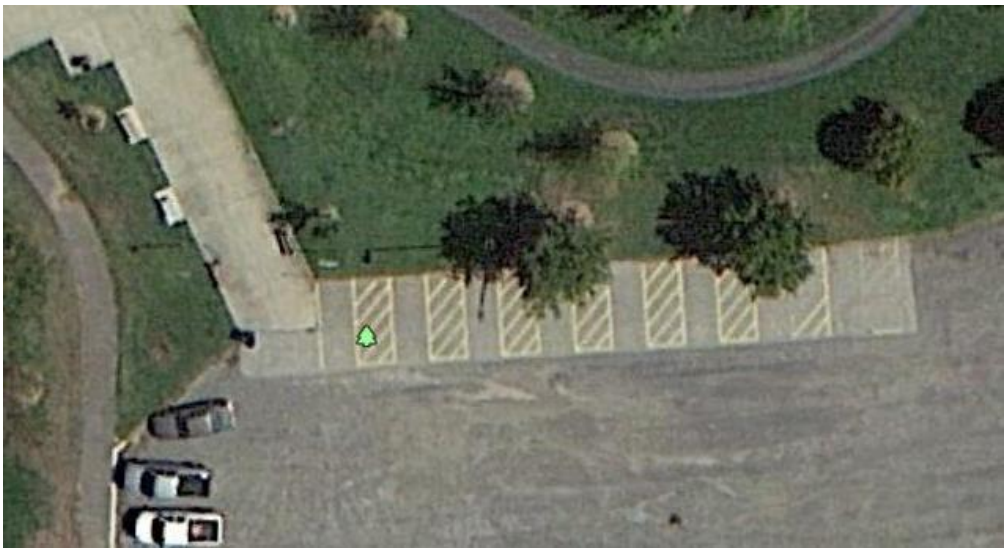
Main Parking Lot
1.2 - 1.12: Parking

- 1.8

  Noncompliance: The accessible parking spaces do not adjoin an accessible route.

  Solution: Provide an accessible route from the accessible parking spaces to the existing sidewalk north of the parking spaces.

  Cost: $5,000



- 1.10

  Noncompliance: Only one of the eight accessible spaces has an accessible parking sign.

  Solution: Install accessible parking signs.

  Cost: $500

- 1.11

  Noncompliance: There is no sign that reads "van accessible" at the accessible parking sign.

  Solution: Provide a sign that reads "van accessible" at one accessible space.

  Cost: $100

- Miscellaneous

  Noncompliance: There is a lot of debris (gravel / mulch) on the accessible parking spaces.

  Solution: Remove debris from the parking spaces.

  Cost: $100

Wirz Field #3 Parking Lot

1.2 - 1.12: Parking

- Miscellaneous

  Noncompliance: There are no accessible parking spaces provided near Wirz Field #3 (northeast corner of the park) or the small playground south of the ball field.

  Solution: Provide an accessible parking space near the ball field and one near the playground. The accessible parking spaces need to be van accessible and need to be designated as such.

  Cost: $2500

Football Field #3 Parking Spaces

1.2 - 1.12: Parking

- Miscellaneous

  Noncompliance: There are no accessible parking spaces provided at the gravel parking lot near football field in the southwest corner of the park.

  Solution: Provide an accessible parking space and an accessible route on the closest route to the football field. The accessible parking space needs to be van accessible and needs to be designated as such.

  Cost: $2500

Priority 3: Toilet Rooms:

Main Concessions Toilets

- 3.5: Signs at Toilet Rooms

  Noncompliance: The toilets do not have tactile (Note: "Tactile characters" are read using touch, i.e. raised characters and Braille) signs designating the toilet rooms as accessible.

  Solution: Provide tactile signs at the toilet rooms.

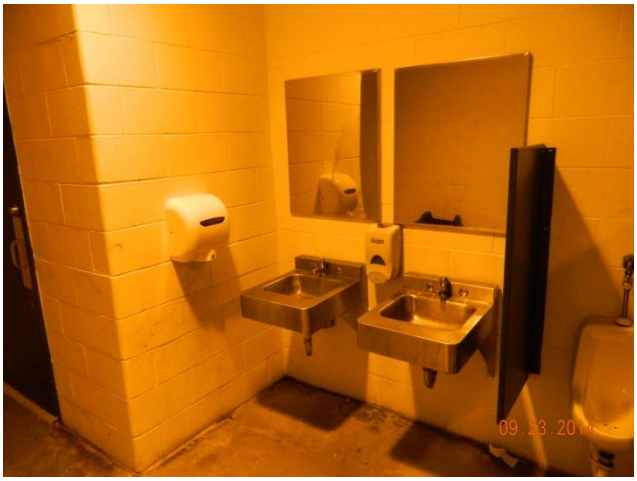
  Cost: $100

3.6 - 3.15: Entrance

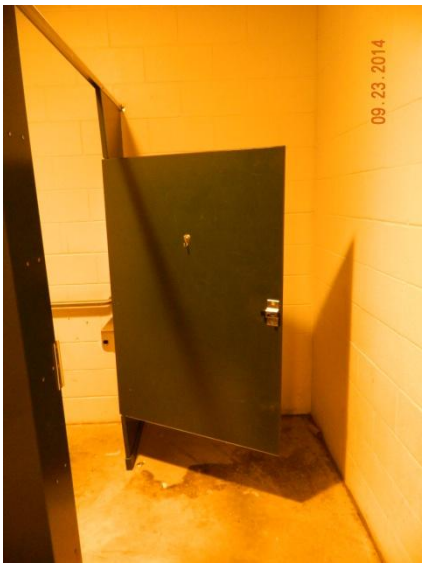
- 3.11
  Noncompliance: The doors to the men's and women's toilets exceed 5 lbs to open.
  Solution: Adjust/replace closers.
  Cost: $100
- 3.12
  Noncompliance: The door to the women's toilet takes less than 5 seconds to close from 90° to 12°.
  Solution: Adjust/replace closer.
  Cost: Cost covered under 3.11

3.16 - 3.20: In the Toilet Room

- 3.19
  Noncompliance: In both toilets the mirrors are mounted greater than 40” above the floor.
  Solution: Move mirrors.
  Cost: $100



- 3.20
  Noncompliance: In both toilets the coat hook are mounted greater than 48" above the floor.
  Solution: Move coat hooks or provide new coat hooks at accessible height.
  Cost: $100



3.21 - 3.27: Lavatories (Note: 2010 Standards refer to sinks in toilet rooms as lavatories)

- 3.24
  Noncompliance: The lavatories in both toilets do not have 27" clear from the bottom of the lavatory to the floor.
  Solution: Raise lavatories.
  Cost: $1000
- 3.26 – see photos from 3.19
  Noncompliance: In both toilets the pipes below the lavatories are not insulated.
  Solution: Insulate pipes.
  Cost: $200

3.30- 3.40: Water Closets (Note: 2010 Standards refer to toilets as water closets)

- 3.30
  Noncompliance: The centerline of the water closet in the women's toilet is 20" from the wall.
  Solution: Move grab bar so it is located no more than 12" from the rear wall.
  Cost: $50

- 3.33
  Noncompliance: The grab bar on the side wall in the women's toilet is located more than 12" from the rear wall.
  Solution: Move grab bar.
  Cost: $50
- 3.34
  Noncompliance: The grab bar on the rear wall in the women's toilet does not extend at least 24" from the centerline of the water closet to the open side of the room.
  Solution: Move grab bar.
  Cost: $50

3.41 - 3.50: Toilet Compartments (Stalls)

- 3.42
  Noncompliance: The clear floor space in each toilet from the partition to the wall is not compliant.
  Solution: Move partition so there is 48" clear from the partition to the wall.
  Cost: $500
- 3.43
  Noncompliance: In both toilets the partition doors are not self-closing.
  Solution: Repair or replace hinges.
  Cost: $200

Wirz Field #3 Toilet
3.6 - 3.15: Entrance

- 3.12
  Noncompliance: The door to the toilet takes less than 5 seconds to close from 90° to 12°.
  Solution: Adjust self closing hinges or add closer.
  Cost: $50 - $400

Football Field Toilets
3.6 - 3.15: Entrance

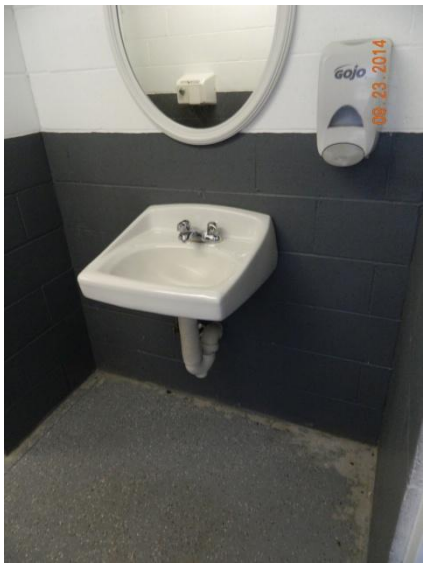
- 3.11
  Noncompliance: The doors to the men's and women's toilets exceed 5 lbs to open.
  Solution: Adjust/replace closers.
  Cost: $100
- 3.12
  Noncompliance: The door to the toilet takes less than 5 seconds to close from 90° to 12°.
  Solution: Adjust self closing hinges or add closer.
  Cost: $50 - $400

- 3.19

  Noncompliance: In the women's toilet the mirror is mounted greater than 40" above the floor.

  Solution: Move mirror.

  Cost: $50

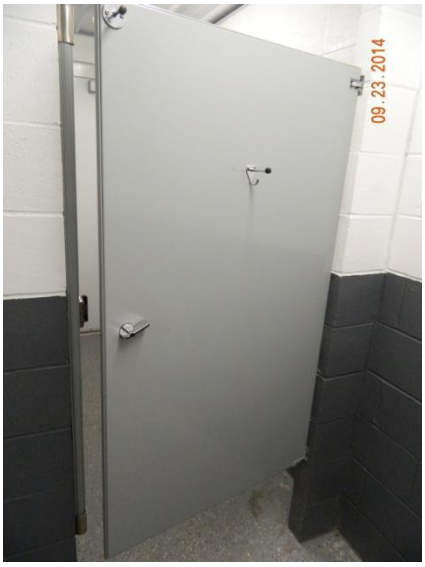


- 3.20

  Noncompliance: In both toilets the coat hooks are mounted greater than 48" above the floor.

  Solution: Move coat hooks or provide new coat hooks at accessible height.

  Cost: $50



- 3.43
  Noncompliance: In both toilets the partition doors are not self-closing.
  Solution: Repair or replace hinges.
  Cost: $200

Priority 4: Additional Access:

Main Concessions
4.1 - 4.9: Drinking Fountains

- 4.9:
  Noncompliance: The drinking fountain sticks out into the path of travel more than 4" and the leading edge of the drinking fountain is more than 27" above the ground.
  Solution: Adjust height of drinking fountain.
  Cost: $200

Wirz Field #3
4.1 - 4.9: Drinking Fountains

- 4.9:
  Noncompliance: The drinking fountain sticks out into the path of travel more than 4" and the leading edge of the drinking fountain is more than 27" above the ground.
  Solution: Adjust height of drinking fountain.
  Cost: $300

Play Areas:

- P1
  Noncompliance: The existing play area is not fully compliant with ADA.
  Solution: When play area is replaced in the future, install accessible, fully-compliant play equipment
  Cost: TBD

Walking Trails:

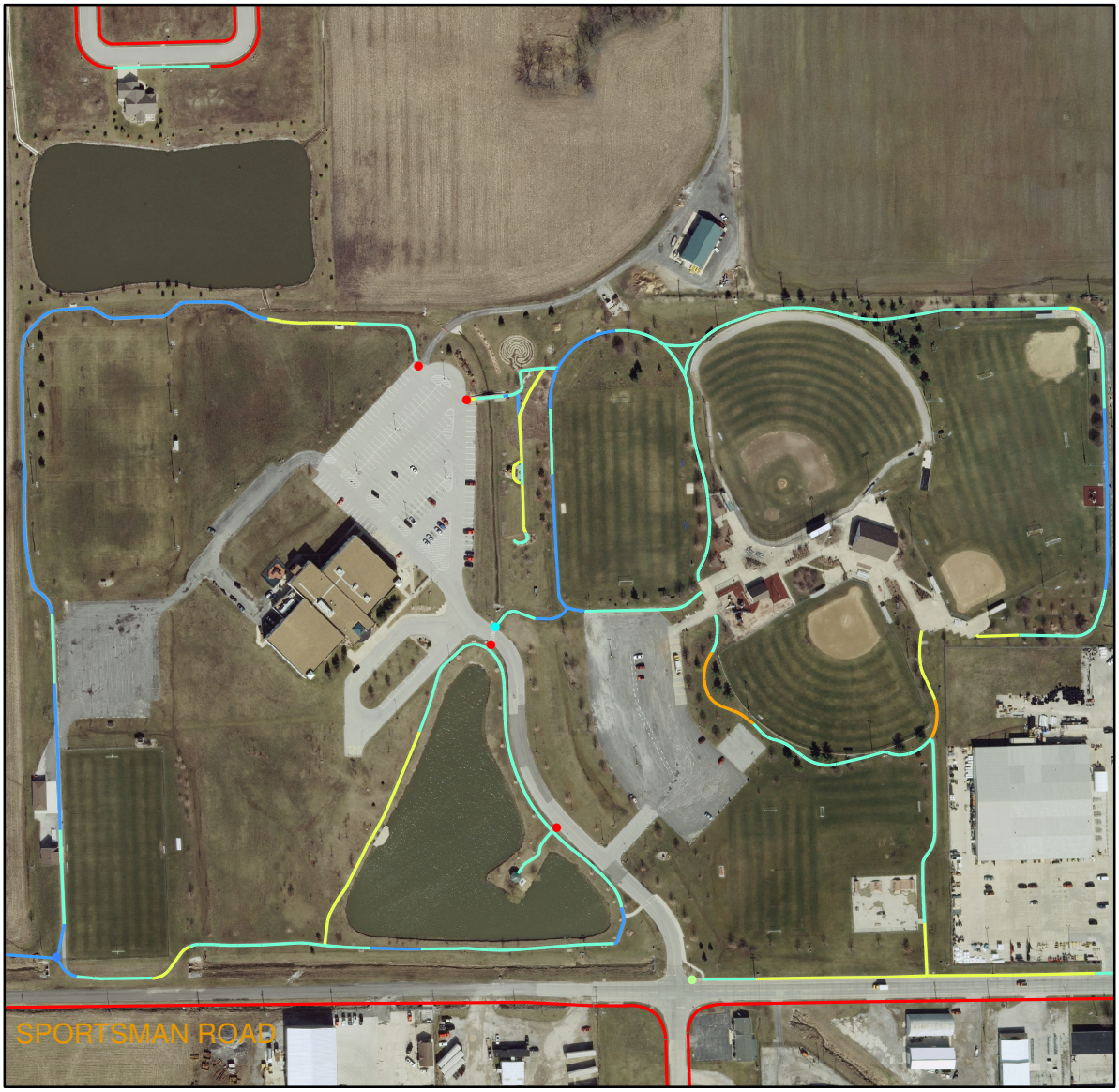
- ADAAG
  Noncompliance: The existing walking trails do not meet ADAAG standards.
  Solution: Reconstruct walking trails where ADAAG standards are not met (assumed reconstruction of walking trails with 6' wide asphalt pavement (shared use path) (See next sheet).
  Cost: $131,000

Estimated Total Costs	
Priority 1: Total Cost	$23,200.00
Priority 3: Total Cost	$2,950.00
Priority 4: Total Cost	$500.00
Play Areas: Total Cost	$TBD
Walking Trails: Total Cost	$131,000.00
Total Cost	$157,650.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
GLIK PARK



N

0 200 400 800 Feet

Legend

CurbRampScore	SidewalkScore
No Ramp	No Sidewalk
Obstructed Ramp	5 - 35
5 - 35	36 - 50
36 - 50	51 - 65
51 - 65	66 - 80
66 - 80	81 - 100
81 - 100	

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- 1.2 & 1.3
  Noncompliance: Based on the total number of parking spaces around the square, two additional accessible spaces are required including one van accessible parking space.
  Solution: Restripe to provide additional accessible parking spaces.
  Cost: $500
- 1.4
  Noncompliance: The accessible parking spaces do not have an access aisle that extends the full length of the parking spaces.
  Solution: Restripe to provide full length access aisles.
  Cost: $500

Bandstand

Priority 2: Access to Goods and Services:

2.10 - 2.21: Ramps

- 2.13
  Noncompliance: The top ramp landing is not 60 inches long.
  Solution: Extend landing.
  Cost: $1,000

- 2.16
  Noncompliance: A portion of the ramp handrail at the top is less than 34 inches above the ramp.
  Solution: Adjust handrail height.
  Cost: $250
- 2.20
  Noncompliance: The handrail extensions at the bottom of the ramp do not return to a wall, guard or landing surface and are not horizontal.
  Solution: Modify handrail extensions.
  Cost: $750

- 2.20
  Noncompliance: The handrail extensions at the top of the ramp do not extend 12 inches on one side and is not horizontal on the other.
  Solution: Modify handrail extensions.
  Cost: $750

Noncompliance: The stair treads are less than 11 inches in depth.
Solution: Replace stairs.
Cost: $7,500

Noncompliance: The stair handrails are less than 34 inches above the stair nosings and/or landings and do not return to a wall, guard or landing.
Solution: Replace handrails.
Cost: $1,000

Sidewalks:

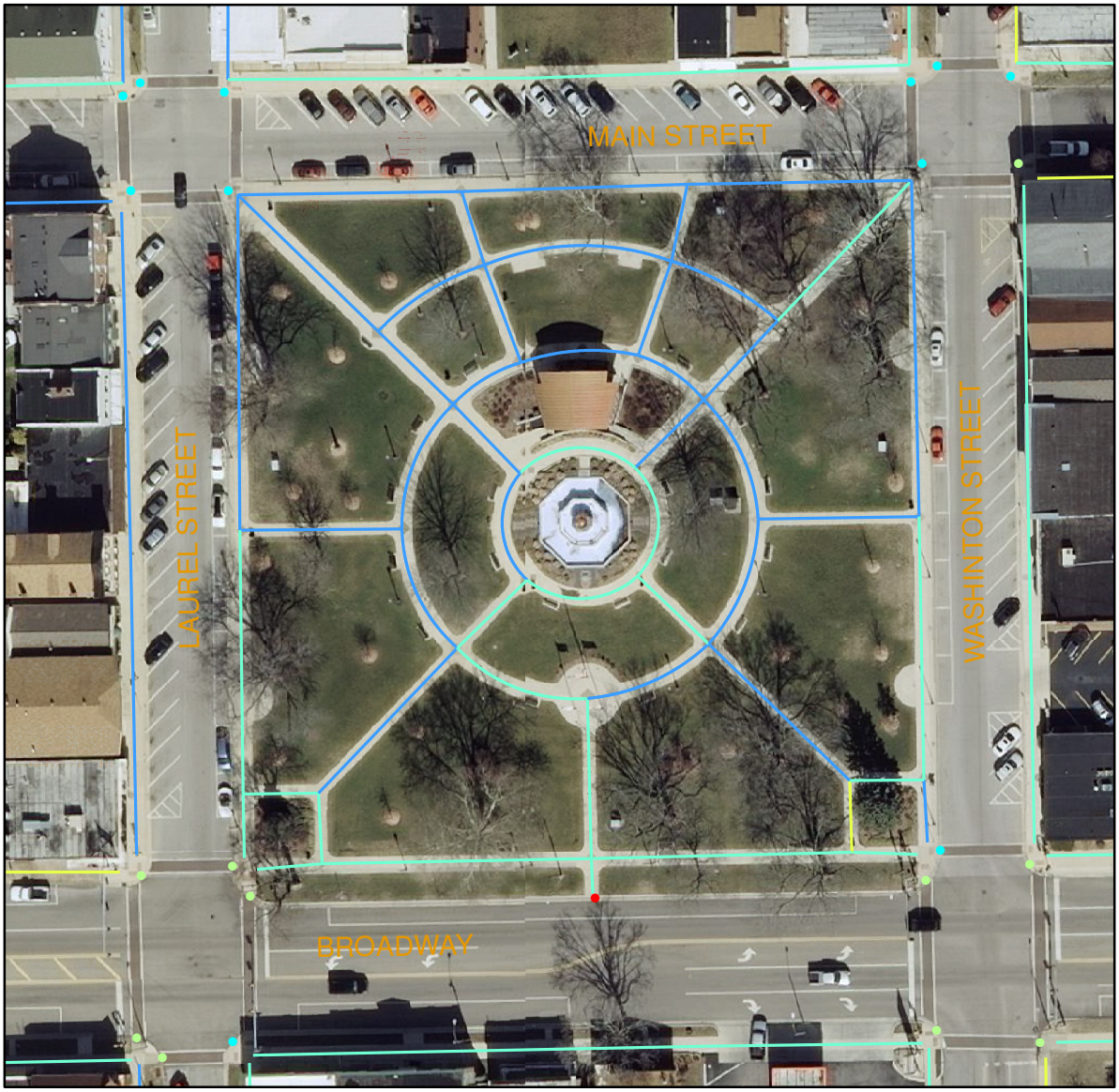
- ADAAG
  Noncompliance: The existing sidewalks do not meet ADAAG standards.
  Solution: Reconstruct sidewalks where ADAAG standards are not met (assumed reconstruction of sidewalk with 5' wide concrete sidewalks. (See next sheet).
  Cost: $22,350

Estimated Total Costs	
Priority 1: Total Cost	$1,000.00
Priority 2: Total Cost	$11,250.00
Priority 3: Total Cost	$0.00
Sidewalks: Total Cost	$22,350.00
Total Cost	$34,600.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
PLAZA PARK



N

0 50 100 200 Feet

Legend

CurbRampScore

- No Ramp
- Obstructed Ramp
- 5 - 35
- 36 - 50
- 51 - 65
- 66 - 80
- 81 - 100

SidewalkScore

- No Sidewalk
- 5 - 35
- 36 - 50
- 51 - 65
- 66 - 80
- 81 - 100

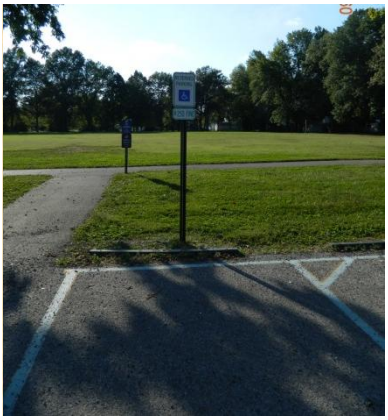
Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

West Parking Spaces (across from tennis courts)
1.2 - 1.12: Parking

- 1.9
  Violation: The south accessible parking space access aisle does not adjoin an accessible route.
  Solution: Move accessible parking space so it adjoins the other accessible route to the south.
  Cost: $150

- 1.11
  Violation: There are not signs that read "van accessible" at the accessible parking signs.
  Solution: Provide signs that read "van accessible".
  Cost: $100



1.13 - 1.18: Exterior Accessible Route

- 1.13

  Violation: There is gravel covering the accessible parking spaces across from the tennis courts.

  Solution: Remove the gravel from the parking spaces.

  Cost: $100

South Parking Spaces (near playground)

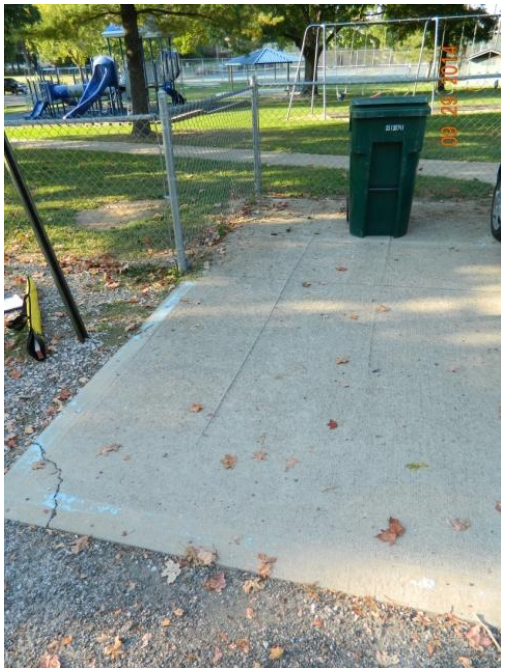
1.2 - 1.12: Parking

- 1.7

  Violation: The accessible parking space is not striped.

  Solution: Stripe the accessible parking space.

  Cost: $150



- 1.11

  Violation: There is no sign that reads "van accessible" at the accessible parking sign.

  Solution: Provide sign that reads "van accessible".

  Cost: $50

Priority 3: Toilet Rooms:

3.6 - 3.15: Entrance

- 3.7

  Violation: The clear floor space on the pull side of the door is less than 18".

  Solution: Reverse the doors to swing opposite or swing doors outward.

  Cost: $300

3.21 - 3.27: Lavatories (Note: 2010 Standards refer to sinks in toilet rooms as lavatories)

- 3.26
  Violation: In both toilets the pipes below the lavatories are not insulated.
  Solution: Insulate pipes.
  Cost: $100

3.30- 3.40: Water Closets (Note: 2010 Standards refer to toilets as water closets)

- 3.30
  Violation: The centerline of the water closet is 19" from the wall.
  Solution: Fur out the side wall so that the centerline of the water closet is 18" from the wall.
  Cost: $500
- 3.34
  Violation: The grab bars on the rear wall in each toilet do not extend at least 24" from the centerline of the water closet to the open side of the room.
  Solution: Relocate grab bars.
  Cost: $100

Play Areas:

- P1
  Noncompliance: The existing play area is not fully compliant with ADA.
  Solution: When play area is replaced in the future, install accessible, fully-compliant play equipment
  Cost: TBD

Walking Trails:

- ADAAG
  Noncompliance: The existing walking trails do not meet ADAAG standards.
  Solution: Reconstruct walking trails where ADAAG standards are not met (assumed reconstruction of walking trails with 8' wide asphalt pavement (shared use path) (See next sheet).
  Cost: $TBD

Estimated Total Costs	
Priority 1: Total Cost	$550.00
Priority 3: Total Cost	$1,000.00
Play Areas: Total Cost	$TBD
Walking Trails: Total Cost	$58,500.00
Total Cost	$60,050.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

OATES ASSOCIATES
Engineering + Architecture

ADA TRANSITION PLAN
SPINDLER PARK

N

0 100 200 400 Feet

Legend

CurbRampScore

- No Ramp
- Obstructed Ramp
- 5 - 35
- 36 - 50
- 51 - 65
- 66 - 80
- 81 - 100

SidewalkScore

- No Sidewalk
- 5 - 35
- 36 - 50
- 51 - 65
- 66 - 80
- 81 - 100

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

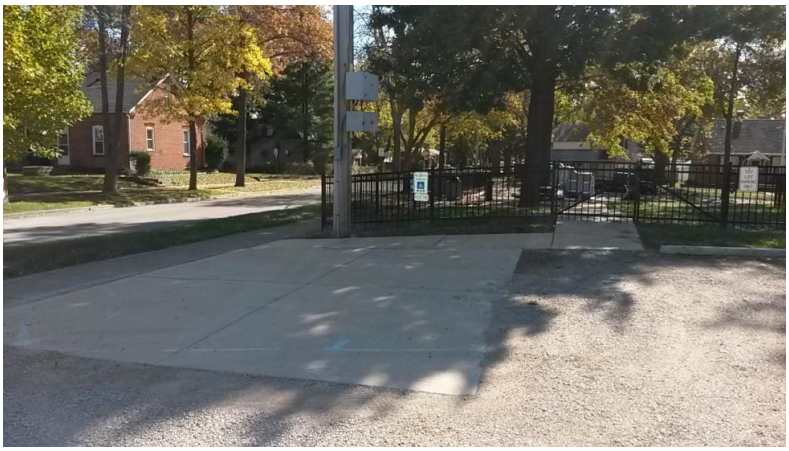
1.2 - 1.12: Parking

- 1.8

  Noncompliance: The slope of the accessible parking space and access aisle exceeds 1:48 in both directions.

  Solution: Relocate accessible parking to be along 13th Street.

  Cost: $5,000



1.37 - 1.49: Entrance

- Miscellaneous

  Noncompliance: The south gate swings out over the sidewalk, making it difficult to enter the park. The latch hardware is not accessible.

  Solution: Reverse gate swing and install compliant hardware on the gate.

  Cost: $500

- Miscellaneous

  Noncompliance: The concrete patio has a slope greater than 1:20 and there is not an accessible route from the playground to the concrete patio. The 4-bench table is not accessible.
  Solution: Repave the concrete patio. Provide an accessible route from the playground to the concrete patio. Provide an accessible table.
  Cost: $8,000

- Miscellaneous

  Noncompliance: There is not an accessible route from the playground to the tire swing.
  Solution: Provide an accessible route from the playground to the tire swing.
  Cost: $2,500


Priority 4: Additional Access:

4.1 - 4.9: Drinking Fountains

- 4.1

  Noncompliance: The clear floor space in front of the drinking fountain is less than 48" long.

  Solution: Provide additional concrete paving to allow adequate clear space and maneuvering space.

  Cost: $500

Estimated Total Costs	
Priority 1: Total Cost	$17,500.00
Priority 4: Total Cost	$500.00
Total Cost	$18,000.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- 1.3

  Noncompliance: A van accessible parking space is not provided at the sand volleyball court, Silver Lake Pavilion and at restrooms and veteran's memorial near boat access.

  Solution: Restripe parking spaces.

  Cost: $500

- 1.8

  Noncompliance: Slope of accessible parking spaces near the sand volleyball court, at Silver Lake Pavilion, at restrooms near boat access, at boat access and at veteran's memorial exceed 1:48.

  Solution: Construct required, compliant accessible parking spaces.

  Cost: $10,000

- 1.10

  Noncompliance: The bottom of the accessible parking signs are less than 60 inches above the ground at the restrooms by the boat access and south boat access accessible parking. There is not a sign identifying the accessible parking at the veteran's memorial.

  Solution: Raise signs and provide signs identifying accessible parking spaces.

  Cost: $200

1.3 - 1.18: Accessible Route

- 1.15
  Noncompliance: The route between the pavilion near the sand volleyball court and the restrooms exceeds 200 feet without a 60 inch by 60 inch passing space.
  Solution: Provide the required passing space.
  Cost: $1,000

- 1.17
  Noncompliance: The running slope of the accessible routes between the restrooms and the sand volleyball court accessible parking and between the accessible parking and Silver Lake Pavilion exceed 1:20.
  Solution: Regrade or provide compliant ramps.
  Cost: $5,000
- 1.18
  Noncompliance: The cross slope of the accessible route between the accessible parking and the boat access exceeds 1:48.
  Solution: Regrade.
  Cost: $2,000

Priority 3: Toilet Rooms:

3.6 - 3.15: Entrance

- 3.7

  Noncompliance: The required maneuvering clearance is not provide at the doors of the restrooms near the Silver Lake Pavilion.

  Solution: Remove small wing wall adjacent to doors on exterior side and move the sink in the men's restroom.

  Cost: $1,000

- 3.11 & 3.12

  Noncompliance: The force required to open the Silver Lake Pavilion restroom doors exceeds 5 pounds and they close in less than 5 seconds.

  Solution: Adjust closers.

  Cost: $50

3.30 - 3.40: Toilets

- 3.30

  Noncompliance: The toilets in the restrooms at the Silver Lake Pavilion are more than 18" from the side wall.

  Solution: Relocate/replace toilet or fur out wall.

  Cost: $1,000

Priority 4: Additional Access:
Fishing Piers and Platforms

- F7

  Noncompliance: The sections of lower railing do not have a curb, barrier or 12 inch extension

  Solution: Install barrier

  Cost: $750

Recreational Boating Facilities

The northern boat dock does not have an accessible route and was not accessed.

- B4

  Noncompliance: The slope of the gangway exceeds 1:12, does not have compliant handrails and edge protection.

  Solution: Replace gangway with a longer, compliant gangway.

  Cost: $1,500

Estimated Total Costs	
Priority 1: Total Cost	$18,700.00
Priority 2: Total Cost	$0.00
Priority 3: Total Cost	$2,050.00
Miscellaneous	$2,250.00
Total Cost	$23,000.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

Noncompliance: An accessible parking space is not provided.

Solution: Provide a van accessible parking space, access aisle and signage.

Cost: $2,500

1.3 - 1.18: Accessible Route

- 1.17

Noncompliance: The running slope of the route to the pavilion exceeds 1:20.

Solution: Regrade and reroute sidewalk.

Cost: $1,500

- 1.17
  Noncompliance: The ramp to the play area exceeds 1:12 slope.
  Solution: Regrade sidewalk to eliminate change in level exceeding 6 inches and provide new ramp.
  Cost: $1,000

Play Areas:

- P3
  Noncompliance: There are no ground level play components.
  Solution: Provide a minimum of two ground level play components.
  Cost: $5,000

- P16

  Noncompliance: There are no elevated play components on an accessible route.
  Solution: Provide an accessible route consisting of ramps and/or transfer systems to a minimum of three elevated play components.
  Cost: $10,000

Estimated Total Costs	
Priority 1: Total Cost	$5,000.00
Priority 2: Total Cost	$0.00
Priority 3: Total Cost	$0.00
Play Areas: Total Cost	$15,000.00
Total Cost	$20,000.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- Miscellaneous

  Noncompliance: There are no parking spaces designated.

  Solution: Designate an accessible parking space. Provide a concrete pad since the existing parking is gravel. Provide accessible sign and striping.

  Cost: $2,500

Play Areas:

- Miscellaneous

  Noncompliance: The edge of the poured rubber playground is 2"-5" above the ground and slopes at approximately 1:1.

  Solution: Bring grade closer to the top of the poured rubber or lessen edge slopes.

  Cost: $500

Play Areas:

- P1
  Noncompliance: The existing play area is not fully compliant with ADA.
  Solution: When play area is replaced in the future, install accessible, fully-compliant play equipment
  Cost: TBD

Estimated Total Costs	
Priority 1: Total Cost	$2,500.00
Play Areas: Total Cost	$TBD
Total Cost	$2,500.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). While the City of Highland does not own Lindendale Park the City does lease land from the owner of the property for municipal uses, specifically the City pool. Therefore, an assessment of the portions of the park that the City utilizes and the parking and sidewalks that provide access to these facilities are included in the assessment. The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

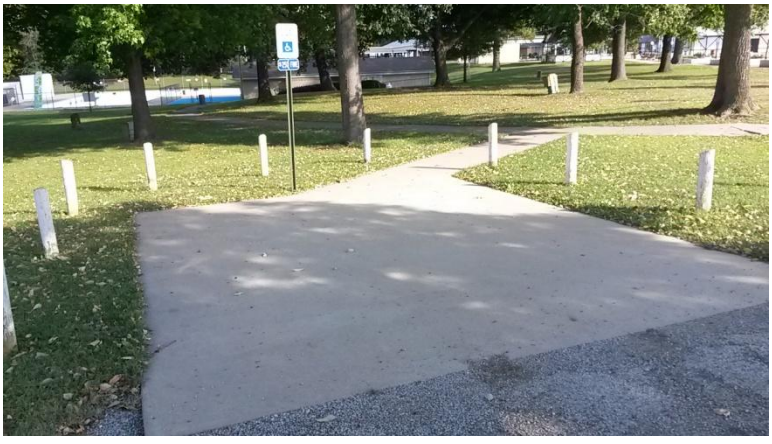
Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- 1.7
  Noncompliance: The accessible parking space and access aisle is not clearly marked.
  Solution: Restripe accessible parking space and access aisle.
  Cost: $150

- 1.8
  Noncompliance: The slope of the accessible parking space and access aisle exceeds 1:48.
  Solution: Remove and replace paving.
  Cost: $3,000

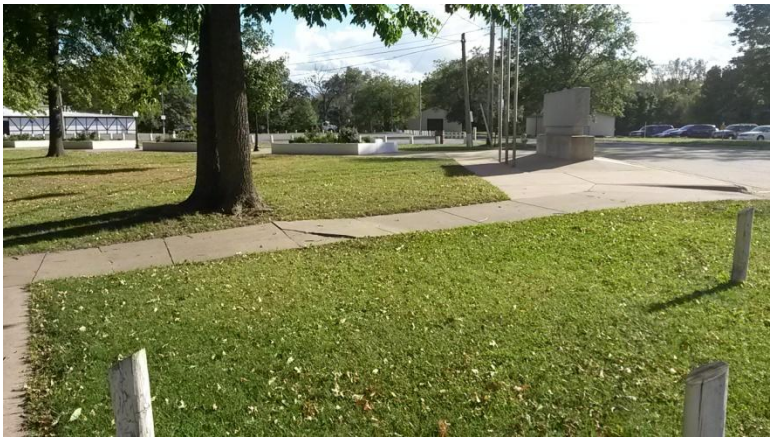
- 1.11
  Noncompliance: There is not a sign identifying the accessible parking space as van accessible.
  Solution: Provide van accessible parking sign.
  Cost: $100



1.13 - 1.18: Exterior Accessible Route

- 1.17 & 1.18
  Noncompliance: The cross slope of the sidewalk from the parking to the accessible route exceeds 1:48.
  Solution: Replace sidewalk to provide compliant accessible route.
  Cost: $1,000

- 1.17 & 1.18
  Noncompliance: Three sections of sidewalk near the parking and monument sign are broken and/or uneven.
  Solution: Replace sections of sidewalk.
  Cost: $750



Estimated Total Costs	
Priority 1: Total Cost	$5,000.00
Priority 2: Total Cost	$0.00
Priority 3: Total Cost	$0.00
Total Cost	$5,000.00

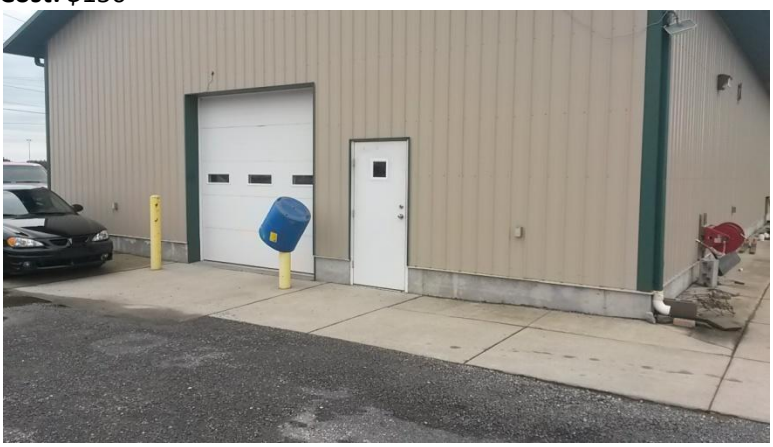
* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

Oates Associates performed a building evaluation for compliance with the 2010 ADAAG, based on a checklist provided by the Institute for Human Centered Design (www.devihcdesign.org , www.adachecklist.org). The following items were found to be noncompliant (for exact dimensions, sizing and location see checklist):

Priority 1: Approach and Entrance:

1.2 - 1.12: Parking

- 1.2
  Noncompliance: There is no designated accessible parking space.
  Solution: Stripe parking lot to provide accessible parking space and access aisle.
  Cost: $150



1.37 - 1.49: Entrance

- 1.44
  Noncompliance: The hardware on the entrance door requires tight grasping, pinching or twisting to operate.
  Solution: Replace with compliant lever hardware.
  Cost: $250

- 1.46
  Noncompliance: The force to open the entrance door exceeds 5 pounds and the door closes in less than 5 seconds.
  Solution: Adjust closer.
  Cost: $25

Priority 2: Access to Goods and Services:

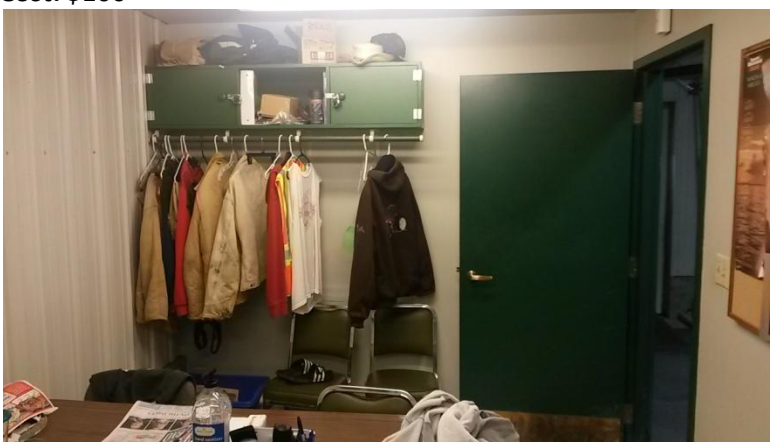
2.2 - 2.9: Interior Accessible Route

- 2.8

Noncompliance: The leading edge of the drinking fountain protrudes more than 4 inches from the wall and is greater than 27 inches above the floor.
Solution: Provide permanent tactile barrier.
Cost: $250

Noncompliance: The main (north) does not have the required 12 inch maneuvering clearance at the latch side.
Solution: Reverse the hinge side of the door.
Cost: $250

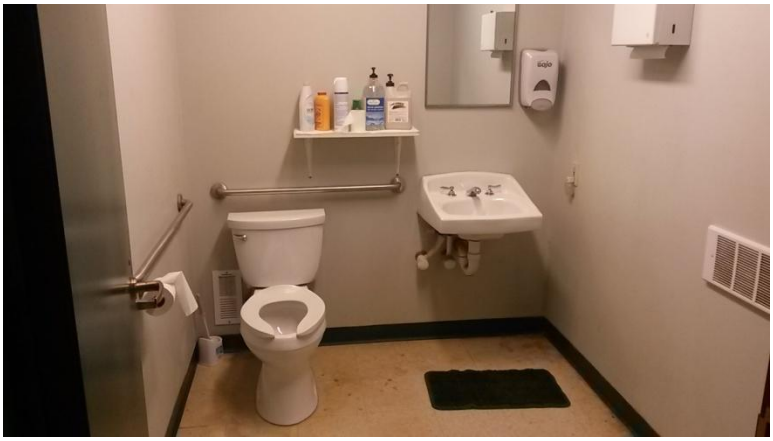
Noncompliance: The hanging rods and storage in the break room are mounted greater than 48 inches above the floor.
Solution: Provide hanging space and storage that is 48 inches or less above the floor.
Cost: $100



Priority 3: Toilet Rooms:

- 3.19
  Noncompliance: The mirror in the restroom is mounted higher than 40 inches above the floor.
  Solution: Relocate mirrors so that the bottom of the reflecting surface is 40 inches or less above the floor.
  Cost: $50

- 3.28 & 3.29
  Noncompliance: The soap dispenser and towel dispenser are mounted greater than 48 inches above the floor.
  Solution: Lower soap dispenser and towel dispenser.
  Cost: $100



- 3.33
  Noncompliance: The side grab bar does not extend at least 54 inches from the back wall.
  Solution: Reinstall grab bar in the correct location.
  Cost: $50

- 3.37
  Noncompliance: The flush control is not located on the open side of the toilet.
  Solution: Replace tank.
  Cost: $200

- 3.38
  Noncompliance: The toilet paper dispenser is mounted more than 9" from the front of the toilet.
  Solution: Relocate toilet paper dispenser so that it is between 7 and 9 inches from the front of the toilet.
  Cost: $25

Estimated Total Costs	
Priority 1: Total Cost	$425.00
Priority 2: Total Cost	$600.00
Priority 3: Total Cost	$425.00
Total Cost	$1,450.00

* Where multiple solutions are given, the total cost in the table above includes the most economical solution.

APPENDIX 2.3

ADA CHECKLIST for READILY ACHIEVABLE BARRIER REMOVAL

Summary of Cost Estimates - Facilities

Facility Group 1	
City Hall	
Priority 1 - Approach & Entrance	$1,100
Priority 2 - Access to Goods & Services	$3,950
Priority 3 - Toilet Rooms	$2,900
Subtotal	$7,950
Korte Recreation Center	
Priority 1 - Approach & Entrance	$6,050
Priority 2 - Access to Goods & Services	$4,600
Priority 3 - Toilet Rooms	$2,425
Other - Swimming Pools	$15,150
Subtotal	$28,225
Weinheimer Community Center	
Priority 1 - Approach & Entrance	$4,600
Priority 2 - Access to Goods & Services	$18,600
Priority 3 - Toilet Rooms	$3,350
Subtotal	$26,550
Group 1 Total	**$62,725**

Facility Group 2 - Facilities not in Group 1 nor Police Station & Fire Station #2	
Priority 1 - Approach & Entrance	$50,875
Priority 2 - Access to Goods & Services	$29,600
Priority 3 - Toilet Rooms	$50,350
Priority 4 - Additional Access	$7,850
Subtotal	$138,675
Fire Station #1 Total	$125,000
Group 2 Total	**$263,675**

Facility Group 3 - Police Station & Fire Station #2	
Priority 1 - Approach & Entrance	$1,725
Priority 2 - Access to Goods & Services	$28,750
Priority 3 - Toilet Rooms	$7,100
Priority 4 - Additional Access	$250
Other - Miscellaneous	$500
Group 3 Total	**$38,325**

FACILITIES GRAND TOTAL	**$364,725**

Summary of Cost Estimates - Parks

Parks Group 1	
Glik Park	
Priority 1 - Approach & Entrance	$18,700
Priority 3 - Toilet Rooms	$2,950
Priority 4 - Additional Access	$500
Other - Play Areas	
Other - Walking Trails	$131,000
Subtotal	$153,150
Plaza Park	
Priority 1 - Approach & Entrance	$1,000
Priority 2 - Access to Goods & Services	$11,250
Other - Sidewalks	$22,350
Subtotal	$34,600
Spindler Park	
Priority 1 - Approach & Entrance	$550
Priority 3 - Toilet Rooms	$1,000
Other - Play Areas	
Other - Walking Trails	$58,500
Subtotal	$60,050
Group 1 Total	**$247,800**
Parks Group 2 - Parks not in Group 1	
Priority 1 - Approach & Entrance	$44,125
Priority 2 - Access to Goods & Services	$600
Priority 3 - Toilet Rooms	$2,475
Priority 4 - Additional Access	$500
Other - Play Areas	$15,000
Other - Miscellaneous	$2,250
Group 2 Total	**$64,950**
PARKS GRAND TOTAL	**$312,750**

APPENDIX 2.4

ADA CHECKLIST for READILY ACHIEVABLE BARRIER REMOVAL

ADA Checklist for Readily Achievable Barrier Removal

Priority 1 – Approach & Entrance

Project

Building

Location

Date

Surveyors

Contact Information

An accessible route from site arrival points and an accessible entrance should be provided for everyone.

This checklist was produced by the New England ADA Center, a project of the Institute for Human Centered Design and a member of the ADA National Network. This checklist was developed under a grant from the Department of Education, NIDRR grant number H133A060092-09A. However the contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

Questions or comments on the checklist contact the New England ADA Center at 617-695-0085 voice/tty or ADAinfo@NewEnglandADA.org

For the full set of checklists, including the checklists for recreation facilities visit www.ADAchecklist.org.

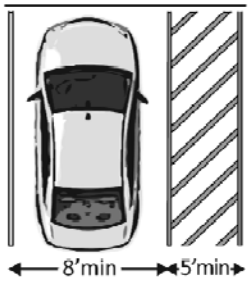
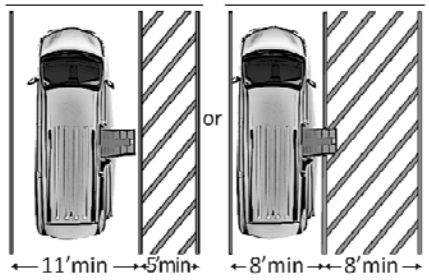
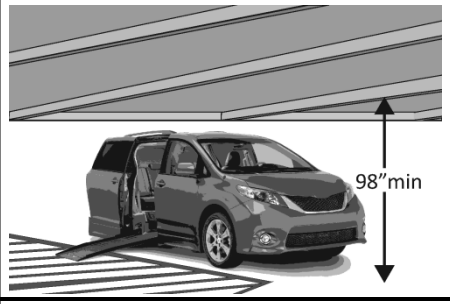
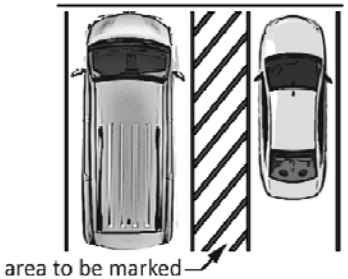
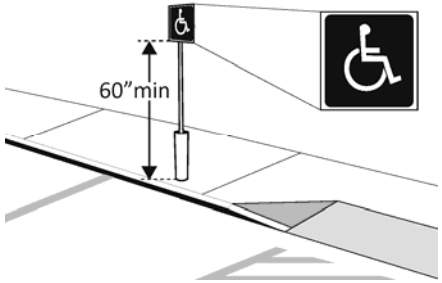
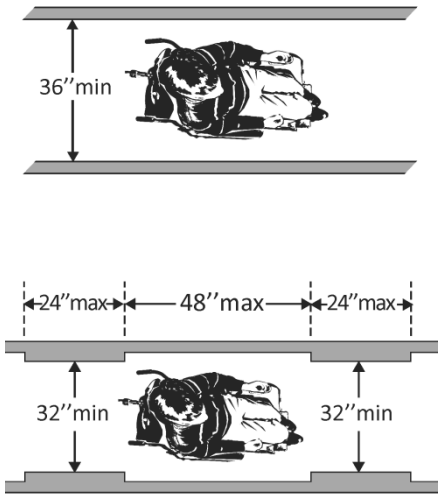
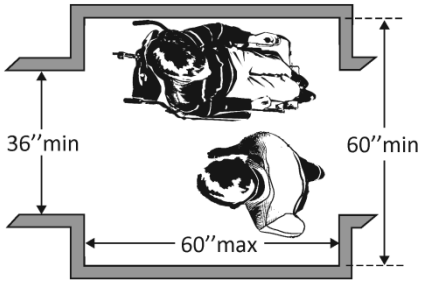
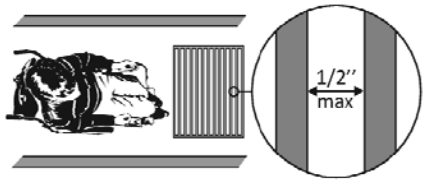
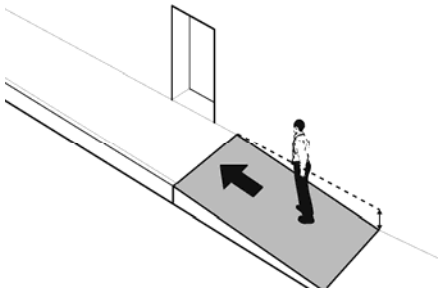
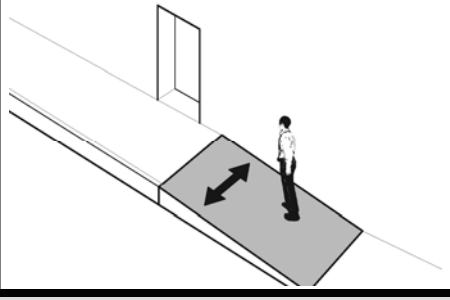
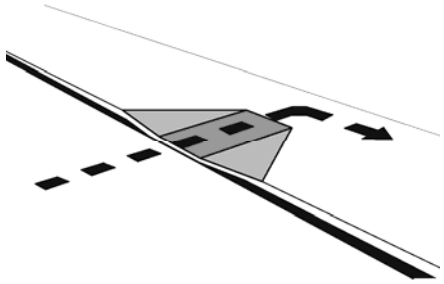
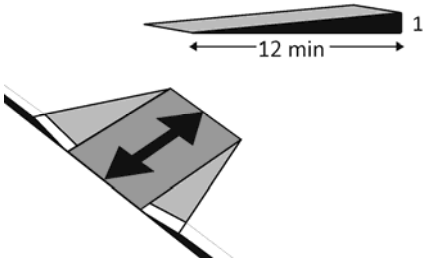
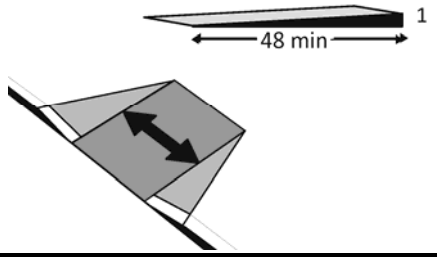
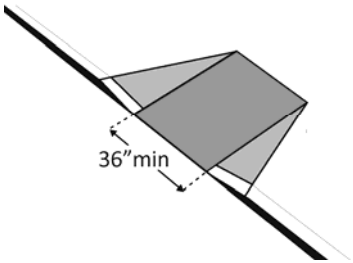
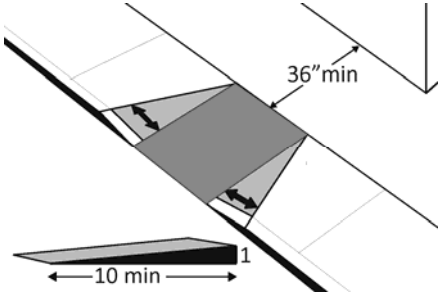
Priority 1 – Approach & Entrance				**Comments**	**Possible Solutions**
1.1	Is there at least one route from site arrival points (parking, passenger loading zones, public sidewalks and public transportation stops) that does not require the use of stairs?	☐ Yes ☐ No If yes, location of route:		Photo #:	• Add a ramp • Regrade to 1:20 maximum slope • Add a lift if site constraints prevent other solutions
Parking *(2010 Standards – 208 & 502)* **Note: Accessible parking spaces should be identified by size, access aisle and signage.**					
1.2	If parking is provided for the public, are an adequate number of accessible spaces provided?	☐ Yes ☐ No Total #: Accessible #:	**Total Spaces** / **Accessible Spaces** 1 - 25 / 1 26 - 50 / 2 51 - 75 / 3 76 - 100 / 4 100+ see 2010 Standards 208.2	Photo #:	• Reconfigure by repainting lines • •
1.3	Of the accessible spaces, is at least one a van accessible space?*	☐ Yes ☐ No	*For every 6 or fraction of 6 parking spaces required by the table above, at least 1 should be a van accessible space.	Photo #:	* If constructed before 3/15/2012, parking is compliant if at least 1 in every 8 accessible spaces is van accessible • Reconfigure by repainting lines
1.4	Are accessible spaces at least 8 feet wide with an access aisle at least 5 feet wide?	☐ Yes ☐ No Measurement:			• Reconfigure by repainting lines Two spaces can share an access aisle (check state requirements; some states, such as Connecticut, require an access aisle for

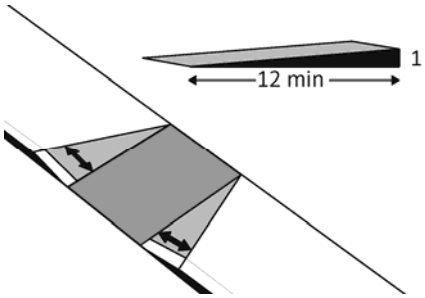
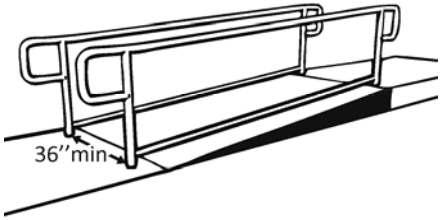
				Photo #:	each space)
1.5	Is the van accessible space: At least 11 feet wide with an access aisle at least 5 feet wide? Or At least 8 feet wide with an access aisle at least 8 feet wide?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Reconfigure to provide van-accessible space(s) • •
1.6	Is at least 98 inches of vertical clearance provided for the van accessible space?	☐Yes ☐No Measurement:		Photo #:	• Reconfigure to provide van-accessible space(s) • •
1.7	Are the access aisles marked so as to discourage parking in them?	☐Yes ☐No		Photo #:	• Mark access aisles • • The marking method and color may be addressed by state/local requirements
1.8	Is the slope of the accessible parking spaces and access aisles no steeper than 1:48 in all directions?	☐Yes ☐No Measurement:		Photo #:	• Regrade surface • •

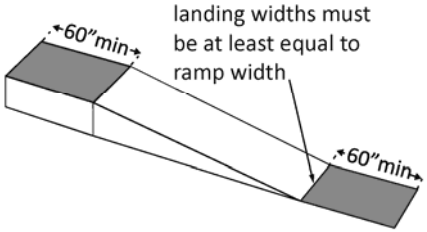
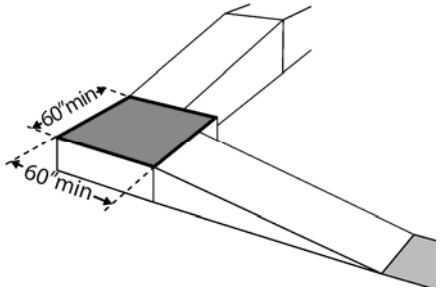
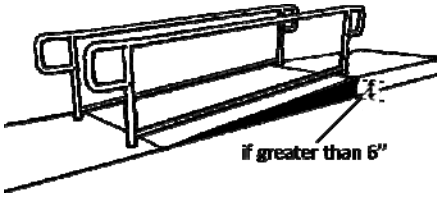
1.9	Do the access aisles adjoin an accessible route?	☐Yes ☐No		Photo #:	• Create accessible route • Relocate accessible space •
1.10	Are accessible spaces Identified with a sign that includes the International Symbol of Accessibility? Is the bottom of the sign at least 60 inches above the ground?	☐Yes ☐No ☐Yes ☐No Measurement:		Photo #:	• Install signs • • The International Symbol of Accessibility is not required on the ground by the 2010 Standards
1.11	Are there signs reading "van accessible" at van accessible spaces?	☐Yes ☐No		Photo #:	• Install signs • •
1.12	Of the total parking spaces, are the accessible spaces located on the closest accessible route to the accessible entrance(s)?	☐Yes ☐No		Photo #:	• Reconfigure spaces • • If parking lot serves multiple entrances, accessible parking should be dispersed

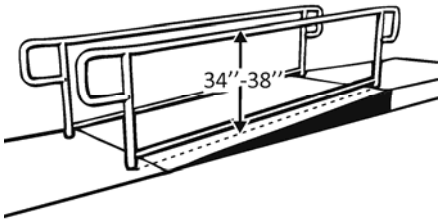
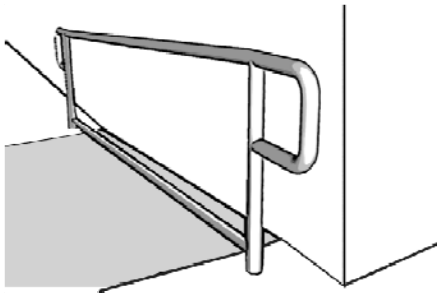
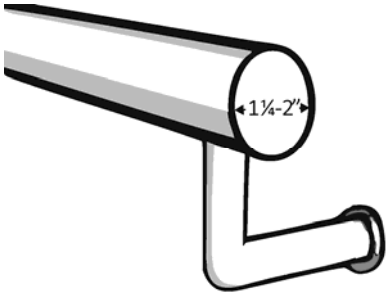
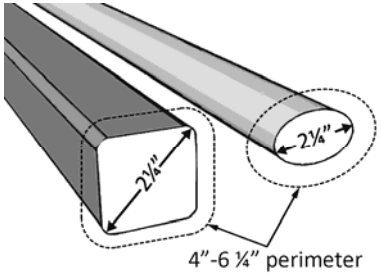
Exterior Accessible Route *(2010 Standards – Ch.4)*				
1.13 Is the route stable, firm and slip-resistant?	☐Yes ☐No		Photo #:	• Repair uneven paving • Fill small bumps and breaks with patches • Replace gravel with asphalt or other surface
1.14 Is the route at least 36 inches wide? Note: The accessible route can narrow to 32 inches min. for a max. of 24 inches. These narrower portions of the route must be at least 48 inches from each other.	☐Yes ☐No Measurement:		Photo #:	• Change or move landscaping, furnishings or other items • Widen route •
1.15 If the route is greater than 200 feet in length and no less than 60 inches wide, is there a passing space no less than 60 x 60 inches?	☐Yes ☐No Measurement:		Photo #:	• Widen route for passing space • •

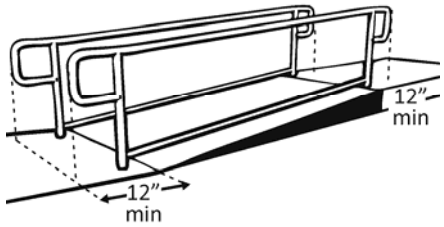
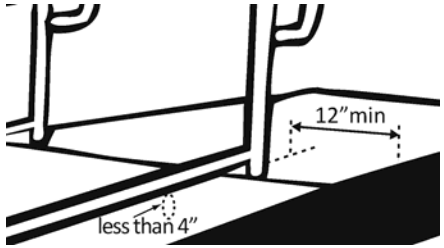
1.16	If there are grates or openings on the route, are the openings no larger than ½ inches to the dominant direction of travel? Is the long dimension perpendicular to the dominant direction of travel?	☐Yes ☐No Measurement: ☐Yes ☐No		Photo #:	• Replace or move grate • •
1.17	Is the running slope no steeper than 1:20, i.e. for every inch of height change there are at least 20 inches of route run?	☐Yes ☐No Measurement:		Photo #:	• Regrade to 1:20 max. • If steeper than 1:20 and no steeper than 1:12, treat as a ramp and add other features such as edge protection and handrails •
1.18	Is the cross slope no steeper than 1:48?	☐Yes ☐No Measurement:		Photo #:	• Regrade to 1:48 max. • •
Curb Ramps *(2010 Standards – 406)*					
1.19	If the accessible route crosses a curb, is there a curb ramp?	☐Yes ☐No		Photo #:	• Install curb ramp • •

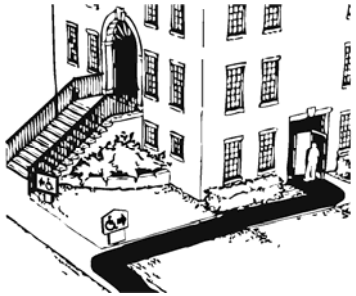
1.20	Is the running slope of the curb ramp no steeper than 1:12, i.e. for every inch of height change there are at least 12 inches of curb ramp run?	☐Yes ☐No Measurement:		Photo #:	• Regrade curb ramp • •
1.21	Is the cross slope of the curb ramp, excluding flares, no steeper than 1:48?	☐Yes ☐No Measurement:		Photo #:	• Regrade curb ramp • •
1.22	Is the curb ramp, excluding flares, at least 36 inches wide?	☐Yes ☐No Measurement:		Photo #:	• Widen curb ramp • •
1.23	At the top of the curb ramp is there a level landing (slope no steeper than 1:48 in all directions) that is at least 36 inches long and at least as wide as the curb ramp? If there are curb ramp flares, are the slopes of the flares no steeper than 1:10, i.e. for every inch of height change there are	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:			• Reconfigure • Add ramp flares •

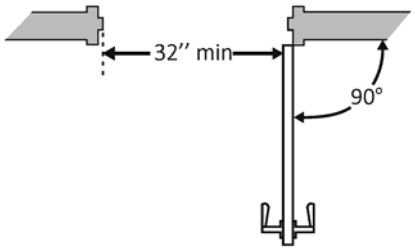
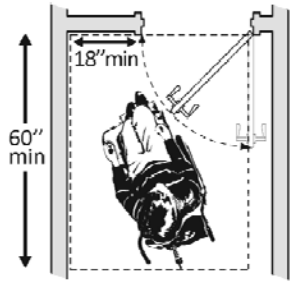
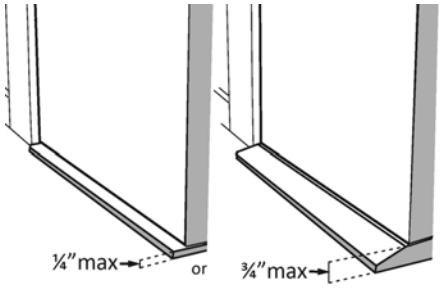
	at least 10 inches of flare run?			Photo #:	
1.24	If the landing at the top is less than 36 inches long, are there curb ramp flares? Are the slopes of the flares no greater than 1:12, i.e. for every inch of height change there are at least 12 inches of flare run?	☐Yes ☐No ☐Yes ☐No Measurement:		Photo #:	• Add ramp flares • Regrade flares •
Ramps *(2010 Standards – 405 & 505)* **Note: If any portion of the accessible route is steeper than 1:20, it should be treated as a ramp.**					
1.25	If there is a ramp (other than curb ramps), is it at least 36 inches wide? If there are handrails, measure between the handrails.	☐Yes ☐No Measurement:		Photo #:	• Alter ramp • •
1.26	Is the surface stable, firm and slip resistant?	☐Yes ☐No		Photo #:	• Resurface ramp • •
1.27	For each section of the ramp, is the running slope no greater than 1:12, i.e. for every inch of height change there are at least 12 inches of ramp run? Note: Rises no greater than 3 inches with a slope no steeper than	☐Yes ☐No Measurement:			• Alter or relocate ramp • Lengthen ramp to decrease slope •

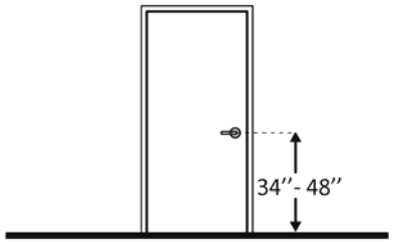
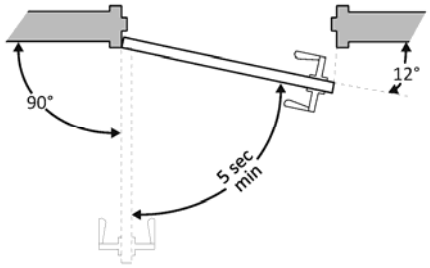
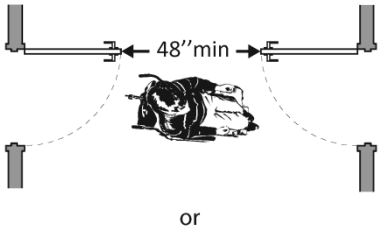
	1:8 and rises no greater than 6 inches with a slope no steeper than 1:10 are permitted when such slopes are necessary due to space limitations.			Photo #:	
1.28	Is there a level landing that is at least 60 inches long and at least as wide as the ramp: At the top of the ramp? At the bottom of the ramp?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Alter ramp • •
1.29	Is there a level landing where the ramp changes direction that is at least 60 x 60 inches?	☐Yes ☐No Measurement:		Photo #:	• Alter ramp • •
1.30	If the ramp has a rise higher than 6 inches, are there handrails on both sides?	☐Yes ☐No Measurement:		Photo #:	• Add handrails • • Curb ramps are not required to have handrails

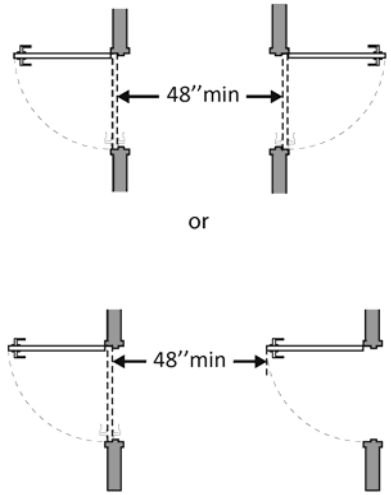
1.31	Is the top of the handrail gripping surface no less than 34 inches and no greater than 38 inches above the ramp surface?	☐Yes ☐No Measurement:		Photo #:	• Reconfigure or replace handrails • •
1.32	Is the handrail gripping surface continuous and not obstructed along the top or sides? Is the bottom of the handrail gripping surface obstructed for no more than 20 percent of its length?	☐Yes ☐No ☐Yes ☐No Measurement:		Photo #:	• Reconfigure or replace handrails • •
1.33	If the handrail gripping surface is circular, is it no less than 1 ¼ inches and no greater than 2 inches in diameter?	☐Yes ☐No Measurement:		Photo #:	• Replace handrails • •
1.34	If the handrail gripping surface is non-circular, is it no less than 4 inches and no greater than 6 ½ inches in perimeter and no more than 2 ¼ inches in cross section?	☐Yes ☐No Measurement:		Photo #:	• Replace handrails • •

1.35	Does the handrail: Extend at least 12 inches horizontally beyond the top and bottom of the ramp? Return to a wall, guard, or landing surface?	☐Yes ☐No Measurement: ☐Yes ☐No		Photo #:	• Add extensions • Reconfigure handrails •
1.36	To prevent wheelchair casters and crutch tips from falling off: Does the surface of the ramp extend at least 12 inches beyond the inside face of the handrail? Or Is there a curb or barrier that prevents the passage of a 4-inch diameter sphere?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Add curb • Add barrier • Extend ramp width •
Entrance *(2010 Standards – 404)*					
1.37	Is the main entrance accessible?	☐Yes ☐No		Photo #:	• Redesign to make it accessible • •

1.38	If the main entrance is not accessible, is there an alternative accessible entrance? Can the alternative accessible entrance be used independently and during the same hours as the main entrance?	☐Yes ☐No ☐Yes ☐No	 	Photo #:	• Designate an entrance and make it accessible • Ensure that accessible entrance can be used independently and during the same hours as the main entrance •
1.39	Do all inaccessible entrances have signs indicating the location of the nearest accessible entrance?	☐Yes ☐No		Photo #:	• Install signs • Install signs on route before people get to inaccessible entrances so that people do not have to turn around and retrace route •
1.40	If not all entrances are accessible, is there a sign at the accessible entrance with the International Symbol of Accessibility?	☐Yes ☐No		Photo #:	• Install sign • •

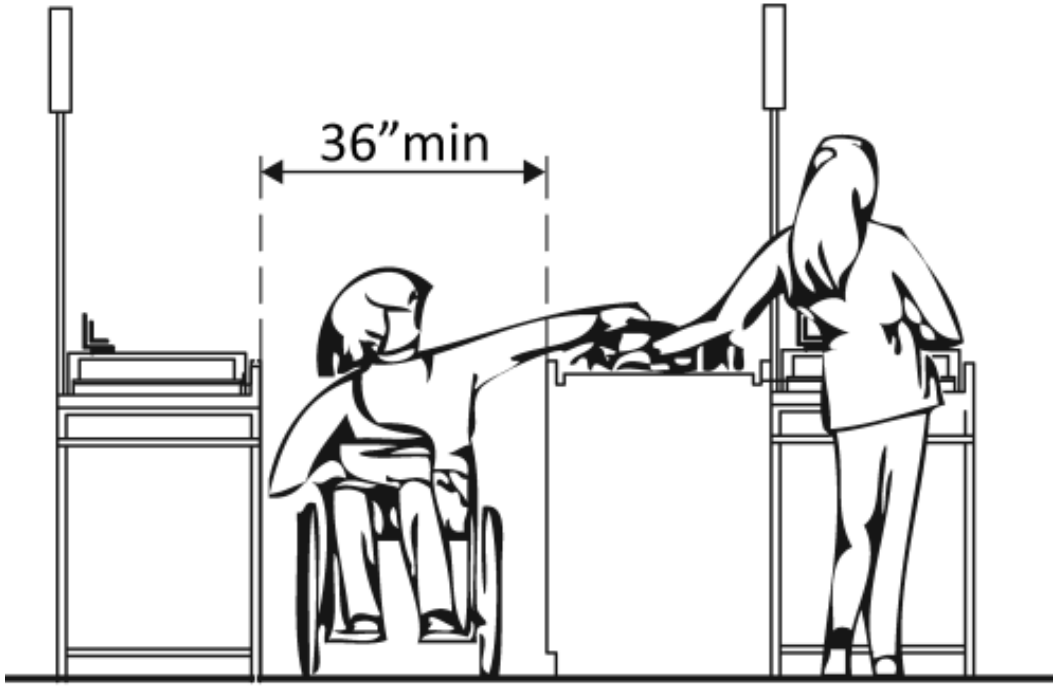
1.41	Is the clear opening width of the accessible entrance door at least 32 inches, between the face of the door and the stop, when the door is open 90 degrees?	☐Yes ☐No Measurement:		Photo #:	• Alter door • Install offset hinges •
1.42	If there is a front approach to the pull side of the door, is there at least 18 inches of maneuvering clearance beyond the latch side plus at least 60 inches clear depth? On both sides of the door, is the ground or floor surface of the maneuvering clearance level (no steeper than 1:48)?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	See 2010 Standards 404.2.4 for maneuvering clearance requirements on the push side of the door and side approaches to the pull side of the door • Remove obstructions • Reconfigure walls • Add automatic door opener
1.43	Is the door threshold edge no more than ¼ inch high? Or No more than ¾ inch high if slope is beveled no steeper than 1:2? Note: The first ¼ inch of the threshold may be vertical; the rest must be beveled.	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Remove or replace threshold • •

1.44	Is the door equipped with hardware, including locks, that is operable with one hand and does not require tight grasping, pinching, or twisting of the wrist?	☐Yes ☐No		Photo #:	• Replace inaccessible knob with lever, loop or push hardware • Add automatic door opener •
1.45	Are the operable parts of the door hardware no less than 34 inches and no greater than 48 inches above the floor or ground surface?	☐Yes ☐No Measurement:		Photo #:	• Change hardware height • •
1.46	If the door has a closer, does it take at least 5 seconds to close from an open position of 90 degrees to a position of 12 degrees from the latch?	☐Yes ☐No Measurement:		Photo #:	• Adjust closer • •
1.47	If there are two doors in a series, e.g. vestibule, is the distance between the doors at least 48 inches plus the width of the doors when swinging into the space?	☐Yes ☐No Measurement:			• Remove inner door • Change door swing •

			Photo #:	
1.48	If provided at the building entrance, are carpets or mats no higher than ½ inch thick?	☐Yes ☐No Measurement:	 Photo #:	• Replace or remove mats • •
1.49	Are edges of carpets or mats securely attached to minimize tripping hazards?	☐Yes ☐No	Photo #:	• Secure carpeting or mats at edges • •

ADA Checklist for Readily Achievable Barrier Removal

Priority 2 – Access to Goods & Services



Project

Building

Location

Date

Surveyors

Contact Information

The layout of the building should allow people with disabilities to obtain goods and services and to participate in activities without assistance.

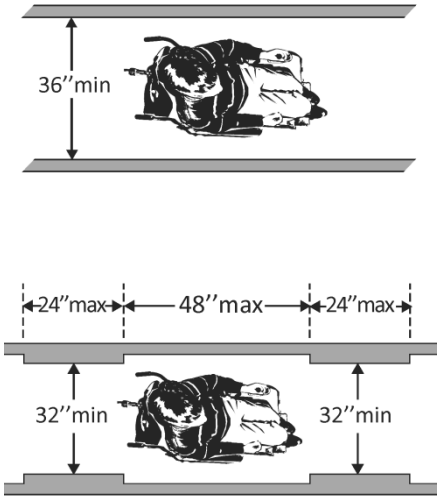
Institute for Human Centered Design
www.HumanCenteredDesign.org
November 2011

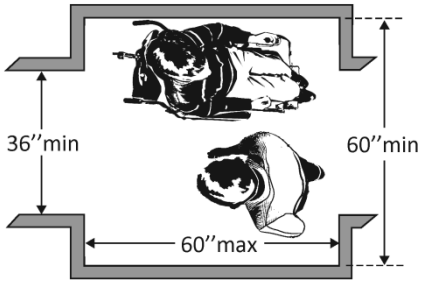
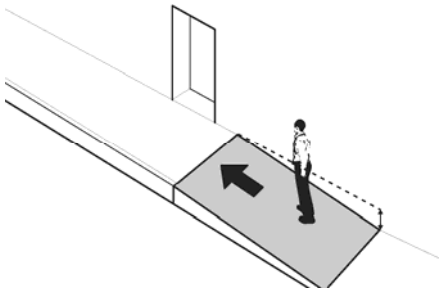
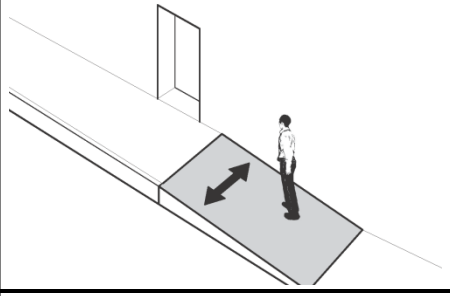
ADA National Network
Questions on the ADA 800-949-4232 voice/tty
www.ADAchecklist.org

This checklist was produced by the New England ADA Center, a project of the Institute for Human Centered Design and a member of the ADA National Network. This checklist was developed under a grant from the Department of Education, NIDRR grant number H133A060092-09A. However the contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

Questions or comments on the checklist contact the New England ADA Center at 617-695-0085 voice/tty or ADAinfo@NewEnglandADA.org

For the full set of checklists, including the checklists for recreation facilities visit www.ADAchecklist.org.

Priority 2 – Access to Goods & Services			**Comments**	**Possible Solutions**
2.1 Does the accessible entrance provide direct access to the main floor, lobby and elevator?	☐ Yes ☐ No		Photo #:	• Create accessible route • •
Interior Accessible Route *(2010 Standards – Ch.4)*				
2.2 Are all public spaces on at least one accessible route?	☐ Yes ☐ No		Photo #:	• Create accessible route • •
2.3 Is the route stable, firm and slip-resistant?	☐ Yes ☐ No		Photo #:	• Repair uneven surfaces • •
2.4 Is the route at least 36 inches wide? Note: The accessible route can narrow to 32 inches min. for a max. of 24 inches. These narrower portions of the route must be at least 48 inches from each other.	☐ Yes ☐ No Measurement:		Photo #:	• Widen route • •

2.5	If the route is greater than 200 feet in length and no less than 36 inches wide, is there a passing space no less than 60 x 60 inches?	☐Yes ☐No Measurement:		Photo #:	• Widen route for passing space • •
2.6	Is the running slope no steeper than 1:20, i.e. for every inch of height change there are at least 20 inches of route run?	☐Yes ☐No Measurement:		Photo #:	• Regrade • If steeper than 1:20 and no steeper than 1:12, treat as ramp and add other features such as edge protection and handrails •
2.7	Is the cross slope no steeper than 1:48?	☐Yes ☐No Measurement:		Photo #:	• Regrade • •
2.8	Do all objects on circulation paths through public areas, e.g. fire extinguishers, drinking fountains, signs, etc., protrude no more than 4 inches into the path? Or If an object protrudes more than 4 inches, is the bottom leading edge at 27 inches or lower above the floor?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:	 Or		• Remove object • Add tactile warning such as permanent planter or partial walls •

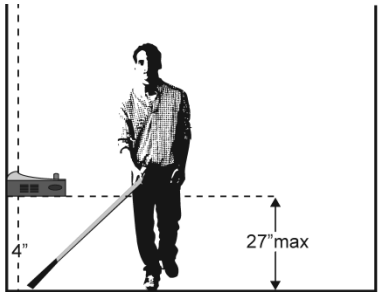
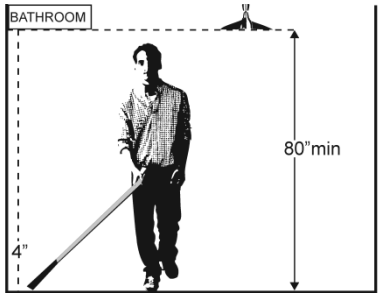
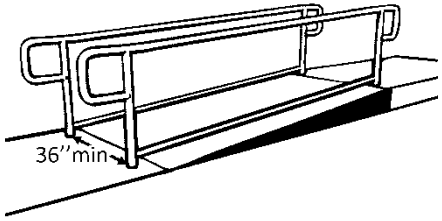
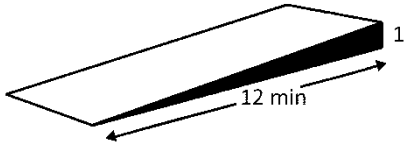
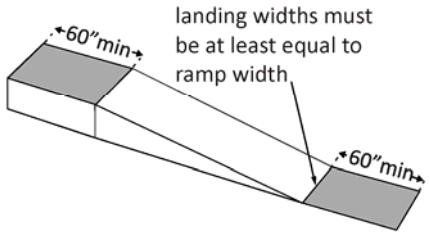
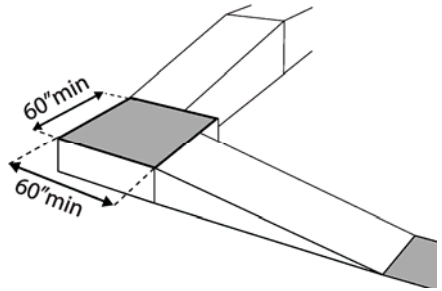
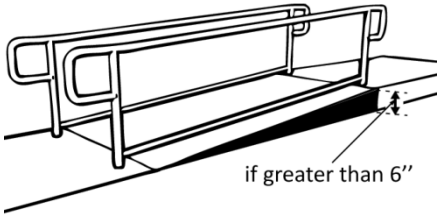
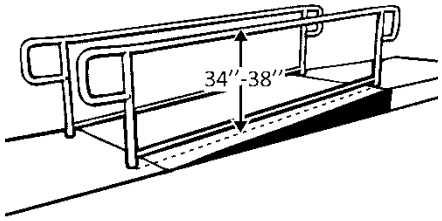
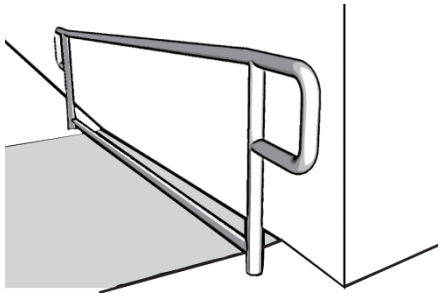
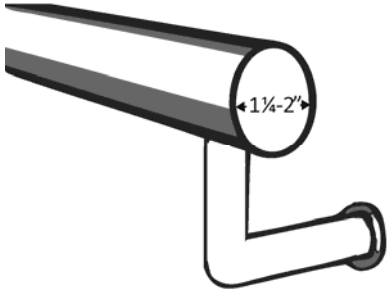
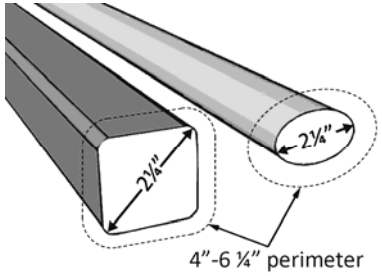
	Or Is the bottom leading edge at 80 inches or higher above the floor?	☐Yes ☐No Measurement:	 Or 	Photo #:	
2.9	Are there elevators or platform lifts to all public stories?*	☐Yes ☐No			*Vertical access is not required in new construction or alterations if a facility is less than three stories or has less than 3,000 square feet per story, unless a facility is a shopping center, shopping mall, professional office of a health care provider, transportation terminal, state facility or government facility • Install if necessary

			Photo #:	• Offer goods and services on an accessible story •
Ramps *(2010 Standards 404 & 505)*				
2.10 If there is a ramp, is it at least 36 inches wide? If there are handrails, measure between the handrails.	☐Yes ☐No Measurement:		Photo #:	• Alter ramp • •
2.11 Is the surface stable, firm and slip resistant?	☐Yes ☐No		Photo #:	• Change surface • •
2.12 For each section of the ramp, is the running slope no greater than 1:12, i.e. for every inch of height change there are at least 12 inches of ramp run? Note: Rises no greater than 3 inches with a slope no steeper than 1:8 and rises no greater than 6 inches with a slope no steeper than 1:10 are permitted when due to space limitations.	☐Yes ☐No Measurement:		Photo #:	• Lengthen ramp to decrease slope • Reconfigure ramp to include switchbacks • Relocate ramp •

2.13	Is there a level landing that is at least 60 inches long and at least as wide as the ramp: At the top of the ramp? At the bottom of the ramp?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Alter ramp • Relocate ramp •
2.14	Is there a level landing where the ramp changes direction that is at least 60 x 60 inches?	☐Yes ☐No Measurement:		Photo #:	• Increase landing size • •
2.15	If the ramp has a rise higher than 6 inches are there handrails on both sides?	☐Yes ☐No Measurement:		Photo #:	• Add handrails • •

2.16	Is the top of the handrail gripping surface no less than 34 inches and no greater than 38 inches above the ramp surface?	☐Yes ☐No Measurement:		Photo #:	• Adjust handrail height • •
2.17	Is the handrail gripping surface continuous and not obstructed along the top or sides? If there are obstructions, is the bottom of the handrail gripping surface obstructed by no more than 20%?	☐Yes ☐No ☐Yes ☐No Measurement:		Photo #:	• Regrade to 1:20 max • If steeper than 1:20 and no steeper than 1:12, treat as a ramp and add other features such as edge protection and handrails •
2.18	If the handrail gripping surface is circular, is it no less than 1 ¼ inches and no greater than 2 inches in diameter?	☐Yes ☐No Measurement:		Photo #:	• Alter handrails • •
2.19	If the handrail gripping surface is non-circular, is it no less than 4 inches and no greater than 6 ½ inches in perimeter and no more than 2 ¼ inches in cross section?	☐Yes ☐No Measurement:		Photo #:	• Alter handrails • •

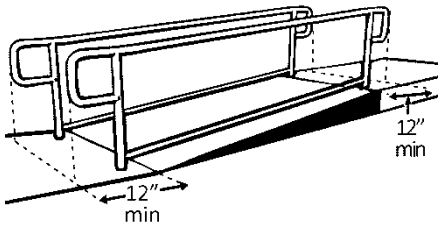
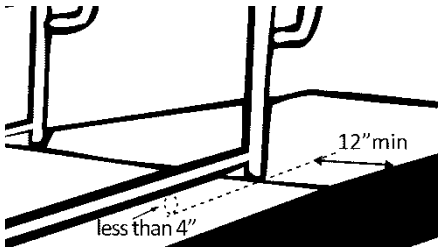
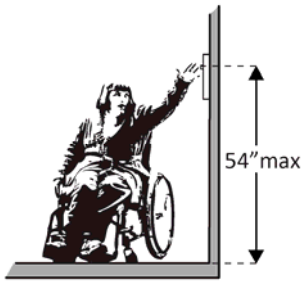
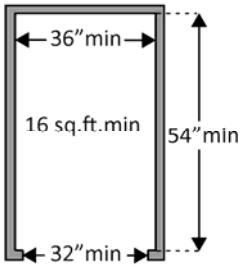
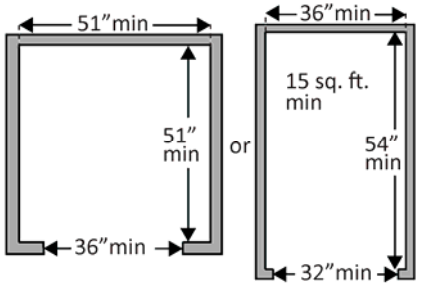
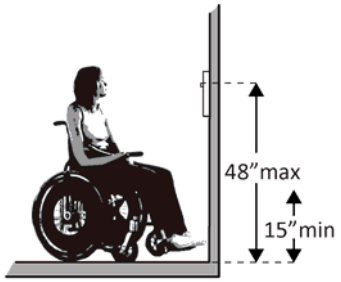
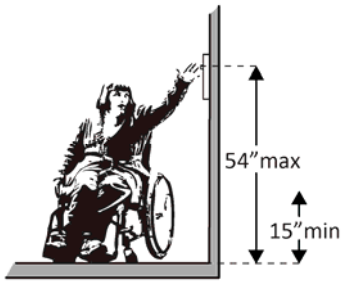
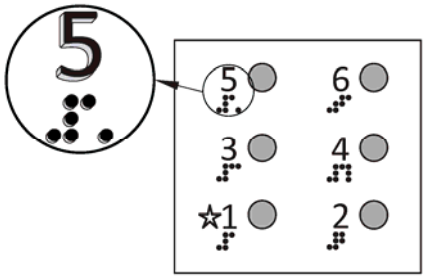
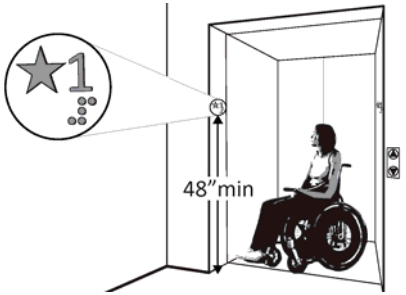
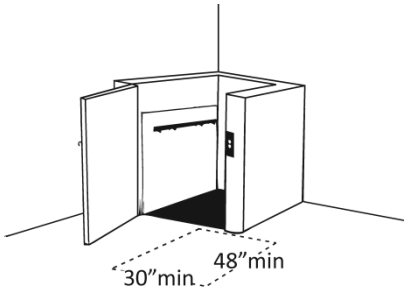
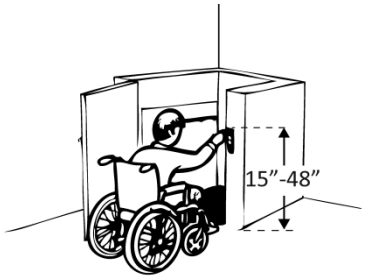
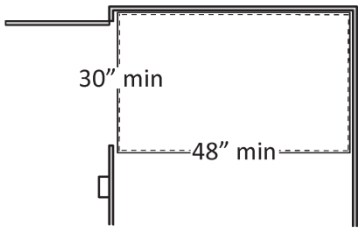
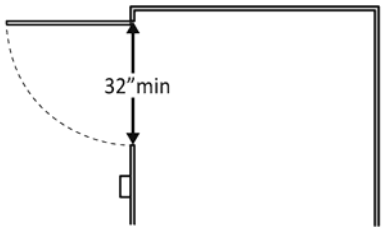
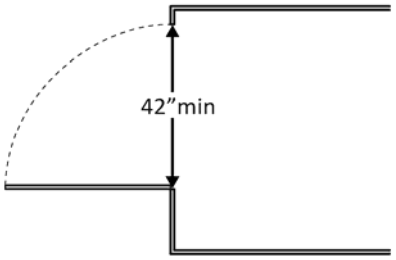
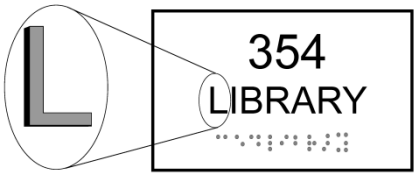
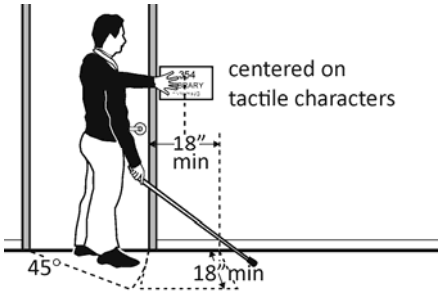
2.20	Does the handrail: Extend at least 12 inches beyond the top and bottom of the ramp? Return to a wall, guard, or landing surface?	☐Yes ☐No Measurement: ☐Yes ☐No		Photo #:	• Alter handrails • • If a 12" extension would be hazardous (in circulation path), it is not required
2.21	To prevent wheelchair casters and crutch tips from falling off: Does the surface of the ramp extend at least 12 inches beyond the inside face of the handrail? Or Is there a curb or barrier that prevents the passage of a 4-inch diameter sphere?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Add curb • Add barrier • Extend ramp width • •
Elevators – Full Size & LULA (limited use, limited application) *(2010 Standards – 407 & 408)* **Note: LULA elevators are often used in alterations.**					
2.22	If there is a full size or LULA elevator, are the call buttons no higher than 54 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Change call button height • •
2.23	If there is a full size or LULA elevator, does the sliding door reopen automatically when obstructed by an object or person?*	☐Yes ☐No			* If constructed before 3/15/2012 and manually operated, the door is not required to reopen automatically

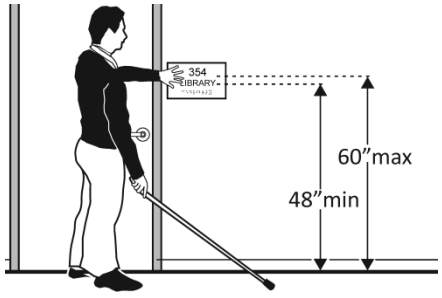
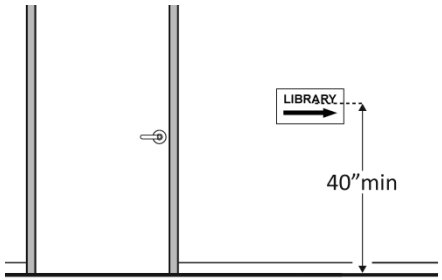
				Photo #:	• Install opener •
2.24	If there is a LULA elevator with a swinging door: Is the door power- operated? Does the door remain open for at least 20 seconds when activated?	☐ Yes ☐ No ☐ Yes ☐ No Time:		Photo #:	• Add power operated door • Adjust opening time •
2.25	If there is a full size elevator: Is the interior at least 54 inches deep by at least 36 inches wide with at least 16 sq. ft. of clear floor area? Is the door opening width at least 32 inches?	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:		Photo #:	• Replace elevator • •
2.26	If there is a LULA elevator, is the interior: At least 51 x 51 inches with a door opening width of at least 36 inches? Or At least 54 inches deep by at least 36 inches wide with at least 15 sq. ft. of clear floor	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:			• Replace elevator • •

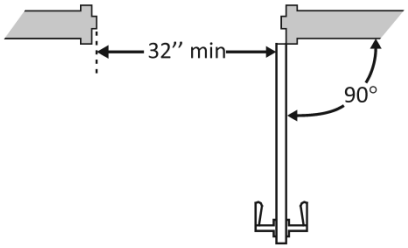
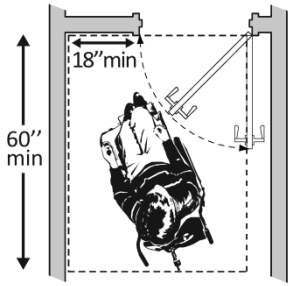
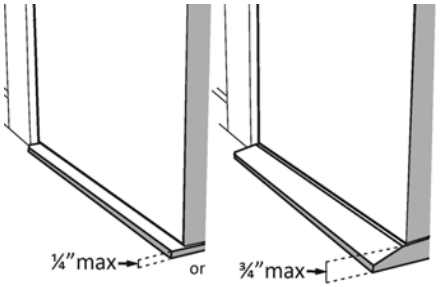
	area and a door opening width of at least 32 inches?			Photo #:	
2.27	If there is a full size or LULA elevator, are the in-car controls: No less than 15 inches and no greater 48 inches above the floor? Or Up to 54 inches above the floor for a parallel approach?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:	 Or 	Photo #:	• Change control height • •
2.28	If there is a LULA elevator, are the in-car controls centered on a side wall?	☐Yes ☐No Measurement:		Photo #:	• Reconfigure controls • •

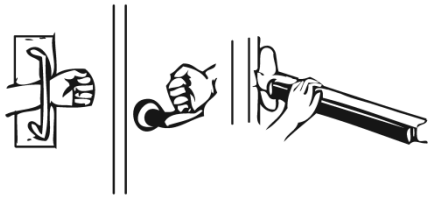
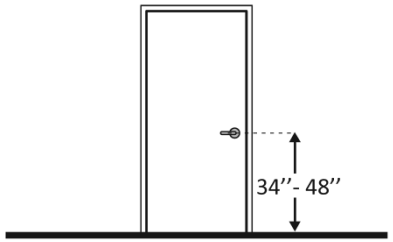
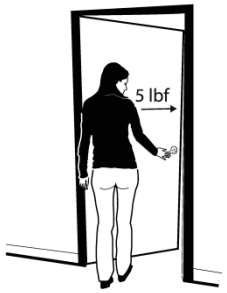
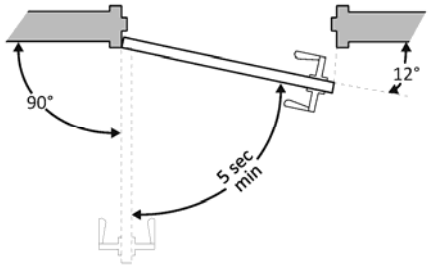
2.29	If there is a full size or LULA elevator: Are the car control buttons designated with raised characters? Are the car control buttons designated with Braille?	☐Yes ☐No ☐Yes ☐No		Photo #:	• Add raised characters • Add Braille •
2.30	If there is a full size or LULA elevator, are there audible signals which sound as the car passes or is about to stop at a floor?	☐Yes ☐No		Photo #:	• Install audible signals • •
2.31	If there is a full size or LULA elevator: Is there a sign on both door jambs at every floor identifying the floor? Is there a tactile star on both jambs at the main entry level? Do text characters contrast with their backgrounds? Are text characters raised? Is there Braille? Is the sign mounted between 48 inches to the baseline of the lowest character and 60 inches to the baseline of the highest character above the floor?*	☐Yes ☐No ☐Yes ☐No ☐Yes ☐No ☐Yes ☐No ☐Yes ☐No ☐Yes ☐No Measurement:		Photo #:	• Install signs • Change sign height • • * If constructed before 3/15/2012 and mounted no higher than 60 inches to the centerline of the sign, relocation is not required

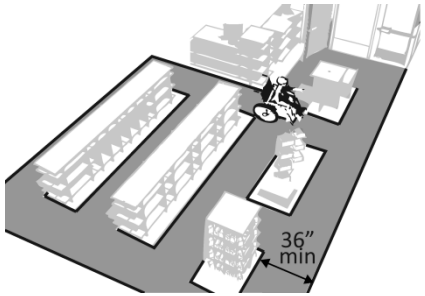
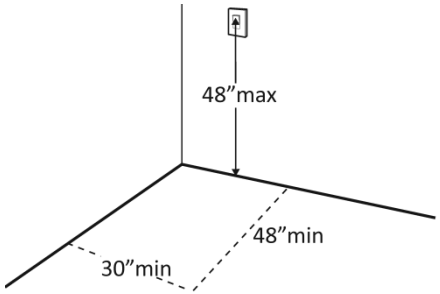
Platform Lifts *(2010 Standards – 410)*				
2.32 If a lift is provided, can it be used without assistance from others?	☐Yes ☐No		Photo #:	• Reconfigure so independently operable • •
2.33 Is there a clear floor space at least 30 inches wide by at least 48 inches long for a person using a wheelchair to approach and reach the controls to use the lift?	☐Yes ☐No Measurement:		Photo #:	• Remove obstructions • •
2.34 Are the lift controls no less than 15 inches and no greater than 48 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Change control height • •
2.35 Is there a clear floor space at least 30 inches wide by at least 48 inches long inside the lift?	☐Yes ☐No Measurement:		Photo #:	• Replace lift • •

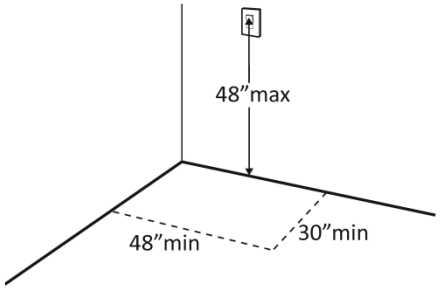
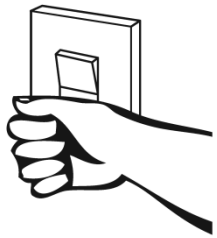
2.36	If there is an end door, is the clear opening width at least 32 inches?	☐Yes ☐No Measurement:		Photo #:	• Alter door width • •
2.37	If there is a side door, is the clear opening width at least 42 inches?	☐Yes ☐No Measurement:		Photo #:	• Alter door width • •
Signs *(2010 Standards – 703)* **Note: "Tactile characters" are read using touch, i.e. raised characters and Braille.**					
2.38	If there are signs designating permanent rooms and spaces not likely to change over time, e.g. room numbers and letters, room names, and exit signs: Do text characters contrast with their backgrounds? Are text characters raised? Is there Braille? Is the sign mounted: On the wall on the latch side of the door?	 ☐Yes ☐No ☐Yes ☐No ☐Yes ☐No ☐Yes ☐No	 		• Install tactile sign • Relocate sign •

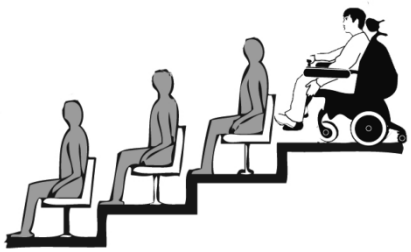
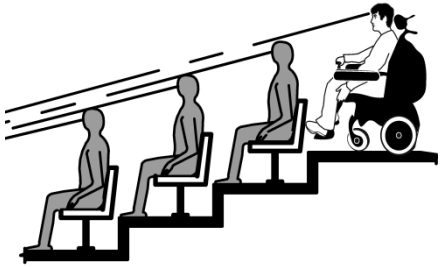
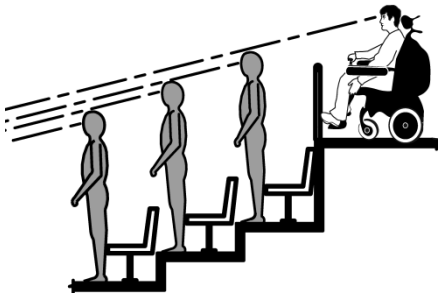
	Note: Signs are permitted on the push side of doors with closers and without hold-open devices. With clear floor space beyond the arc of the door swing between the closed position and 45-degree open position, at least 18 x 18 inches centered on the tactile characters?* So the baseline of the lowest character is at least 48 inches above the floor and the baseline of the highest character is no more than 60 inches above the floor? * Note: If the sign is at double doors with one active leaf, the sign should be on the inactive leaf; if both leaves are active, the sign should be on the wall to the right of the right leaf.	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	*If constructed before 3/15/2010 and a person may approach within 3 inches of the sign without encountering protruding objects or standing within the door swing, relocation not required *If constructed before 3/15/2012 and mounted no higher than 60 inches to the centerline of the sign, relocation not required
2.39	If there are signs that provide direction to or information about interior spaces: Do text characters contrast with their backgrounds? Is the sign mounted so that characters are at least 40 inches above the floor?	☐Yes ☐No ☐Yes ☐No Measurement:		Photo #:	• Install signs with contrasting characters • Change sign height • Raised characters and Braille are not required

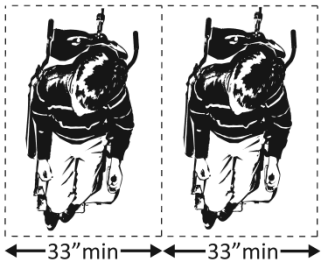
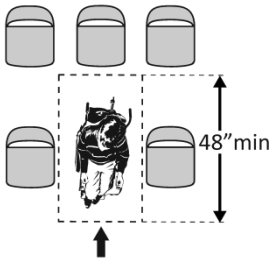
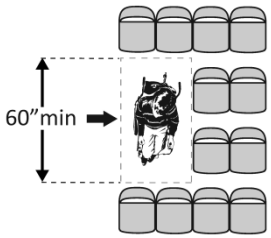
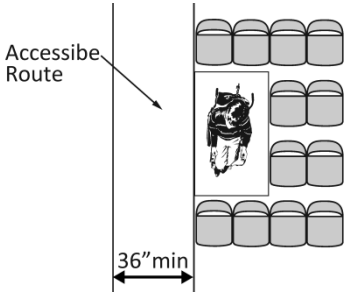
Interior Doors – to classrooms, medical exam rooms, conference rooms, etc. *(2010 Standards – 404)*				
2.40 Is the door opening width at least 32 inches clear, between the face of the door and the stop, when the door is open 90 degrees?	☐Yes ☐No Measurement:		Photo #:	• Install offset hinges • Alter the doorway •
2.41 If there is a front approach to the pull side of the door, is there at least 18 inches of maneuvering clearance beyond the latch side plus at least 60 inches clear depth? On both sides of the door, is the floor surface of the maneuvering clearance level (no steeper than 1:48)?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Remove obstructions • Reconfigure walls • Add automatic door opener See 2010 Standards 404.2.4 for maneuvering clearance requirements on the push side of the door and side approaches to the pull side of the door
2.42 Is the door threshold edge no more than ¼ inch high? Or No more than ¾ inch high if slope is beveled no steeper than 1:2? Note: The first ¼ inch of the threshold may be vertical; the rest must be beveled.	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Remove or replace threshold • •

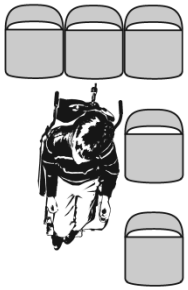
2.43	Is the door equipped with hardware that is operable with one hand and does not require tight grasping, pinching and twisting of the wrist?	☐Yes ☐No		Photo #:	• Replace inaccessible knob with lever, loop or push hardware • Add automatic door opener •
2.44	Are the operable parts of the hardware no less than 34 inches and no greater than 48 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Change hardware height • •
2.45	Can the door be opened easily (5 pounds maximum force)? Note: You can use a pressure gauge or fish scale to measure force. If you do not have a pressure gauge or fish scale you will need to judge whether the door is easy to open.	☐Yes ☐No Measurement:		Photo #:	• Adjust or replace closers • Install lighter doors • Install power-assisted or automatic door openers
2.46	If the door has a closer, does it take at least 5 seconds to close from an open position of 90 degrees to a position of 12 degrees from the latch?	☐Yes ☐No Measurement:		Photo #:	• Adjust closer • •

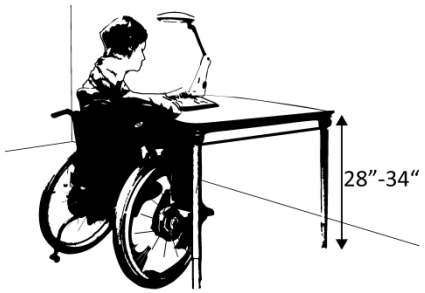
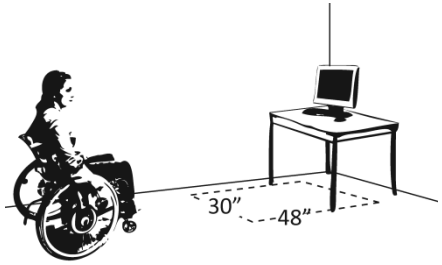
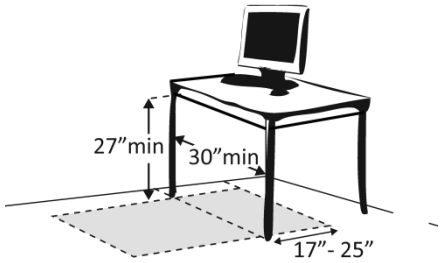
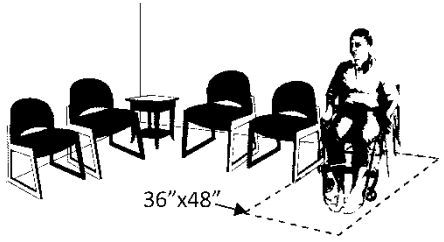
Rooms and Spaces – stores, supermarkets, libraries, etc. *(2010 Standards – 302, 304, & 402)*					
2.47	Are aisles and pathways to goods and services, and to one of each type of sales and service counters, at least 36 inches wide?	☐Yes ☐No Measurement:		Photo #:	• Rearrange goods, equipment and furniture • •
2.48	Are floor surfaces stable, firm and slip resistant?	☐Yes ☐No		Photo #:	• Change floor surface • •
2.49	If there is carpet: Is it no higher than ½ inch? Is it securely attached along the edges?	☐Yes ☐No Measurement: ☐Yes ☐No		Photo #:	• Replace carpet • •
Controls – light switches, security and intercom systems, emergency/alarm boxes, etc. *(2010 Standards – 309)*					
2.50	Is there a clear floor space at least 30 inches wide by at least 48 inches long for a forward or parallel approach? Are the operable parts no higher than 48 inches above the floor?*	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:			• Change height of control • • *If constructed before 3/15/2012 and a parallel approach is provided, controls can be 54 inches above the floor

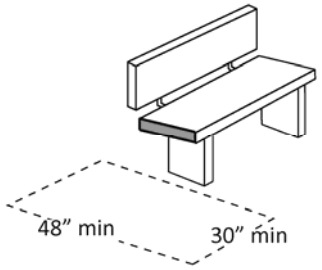
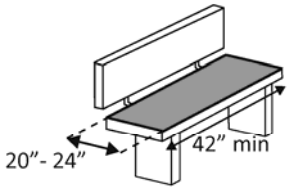
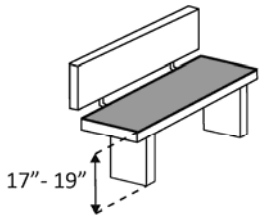
			Photo #:	
2.51	Can the control be operated with one hand and without tight grasping, pinching, or twisting of the wrist?	☐Yes ☐No	 Photo #:	• Replace control • •
Seating: Assembly Areas – theaters, auditoriums, stadiums, theater style classrooms, etc. *(2010 Standards – 221 & 802)*				
2.52	Are an adequate number of wheelchair spaces provided?	☐Yes ☐No Total #: Wheelchair #:	**# of Seats** / **Wheelchair Spaces** 4 - 25 / 1 26 - 50 / 2 51 - 150 / 4 151 - 300 / 5 300+ see 2010 Standards 221.2.1. Photo #:	• Reconfigure to add wheelchair spaces • •

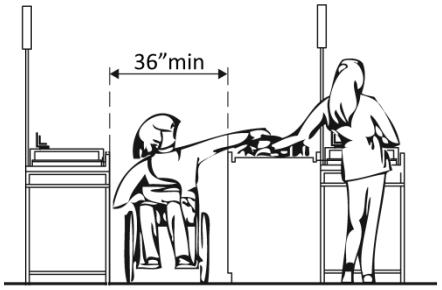
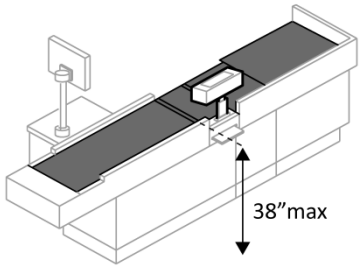
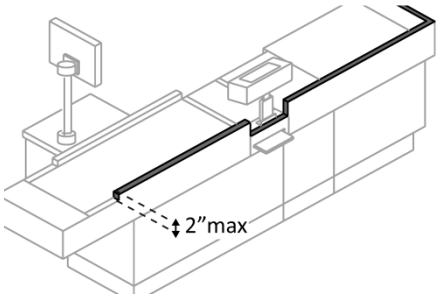
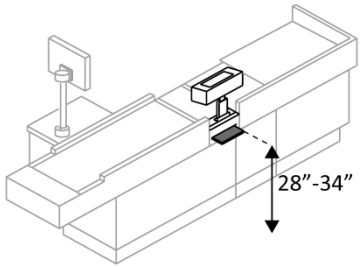
2.53	Are wheelchair spaces dispersed to allow location choices and viewing angles equivalent to other seating, including specialty seating areas that provide distinct services and amenities?	☐Yes ☐No	 Photo #:	• Reconfigure to disperse wheelchair spaces • •
2.54	Where people are expected to remain seated, do people in wheelchair spaces have a clear line of sight over and between the heads of others in front of them?	☐Yes ☐No	 Photo #:	• Alter for line of sight • •
2.55	Where people are expected to stand, do people in wheelchair spaces have a clear line of sight over and between the heads of others in front of them?	☐Yes ☐No	 Photo #:	• Alter for line of sight • •
2.56	If there is a single wheelchair space, is it at least 36 inches wide?	☐Yes ☐No Measurement:	 Photo #:	• Alter space • •

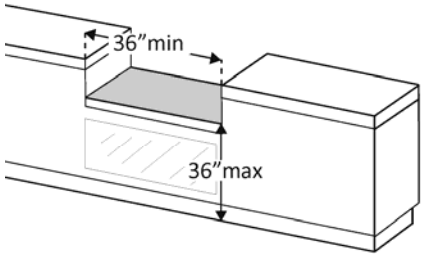
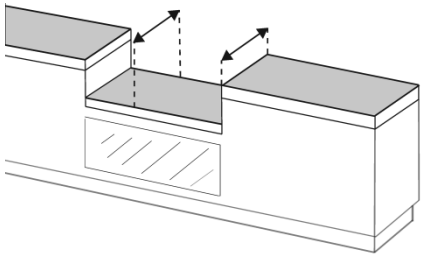
2.57	If there are two adjacent wheelchair spaces, are they each at least 33 inches wide?	☐Yes ☐No Measurement:		Photo #:	• Alter spaces • •
2.58	If the wheelchair space can be entered from the front or rear, is it at least 48 inches deep?	☐Yes ☐No Measurement:		Photo #:	• Alter space • •
2.59	If the wheelchair space can only be entered from the side, is it at least 60 inches deep?	☐Yes ☐No Measurement:		Photo #:	• Alter space • •
2.60	Do wheelchair spaces adjoin, but not overlap, accessible routes?	☐Yes ☐No		Photo #:	• Alter spaces • •

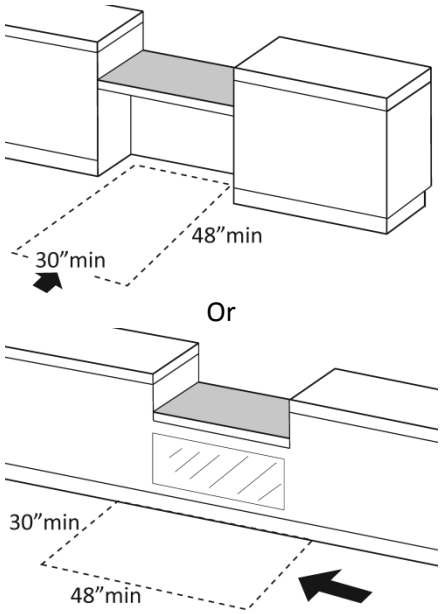
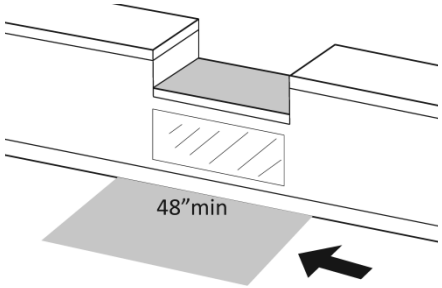
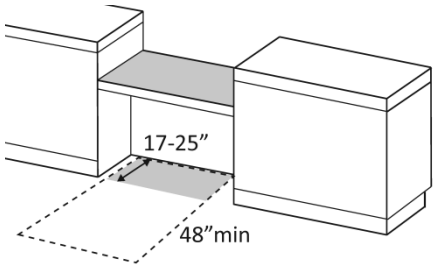
2.61	Is there at least one companion seat for each wheelchair space?	☐Yes ☐No		Photo #:	• Add companion seats • •
2.62	Is the companion seat located so the companion is shoulder-to-shoulder with the person in a wheelchair?	☐Yes ☐No		Photo #:	• Alter seating • •
2.63	Is the companion seat equivalent in size, quality, comfort and amenities to seating in the immediate area?	☐Yes ☐No		Photo #:	• Add equivalent seating • •
Seating: At dining surfaces (restaurants, cafeterias, bars, etc.) and non-employee work surfaces (libraries, conference rooms, etc.) *(2010 Standards – 226 & 902)*					
2.64	Are at least 5%, but no fewer than one, of seating and standing spaces accessible for people who use wheelchairs?	☐Yes ☐No Total #: Wheelchair #:		Photo #:	• Alter to provide accessible spaces • •
2.65	Is there a route at least 36 inches wide to accessible seating?	☐Yes ☐No Measurement:		Photo #:	• Widen route • •

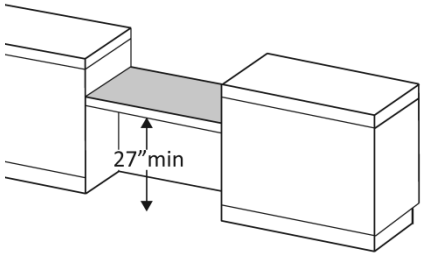
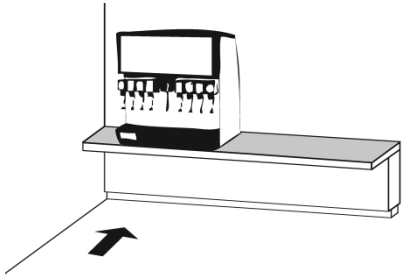
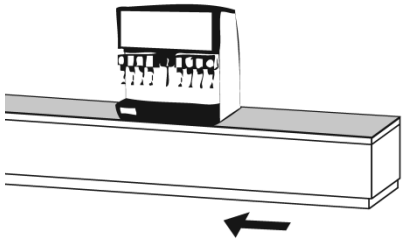
2.66	At the accessible space(s), is the top of the accessible surface no less than 28 inches and no greater than 34 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Alter surface height • •
2.67	Is there a clear floor space at least 30 inches wide by at least 48 inches long for a forward approach? Does it extend no less than 17 inches and no greater than 25 inches under the surface? Is there knee space at least 27 inches high and at least 30 inches wide?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement: ☐Yes ☐No Measurement:	 	Photo #:	• Alter table or work surface • Add accessible table or work surface •
Seating: General – reception areas, waiting rooms, etc. *(2010 Standards – 801)*					
2.68	Is there at least one space at least 36 inches wide by at least 48 inches long for a person in a wheelchair?	☐Yes ☐No Measurement:		Photo #:	• Move furniture and equipment to provide space • •

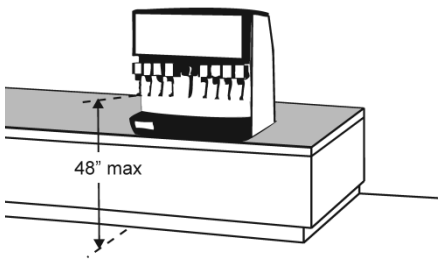
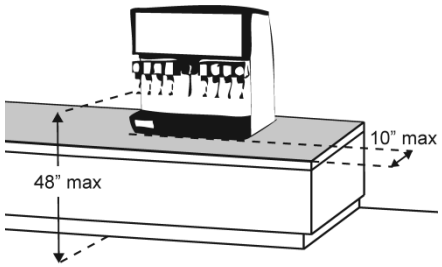
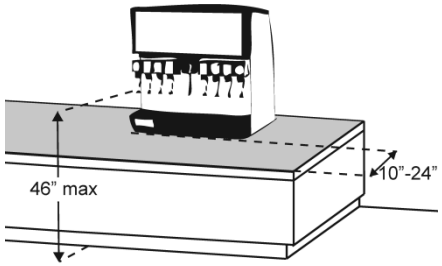
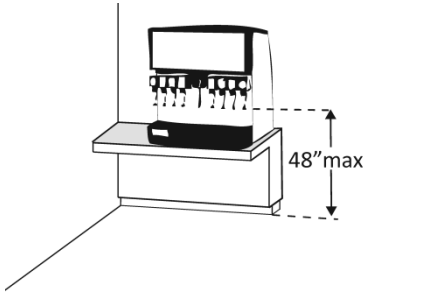
Benches – In locker rooms, dressing rooms, fitting rooms *(2010 Standards – 803 & 903)*					
2.69	In locker rooms, dressing rooms and fitting rooms, is there at least one room with a bench?	☐Yes ☐No		Photo #:	• Add bench • •
2.70	Is there a clear floor space at least 30 inches wide by at least 48 inches long at the end of the bench and parallel to the short axis of the bench? Is the bench seat at least 42 inches long and no less than 20 inches and no greater than 24 inches deep? Does the bench have back support or is it affixed to a wall? Is the top of the bench seat no less than 17 inches and no greater than 19 inches above the floor?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement: ☐Yes ☐No ☐Yes ☐No Measurement:	  	Photo #:	• Move bench • Replace bench • Affix bench to wall • •

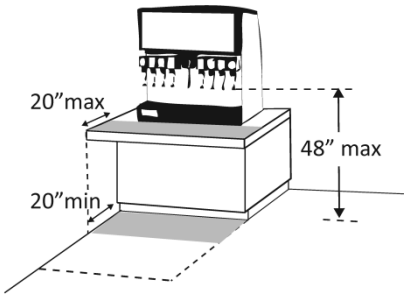
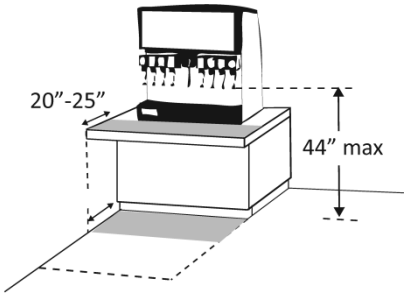
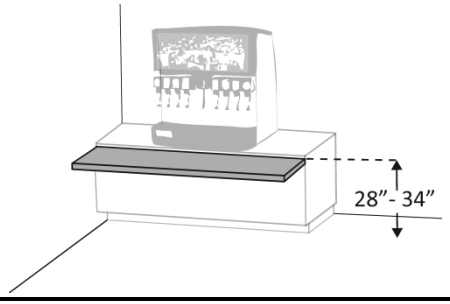
Check-Out Aisles – supermarkets, large retail stores, etc. *(2010 Standards – 904)*				
2.71 Is the aisle at least 36 inches wide?	☐Yes ☐No Measurement:		Photo #:	• Widen aisle • •
2.72 Is the counter surface of at least one aisle no higher than 38 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Lower counter • •
2.73 Is the top of the counter edge protection no higher than 2 inches above the counter surface?	☐Yes ☐No Measurement:		Photo #:	• Lower edge protection • •
2.74 If there is a check writing surface, is the top no less than 28 inches and no greater than 34 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Alter check writing surface • •

2.75	If there is more than one check-out aisle is there a sign with the International Symbol of Accessibility at the accessible aisle?	☐Yes ☐No		Photo #:	• Add sign • •
Sales & Service Counters – banks, stores, dry cleaners, auto repair shops, fitness clubs, etc. *(2010 Standards – 904)*					
2.76	Is there a portion of at least one of each type of counter that is: No higher than 36 inches above the floor? At least 36 inches long?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Lower section of counter • Lengthen section of counter •
2.77	Does the accessible portion of the counter extend the same depth as the counter top?	☐Yes ☐No Measurement:		Photo #:	• Alter accessible portion • •

2.78	Is there a clear floor space at least 30 inches wide by at least 48 inches long for a forward or parallel approach?	☐Yes ☐No ☐Parallel Measurement: ☐Forward Measurement:		Photo #:	• Reconfigure to provide a parallel or forward approach • •
2.79	For a parallel approach, is the clear floor space positioned with the 48 inches adjacent to the accessible length of counter?	☐Yes ☐No Measurement:		Photo #:	• If a parallel approach is not possible, a forward approach is required • •
2.80	For a forward approach: Do no less than 17 and no greater than 25 inches of the clear floor space extend under the accessible length of the counter? Is there at least 27 inches clearance from the floor to the	☐Yes ☐No Measurement: ☐Yes ☐No			• Reconfigure to provide knee clearance • •

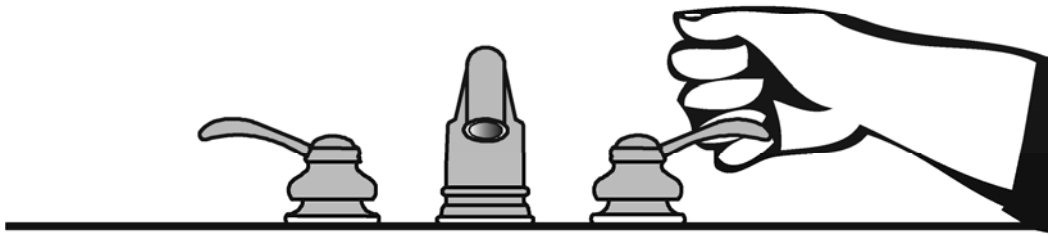
	bottom of the counter?	Measurement:		Photo #:	
Food Service Lines – in cafeterias, salad bars, eat-in fast food establishments, etc. *(2010 Standards – 904)*					
2.81	Does at least one of each type of self-service shelf or dispensing device for tableware, dishware, condiments, food and beverages have a forward or parallel approach?	☐ Yes ☐ No ☐ Forward ☐ Parallel	 Or 	Photo #:	• Reconfigure to provide approach • •

2.82	If there is an unobstructed parallel approach, is the shelf or dispensing device no higher than 48 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Lower shelf and/or dispensing device • •
2.83	If there is a shallow obstruction no deeper than 10 inches with a parallel approach, is the shelf or dispensing device no higher than 48 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Lower shelf and/or dispensing device • •
2.84	If there is an obstruction no less than 10 inches and no greater than 24 inches deep with a parallel approach, is the shelf or dispensing device no higher than 46 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Lower shelf and/or dispensing device • •
2.85	If there is an unobstructed forward approach, is the shelf or dispensing device no higher than 48 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Lower shelf and/or dispensing device • •

2.86	If there is an obstruction no deeper than 20 inches with a forward approach: Does clear floor space extend under the obstruction that is at least the same depth as the obstruction? Is the shelf or dispensing device no higher than 48 inches above the floor?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Reconfigure to provide knee space • Lower shelf and/or dispensing device •
2.87	If the obstruction is no less than 20 inches and no greater than 25 inches deep with a forward approach: Does clear floor space extend under the obstruction that is at least the same depth as the obstruction? Is the shelf or dispensing device no higher than 44 inches above the floor?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Reconfigure to provide knee space • Lower shelf and/or dispensing device •
2.88	If there is a tray slide, is the top no less than 28 inches and no greater than 34 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Reconfigure • •

The ADA Checklist for Readily Achievable Barrier Removal

Priority 3 - Toilet Rooms



Project

Building

Location

Date

Surveyors

Contact Information

When toilet rooms are open to the public they should be accessible to people with disabilities.

Institute for Human Centered Design
www.HumanCenteredDesign.org
November 2011

ADA National Network
Questions on the ADA 800-949-4232 voice/tty
www.ADAchecklist.org

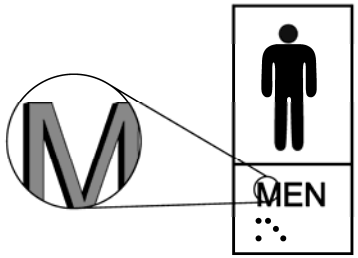
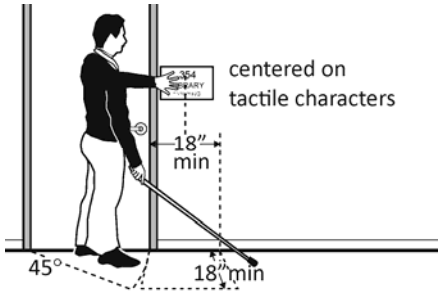
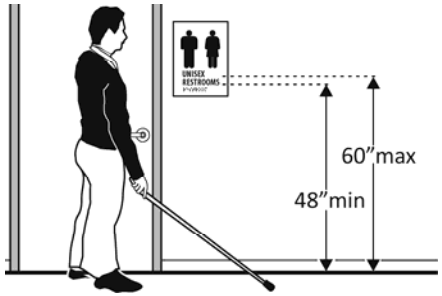
This checklist was produced by the New England ADA Center, a project of the Institute for Human Centered Design and a member of the ADA National Network. This checklist was developed under a grant from the Department of Education, NIDRR grant number H133A060092-09A. However the contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

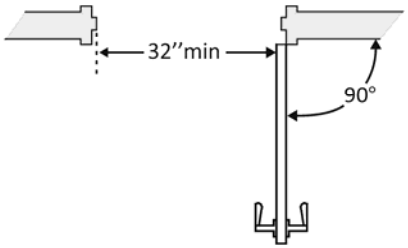
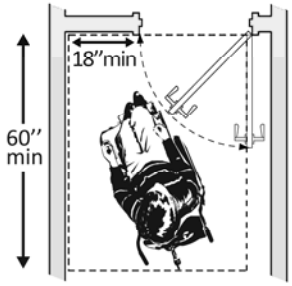
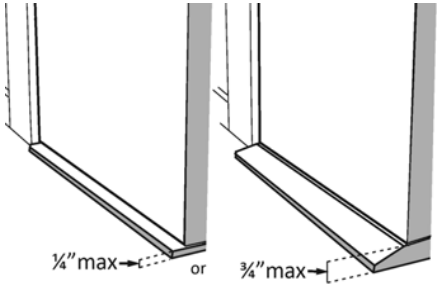
Questions or comments on the checklist contact the New England ADA Center at 617-695-0085 voice/tty or ADAinfo@NewEnglandADA.org

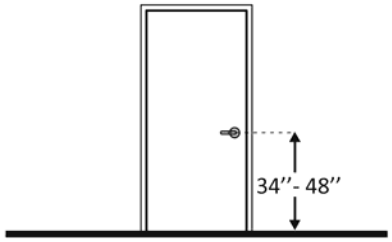
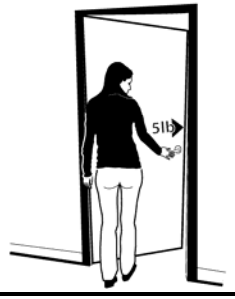
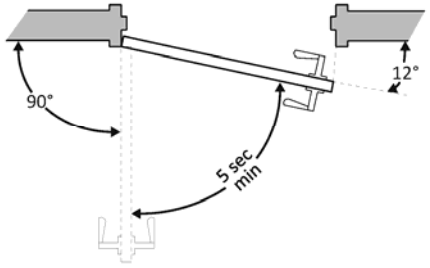
For the full set of checklists, including the checklists for recreation facilities visit www.ADAchecklist.org.

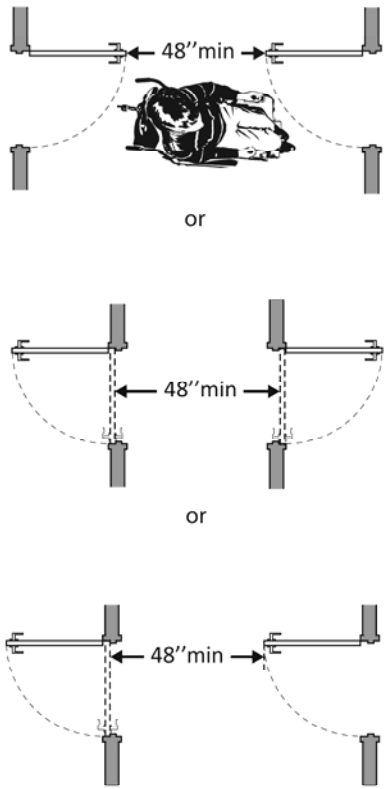
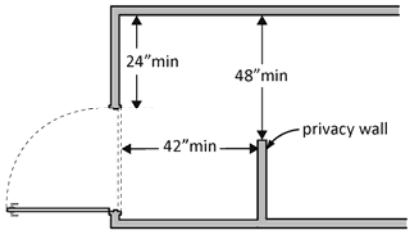
Priority 3 – Toilet Rooms			**Comments**	**Possible Solutions**
3.1 If toilet rooms are available to the public, is at least one toilet room accessible? (Either one for each sex, or one unisex.)	☐ Yes ☐ No		Photo #:	• Reconfigure toilet rooms • Combine toilet rooms to create one unisex accessible toilet room •
3.2 Are there signs at inaccessible toilet rooms that give directions to accessible toilet rooms?	☐ Yes ☐ No		Photo #:	• Install signs • •
3.3 If not all toilet rooms are accessible, is there a sign at the accessible toilet room with the International Symbol of Accessibility?	☐ Yes ☐ No		Photo #:	• Install sign • •
Accessible Route *(2010 Standards – Chapter 4)*				
3.4 Is there a route to the accessible toilet room(s) that does not include the use of stairs? Is the route accessible? (See Priority 2 Interior Accessible Route for specifics.)	☐ Yes ☐ No ☐ Yes ☐ No		Photo #:	• Alter route • •

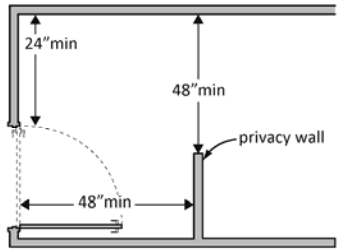
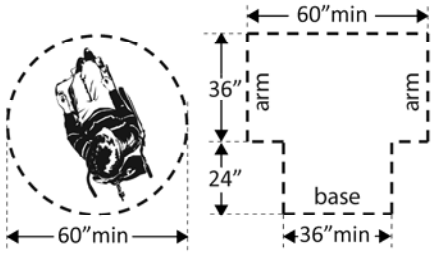
Signs at Toilet Rooms *(2010 Standards – 703)*

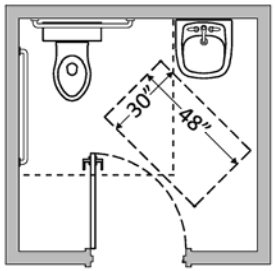
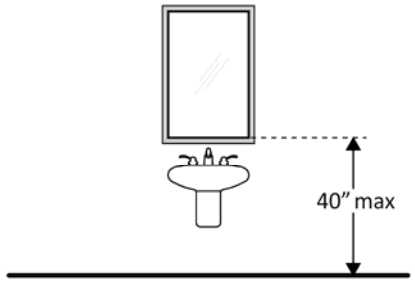
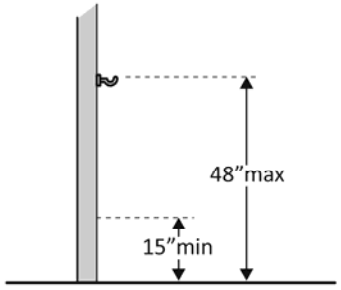
3.5	Do text characters contrast with their backgrounds?	☐ Yes ☐ No			• Install tactile sign • Relocate sign •
	Are text characters raised?	☐ Yes ☐ No			
	Is there Braille?	☐ Yes ☐ No			
	Is the sign mounted: On the wall on the latch side of the door?	☐ Yes ☐ No			
	Note: Signs are permitted on the push side of doors with closers and without hold-open devices.				
	With clear floor space beyond the arc of the door swing between the closed position and 45-degree open position, at least 18 x 18 inches centered on the tactile characters? *	☐ Yes ☐ No Measurement:			*If constructed before 3/15/2010 and a person may approach within 3 inches of the sign without encountering protruding objects or standing within the door swing, relocation not required
	So the baseline of the lowest character is at least 48 inches above the floor and the baseline of the highest character is no more than 60 inches above the floor? *	☐ Yes ☐ No Measurement:			*If constructed before 3/15/2012 and mounted no higher than 60 inches to the centerline of the sign, relocation is not required
	Note: If the sign is at double doors with one active leaf, the sign should be on the inactive leaf; if both leaves are active, the sign				

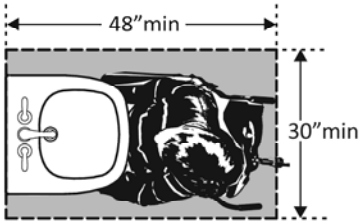
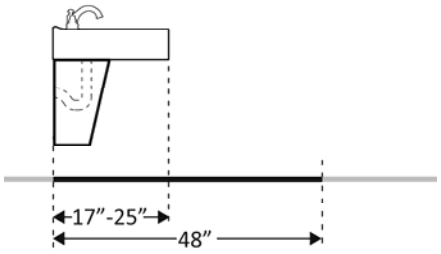
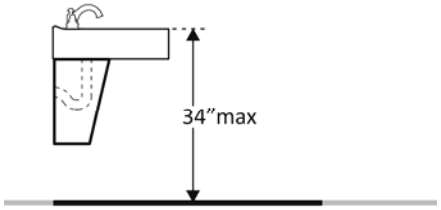
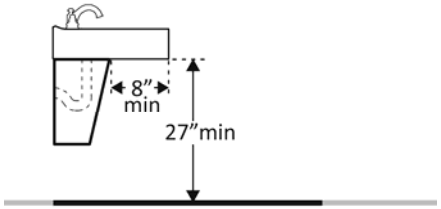
	should be on the wall to the right of the right leaf.			Photo #:	
Entrance *(2010 Standards – 404)*					
3.6	Is the door opening width at least 32 inches clear, between the face of the door and the stop, when the door is open 90 degrees?	☐ Yes ☐ No Measurement:		Photo #:	• Install offset hinges • Alter the doorway •
3.7	If there is a front approach to the pull side of the door is there at least 18 inches of maneuvering clearance beyond the latch side plus 60 inches clear depth? On both sides of the door, is the floor surface of the maneuvering clearance level (no steeper than 1:48)?	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:		Photo #:	• Remove obstructions • Reconfigure walls • Add automatic door opener See 2010 Standards 404.2.4 for maneuvering clearance requirements on the push side of the door and side approaches to the pull side of the door
3.8	Is the door threshold edge no more than ¼ inch high? Or No more than ¾ inch high if slope is beveled no steeper than 1:2? Note: The first ¼ inch of the threshold may be vertical; the rest must be beveled.	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:		Photo #:	• Remove or replace threshold • •

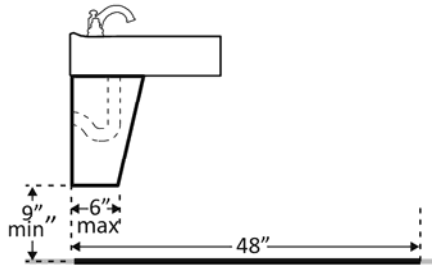
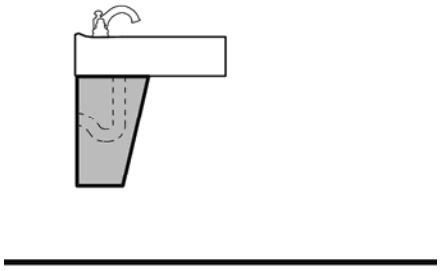
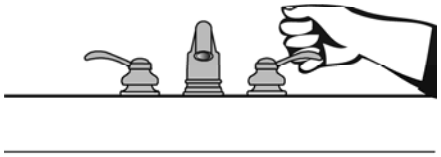
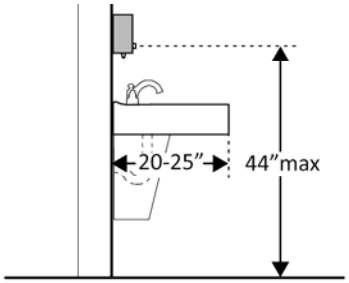
3.9	Is the door equipped with hardware that is operable with one hand and does not require tight grasping, pinching, or twisting of the wrist? Check door handle and lock (if provided).	☐Yes ☐No Measurement:		Photo #:	• Replace knobs or latches with lever or loop handles • Install power-assisted or automatic door openers •
3.10	Are the operable parts of the door hardware mounted no less than 34 inches and no greater than 48 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Change hardware height • •
3.11	Can the door be opened easily (5 pounds maximum force)?	☐Yes ☐No Measurement:		Photo #:	• Adjust or replace closers • Install lighter doors • Install power-assisted or automatic door openers
3.12	If the door has a closer, does it take at least 5 seconds to close from an open position of 90 degrees to a position of 12 degrees from the latch?	☐Yes ☐No Measurement:		Photo #:	• Adjust closer • •

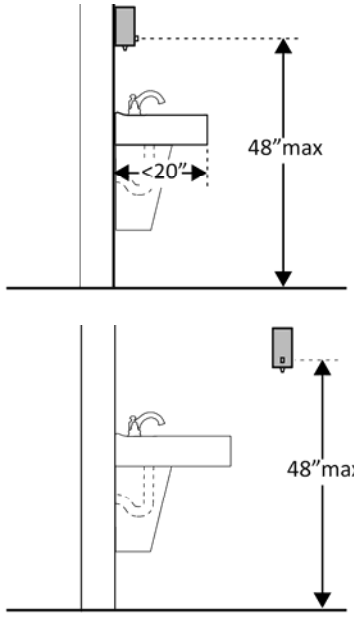
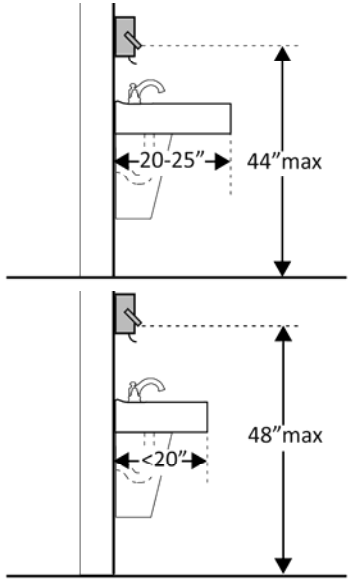
3.13	If there are two doors in a series, e.g. vestibule, is the distance between the doors at least 48 inches plus the width of the doors when swinging into the space?	☐Yes ☐No Measurement:		Photo #:	• Remove inner door • Change door swing •
3.14	If there is a privacy wall and the door swings out, is there at least 24 inches of maneuvering clearance beyond the door latch side and 42 inches to the privacy wall?	☐Yes ☐No Measurement:		Photo #:	• Reconfigure space • •

3.15	If there is a privacy wall and the door swings in, is there at least 24 inches of maneuvering clearance beyond the door latch side and at least 48 inches to the privacy wall if there is no door closer or at least 54 inches if there is a door closer?	☐Yes ☐No Measurement:		Photo #:	• Reconfigure space • •
In the Toilet Room					
3.16	Is there a clear path to at least one of each type of fixture, e.g. lavatory, hand dryer, etc., that is at least 36 inches wide?	☐Yes ☐No Measurement:		Photo #:	• Remove obstructions • •
3.17	Is there clear floor space available for a person in a wheelchair to turn around, i.e. a circle at least 60 inches in diameter or a T-shaped space within a 60-inch square?*	☐Yes ☐No Measurement:		Photo #:	*The door to the toilet room may swing into the required turning space • Move or remove partitions, fixtures or objects such as trash cans • •

3.18	In a single user toilet room if the door swings in and over a clear floor space at an accessible fixture, is there a clear floor space at least 30 x 48 inches beyond the swing of the door?	☐Yes ☐No Measurement:		Photo #:	• Reverse door swing • Alter toilet room •
3.19	If the mirror is over a lavatory or countertop, is the bottom edge of the reflecting surface no higher than 40 inches above the floor? Or If the mirror is not over the lavatory or countertop, is the bottom edge of the reflecting surface no higher than 35 inches above the floor?*	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	* If installed before 3/15/2012 and the bottom edge of the reflecting surface is no higher than 40 inches above the floor, lowering the mirror to 35 inches is not required • Lower the mirror • Add another mirror •
3.20	If there is a coat hook, is it no less than 15 inches and no greater than 48 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Adjust hook • Replace with or provide additional accessible hook •

Lavatories *(2010 Standards – 606)* **Note: 2010 Standards refer to sinks in toilet rooms as lavatories.**				
3.21 Does at least one lavatory have a clear floor space for a forward approach at least 30 inches wide and 48 inches long?	☐Yes ☐No Measurement:		Photo #:	• Alter lavatory • Replace lavatory •
3.22 Do no less than 17 inches and no greater than 25 inches of the clear floor space extend under the lavatory so that a person using a wheelchair can get close enough to reach the faucet?	☐Yes ☐No Measurement:		Photo #:	• Alter lavatory • Replace lavatory •
3.23 Is the front of the lavatory or counter surface, whichever is higher, no more than 34 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Alter lavatory • Replace lavatory •
3.24 Is there at least 27 inches clearance from the floor to the bottom of the lavatory that extends at least 8 inches under the lav for knee clearance?	☐Yes ☐No Measurement:		Photo #:	• Alter lavatory • Replace lavatory •

3.25	Is there toe clearance at least 9 inches high? (Space extending greater than 6 inches beyond the available toe clearance at 9 inches above the floor is not considered toe clearance.)	☐Yes ☐No		Photo #:	• Alter lavatory • Replace lavatory •
3.26	Are pipes below the lavatory insulated or otherwise configured to protect against contact?	☐Yes ☐No		Photo #:	• Install insulation • Install cover panel •
3.27	Can the faucet be operated without tight grasping, pinching, or twisting of the wrist? Is the force required to activate the faucet no greater than 5 pounds?	☐Yes ☐No ☐Yes ☐No		Photo #:	• Adjust faucet • Replace faucet •
Soap Dispensers and Hand Dryers *(2010 Standards – 603)*					
3.28	Are the operable parts of the soap dispenser within one of the following reach ranges: Above lavatories or counters no less than 20 inches and no greater than 25 inches deep: no higher than 44 inches above the floor?	☐Yes ☐No Measurement:			• Adjust dispensers • Replace with or provide additional accessible dispensers •

	Above lavatories less than 20 inches deep: no higher than 48 inches above the floor? Not over an obstruction: no higher than 48 inches above the floor?	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:		Photo #:	
3.29	Are the operable parts of the hand dryer or towel dispenser within one of the following reach ranges: Above lavatories or counters no less than 20 inches and no greater than 25 inches deep: no higher than 44 inches above the floor? Above lavatories less than 20 inches deep: no higher than 48 inches above the floor? Not over an obstruction: no higher than 48 inches above the floor?	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:			• Adjust dispensers • Replace with or provide additional accessible dispensers •

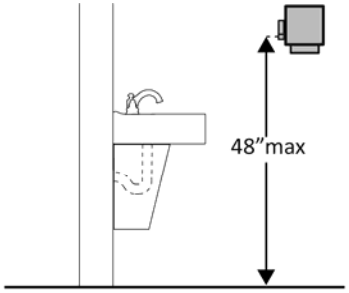
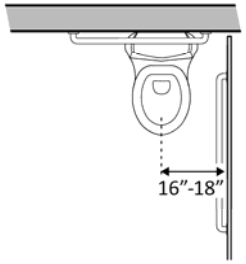
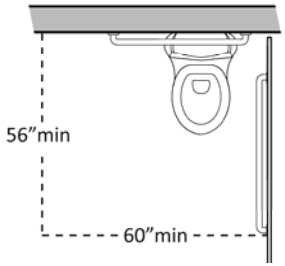
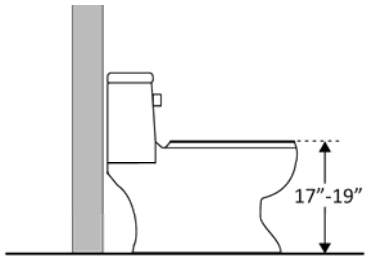
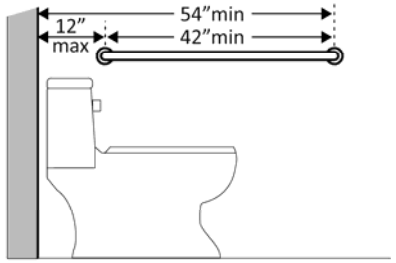
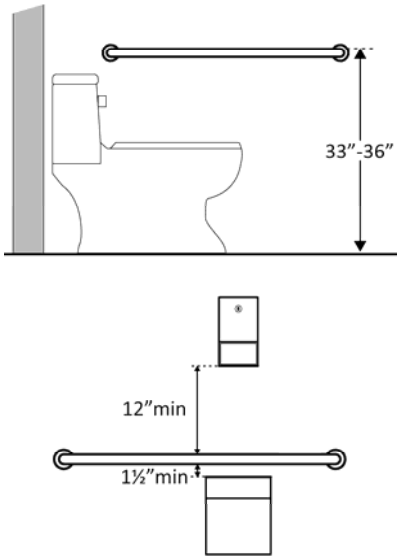
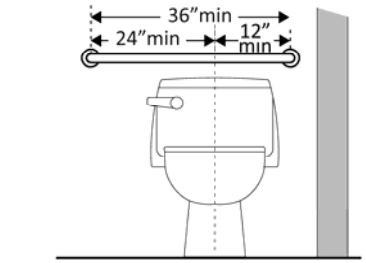
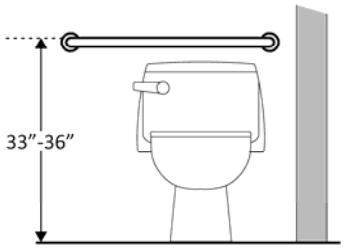
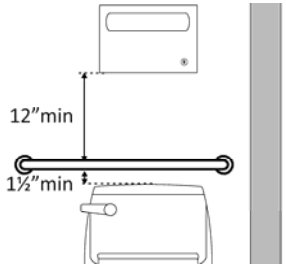
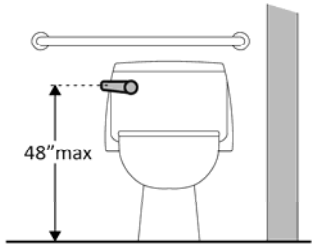
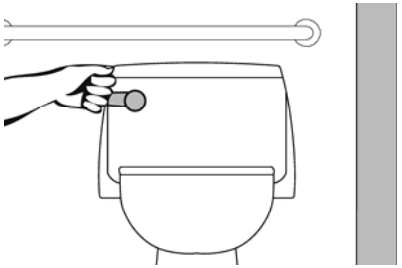
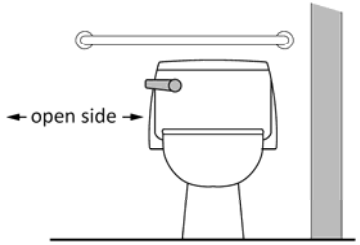
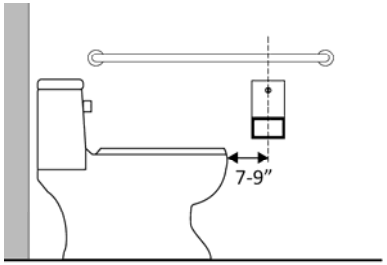
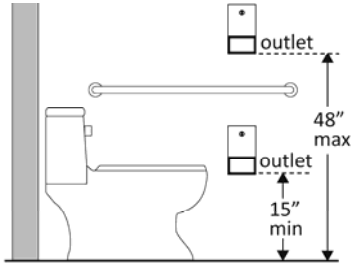
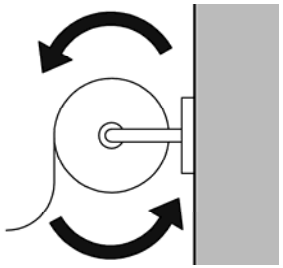
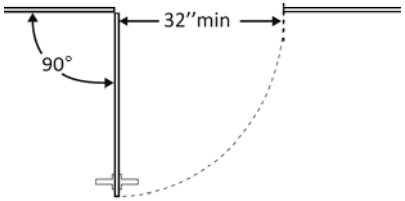
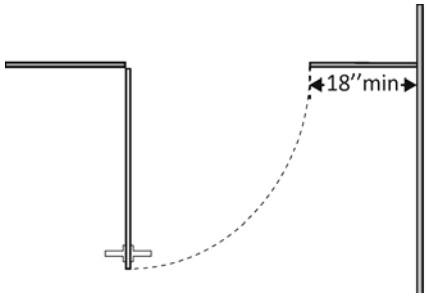
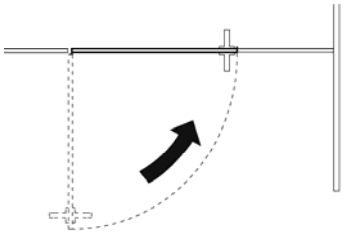
	Can the operable parts of the hand dryer or towel dispenser be operated without tight grasping, pinching or twisting of the wrist? Is the force required to activate the hand dryer or towel dispenser no greater than 5 pounds?	☐Yes ☐No ☐Yes ☐No Measurement:		Photo #:	
Water Closets in Single-User Toilet Rooms and Compartments (Stalls) *(2010 Standards – 603 & 609)* **Note: 2010 Standards refer to toilets as water closets.**					
3.30	Is the centerline of the water closet no less than 16 inches and no greater than 18 inches from the side wall or partition?	☐Yes ☐No Measurement:		Photo #:	• Move toilet • Replace toilet • Move partition •
3.31	Is clearance provided around the water closet measuring at least 60 inches from the side wall and at least 56 inches from the rear wall?*	☐Yes ☐No Measurement:			* If constructed before 3/15/12, clearances around water closets in single user toilet rooms can be 48 inches wide by 66 inches long or 48 inches wide by 56 inches long (depending on the approach to the water closet, see 1991 Standards Figure 28) and the lavatory may overlap that clearance if the door to the room does not swing into the

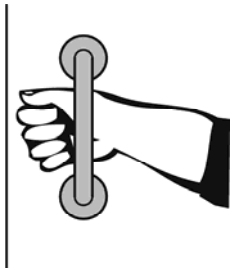
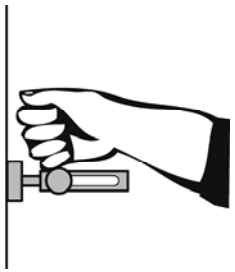
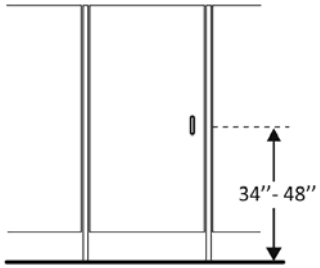
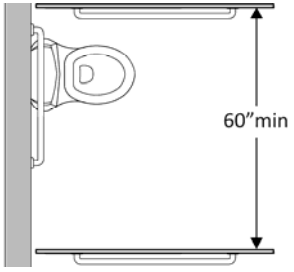
				Photo #:	required clearances at fixtures (such as lavatories, water closet and urinals) and the edge of the lavatory is at least 18 inches from the centerline of the water closet • Alter room/compartment for clearance • •
3.32	Is the height of the water closet no less than 17 inches and no greater than 19 inches above the floor measured to the top of the seat?	☐Yes ☐No Measurement:		Photo #:	• Adjust toilet height • Replace toilet •
3.33	Is there a grab bar at least 42 inches long on the side wall? Is it located no more than 12 inches from the rear wall? Does it extend at least 54 inches from the rear wall? Is it mounted no less than 33	☐Yes ☐No Measurement: ☐Yes ☐No Measurement: ☐Yes ☐No Measurement: ☐Yes ☐No			• Install grab bar • Relocate grab bar • Relocate objects •

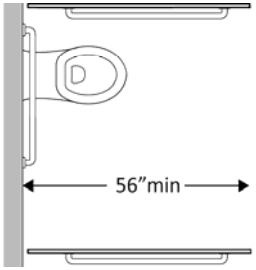
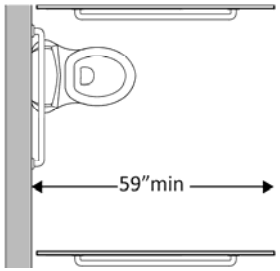
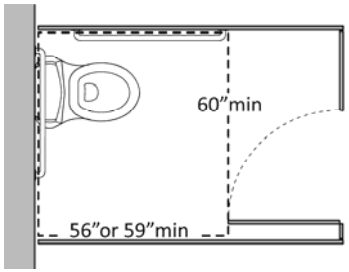
	inches and no greater than 36 inches above the floor to the top of the gripping surface? Is there at least 12 inches clearance between the grab bar and protruding objects above?* Is there at least 1½ inches clearance between the grab bar and projecting objects below?* Is the space between the wall and the grab bar 1 ½ inches?	Measurement: ☐Yes ☐No Measurement: ☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	* If constructed before 3/15/2012 grab bars do not need to be relocated; there are no space requirements above and below grab bars in the 1991 Standards
3.34	Is there a grab bar at least 36 inches long on the rear wall? Does it extend at least 12 inches from the centerline of the water closet on one side (side wall)? Does it extend at least 24 inches on the other (open) side? Is it mounted no less than 33 inches and no greater than 36 inches above the floor to the top of the gripping surface? Are there at least 12 inches	☐Yes ☐No Measurement: ☐Yes ☐No Measurement: ☐Yes ☐No Measurement: ☐Yes ☐No Measurement: ☐Yes ☐No	 		• Install grab bar • Relocate grab bar • Relocate objects •

	clearance between the grab bar and protruding objects above?* Are there at least 1½ inches clearance between the grab bar and projecting objects below?* Is the space between the wall and the grab bar 1 ½ inches?	Measurement: ☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	* If constructed before 3/15/2012 grab bars do not need to be relocated; there are no space requirements above and below grab bars in the 1991 Standards
3.35	If the flush control is hand operated, is the operable part located no higher than 48 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Move control • Install sensor with override button no higher than 48 inches •
3.36	If the flush control is hand operated, can it be operated with one hand and without tight grasping, pinching, or twisting of the wrist? Is the force required to activate the flush control no greater than 5 pounds?	☐Yes ☐No ☐Yes ☐No Measurement:		Photo #:	• Change control • Adjust control •

3.37	Is the flush control on the open side of the water closet?	☐Yes ☐No		Photo #:	• Move control • •
3.38	Is the toilet paper dispenser located no less than 7 inches and no greater than 9 inches from the front of the water closet to the centerline of the dispenser?*	☐Yes ☐No Measurement:		Photo #:	* If constructed before 3/15/2012 dispenser does not need to be relocated if it is within reach from the water closet seat; the 1991 Standards do not specify distance from the front of the water closet • Relocate dispenser • •
3.39	Is the outlet of the dispenser: Located no less than 15 inches and no greater than 48 inches above the floor? Not located behind grab bars?	☐Yes ☐No Measurement: ☐Yes ☐No		Photo #:	• Relocate dispenser • •

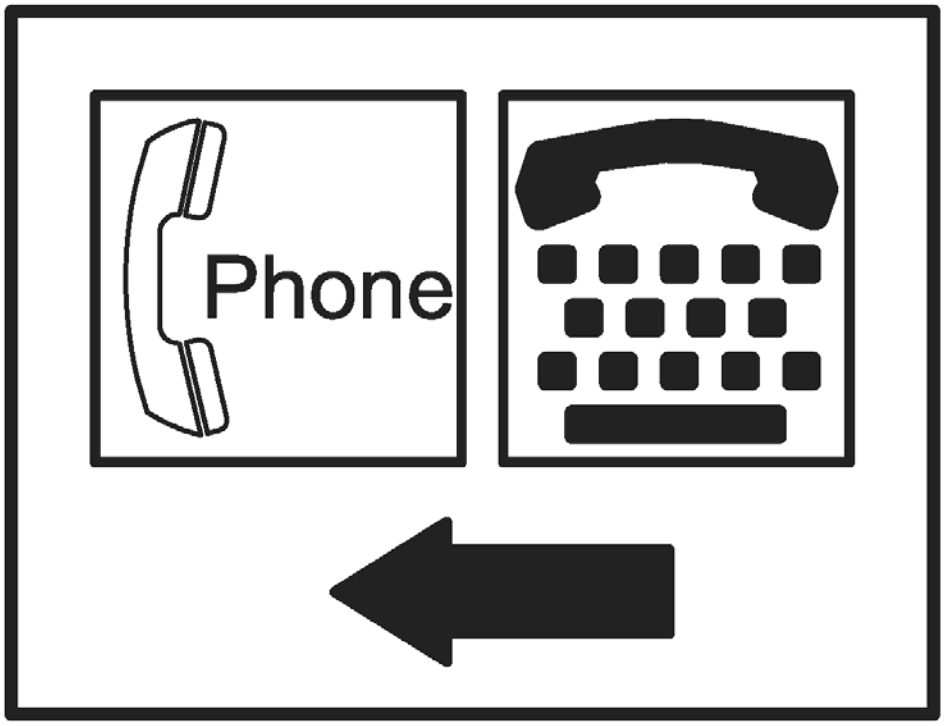
3.40	Does the dispenser allow continuous paper flow?	☐Yes ☐No		Photo #:	• Adjust dispenser • Replace dispenser •
Toilet Compartments (Stalls) (*2010 Standards – 604)*					
3.41	Is the door opening width at least 32 inches clear, between the face of the door and the stop, when the door is open 90 degrees?	☐Yes ☐No Measurement:		Photo #:	• Widen door width • •
3.42	If there is a front approach to the pull side of the door, is there at least 18 inches of maneuvering clearance beyond the latch side plus 60 inches clear depth?*	☐Yes ☐No Measurement:		Photo #:	*See 2010 Standards 604.8.1.2 Doors for maneuvering clearance requirements on the push side of the door and side approaches to the pull side of the door • Remove obstructions •
3.43	Is the door self-closing?	☐Yes ☐No		Photo #:	• Add closer • Replace door •

3.44	Are there door pulls on both sides of the door that are operable with one hand and do not require tight grasping pinching or twisting of the wrist?*	☐Yes ☐No		Photo #:	* If constructed before 3/15/2012 door pulls do not need to be added; door pulls are not required in the 1991 Standards • Replace hardware • •
3.45	Is the lock operable with one hand and without tight grasping, pinching or twisting of the wrist?	☐Yes ☐No		Photo #:	• Replace lock • •
3.46	Are the operable parts of the door hardware mounted no less than 34 inches and no greater than 48 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Relocate hardware • •
3.47	Is the compartment at least 60 inches wide?	☐Yes ☐No Measurement:		Photo #:	• Widen compartment • •

3.48	If the water closet is wall hung, is the compartment at least 56 inches deep?	☐Yes ☐No Measurement:		Photo #:	• Widen compartment • •
3.49	If the water closet is floor mounted, is the compartment at least 59 inches deep?	☐Yes ☐No Measurement:		Photo #:	• Alter compartment • •
3.50	If the door swings in, is the minimum required compartment area provided beyond the swing of the door (60 inches x 56 inches if water closet is wall hung or 59 inches if water closet is floor mounted)?	☐Yes ☐No Measurement:		Photo #:	• Reverse door swing • Alter compartment •
		☐Yes ☐No		Photo #:	• • •
		☐Yes ☐No		Photo #:	• • •

ADA Checklist for Readily Achievable Barrier Removal

Priority 4 – Additional Access



Project

Building

Location

Date

Surveyors

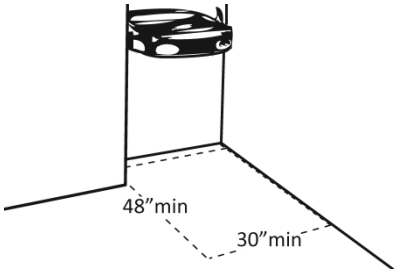
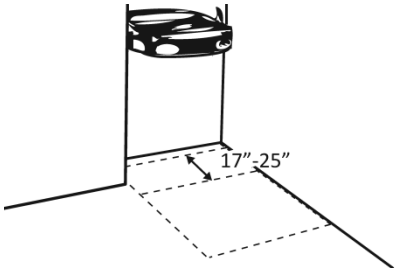
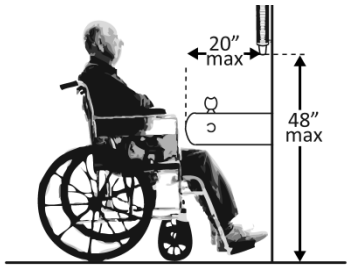
Contact Information

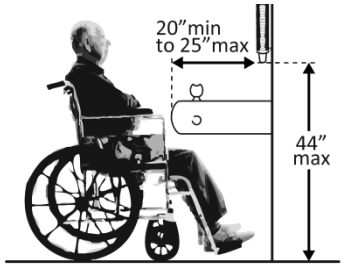
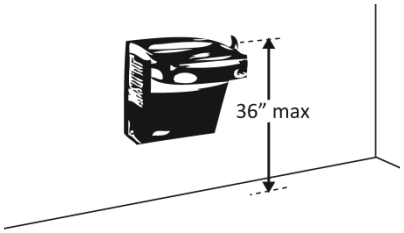
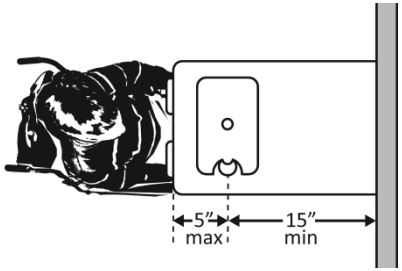
Amenities such as drinking fountains and public telephones should be accessible to people with disabilities.

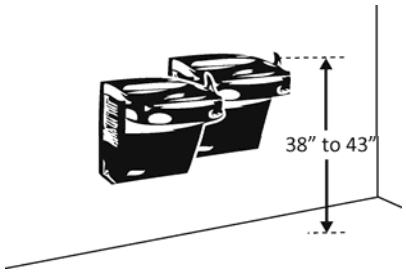
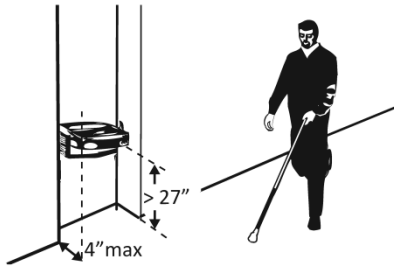
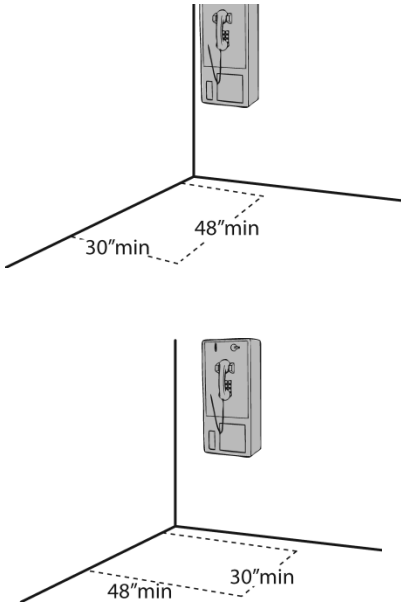
This checklist was produced by the New England ADA Center, a project of the Institute for Human Centered Design and a member of the ADA National Network. This checklist was developed under a grant from the Department of Education, NIDRR grant number H133A060092-09A. However the contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

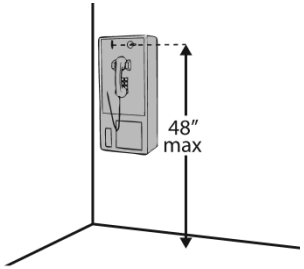
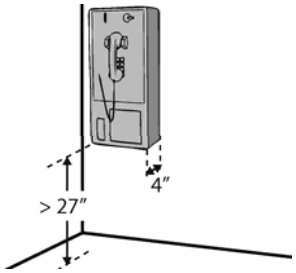
Questions or comments on the checklist contact the New England ADA Center at 617-695-0085 voice/tty or ADAinfo@NewEnglandADA.org

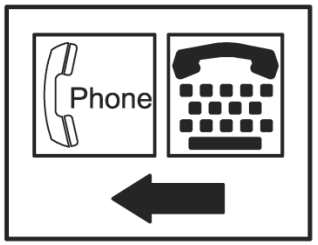
For the full set of checklists, including the checklists for recreation facilities visit www.ADAchecklist.org.

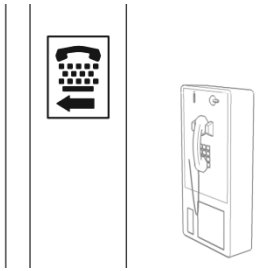
Priority 4 – Additional Access				Comments	Possible Solutions
Drinking Fountains *(2010 Standards – 602)*					
4.1	Does at least one drinking fountain have a clear floor space at least 30 inches wide x at least 48 inches long centered in front of it for a forward approach?*	☐ Yes ☐ No Measurement:		Photo #:	*If installed before 3/15/2012, a parallel approach is permitted and the clear floor space is not required to be centered • Alter space • Relocate drinking fountain • Install a drinking fountain in another location
4.2	If there is a forward approach, do no less than 17 inches and no greater than 25 inches of the clear floor space extend under the drinking fountain?	☐ Yes ☐ No Measurement:		Photo #:	• Alter space • Replace drinking fountain •
4.3	If the drinking fountain is no deeper than 20 inches, are the operable parts no higher than 48 inches above the floor?	☐ Yes ☐ No Measurement:		Photo #:	• Adjust drinking fountain • Replace drinking fountain •

4.4	If the drinking fountain is no less than 20 inches and no greater than 25 inches deep, are the operable parts no higher than 44 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Adjust drinking fountain • Replace drinking fountain •
4.5	Can the control be operated with one hand and without tight grasping, pinching or twisting of the wrist? Is the force required to activate the control no more than 5 pounds?	☐Yes ☐No ☐Yes ☐No Measurement:		Photo #:	• Change control • Adjust control •
4.6	Is the spout outlet no higher than 36 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Adjust drinking fountain • Replace drinking fountain •
4.7	Is the spout: At least 15 inches from the rear of the drinking fountain? No more than 5 inches from the front of the drinking fountain?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Adjust spout • Replace drinking fountain •

4.8	If there is more than one drinking fountain, is there at least one for standing persons? Is the spout outlet no lower than 38 inches and no higher than 43 inches above the floor?	☐Yes ☐No ☐Yes ☐No Measurement:		Photo #:	• Adjust drinking fountain • Install new drinking fountain for standing height •
4.9	If the leading (bottom) edge of the fountain is higher than 27 inches above the floor, does the front of the fountain protrude no more than 4 inches into the circulation path?	☐Yes ☐No Measurement:		Photo #:	• Adjust drinking fountain • Replace drinking fountain • Add tactile warning such as permanent planter or partial walls
Public Telephones (*2010 Standards – 704)* **TTY's are devices that employ interactive text-based communication through the transmission of coded signals across the telephone network. They are mainly used by people who are deaf and/or cannot speak.**					
4.10	Does at least one telephone have a clear floor space at least 30 inches wide x at least 48 inches long for a parallel or forward approach?	☐Yes ☐No		Photo #:	• Move telephone • Install new telephone for clear floor space •

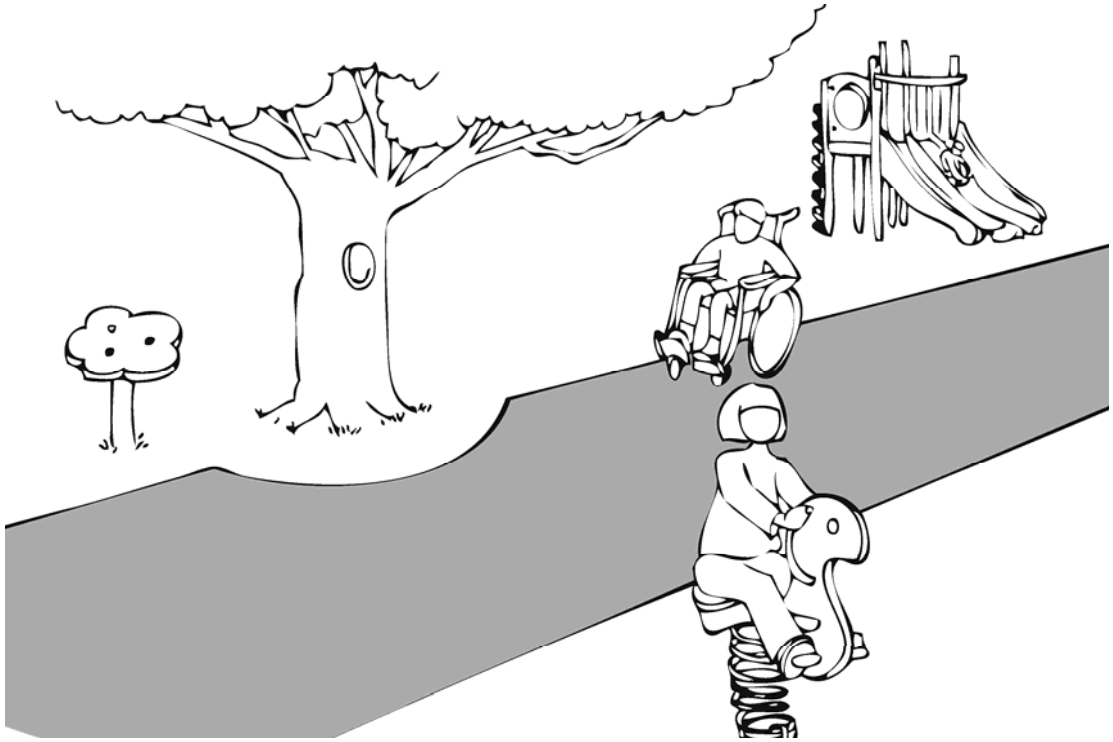
4.11	Is the highest operable part of the telephone no higher than 48 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• Adjust telephone • •
4.12	If the leading (bottom) edge of the telephone is higher than 27 inches above the floor, does the front of the telephone protrude no more than 4 inches into the circulation path?	☐Yes ☐No Measurement:		Photo #:	• Adjust telephone • •
4.13	Does at least one telephone have a volume control?	☐Yes ☐No		Photo #:	• Install volume control • Replace telephone with one that has volume control •
4.14	Is the volume control identified by a pictogram of a telephone handset with radiating sound waves?	☐Yes ☐No		Photo #:	• Add pictogram • •

4.15	Does at least one telephone have a TTY?	☐Yes ☐No		Photo #:	• Install TTY • •
4.16	Is the touch surface of the TTY keypad at least 34 inches above the floor?	☐Yes ☐No Measurement:		Photo #:	• If a seat is provided, TTY is not required to be 34 inches minimum above the floor • Adjust height of TTY •
4.17	Is the TTY identified by the International Symbol of TTY?	☐Yes ☐No		Photo #:	• Add symbol • •
4.18	Do signs that provide direction to public telephones also provide direction to the TTY?	☐Yes ☐No		Photo #:	• Add signs • •

4.19	Do telephones that do not have a TTY provide direction to the TTY?	☐Yes ☐No		Photo #:	• Add signs • •
Fire Alarm Systems *(2010 Standards – 702)*					
4.20	If there are fire alarm systems, do they have both flashing lights and audible signals?	☐Yes ☐No		Photo #:	• Install audible and visual alarms • •
		☐Yes ☐No		Photo #:	• • •
		☐Yes ☐No		Photo #:	• • •
		☐Yes ☐No		Photo #:	• • •

ADA Checklist for Readily Achievable Barrier Removal

Play Areas



Project

Building

Location

Date

Surveyors

Contact Information

Play areas should be accessible to everyone, including people with disabilities.

Institute for Human Centered Design
www.HumanCenteredDesign.org
April 2012

ADA National Network
Questions on the ADA 800-949-4232 voice/tty
www.ADAchecklist.org

This checklist was produced by the New England ADA Center, a project of the Institute for Human Centered Design and a member of the ADA National Network. This checklist was developed under a grant from the Department of Education, NIDRR grant number H133A060092-09A. However the contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

Questions or comments on the checklist contact the New England ADA Center at 617-695-0085 voice/tty or ADAinfo@NewEnglandADA.org

For the full set of checklists, including the checklists for recreation facilities visit www.ADAchecklist.org.

Play Areas				Comments	Possible Solutions
Play Areas *(2010 Standards – 206, 240 & 1008)* **Note: Play areas for children under age 2 and play areas in family child care facilities where the proprietor resides do not have to comply.**					
P1	Is there an accessible route to the entrance of the play area? If there are separate play areas within a site for specific age groups, is there an accessible route to each play area? Is there an accessible route within the play area connecting ground level play components that are on an accessible route and elevated play components that are on an accessible route including the entry and exit points of those components? Use the checklist for *Priority 1: Approach & Entrance*	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No		Photo #:	• • •
P2	<u>Ground Level Play Components</u> Is there an accessible route to at least one of each type of ground level play component? Notes: 1. A play component is an element designed to generate play, socialization and learning. In the 2010 Standards ramps, transfer systems, steps, decks and roofs are not considered play components.	☐ Yes ☐ No			• • •

	2. Ground level play components are components that can be approached and exited at ground level. Examples include rockers, swings, diggers, and stand-alone slides. When distinguishing between types of components consider the experience provided. Examples include rocking, swinging, climbing, digging, spinning and sliding.			Photo #:	
P3	If there are elevated play components, is there an accessible route to at least the following number and type of ground level play components? See chart below. Notes: 1. The intent is to provide a variety of experiences for children who want to remain in their wheelchair or with another mobility device and who choose not to transfer to elevated components. 2. If a play area includes two or more composite structures for the same age group, use the total number of elevated components to determine the additional number and types of	☐ Yes ☐ No			• • •

	ground level play components to provide on an accessible route. 3. If ramps provide access to at least 50 percent of the elevated components and the ramped route goes to at least three different elevated play types, the ground level components in the chart are not required. 4. The number of ground level components determined by "one of each type" can fulfill the minimum ground level requirements in the table.			Photo #:	

Number of Elevated Play Components Provided	Minimum Number of Ground Level Play Components Required to be on an Accessible Route	Minimum Number of Different Types of Ground Level Play Components Required to be on an Accessible Route
1	n/a	n/a
2 to 4	1	1
5 to 7	2	2
8 to 10	3	3
11 to 13	4	3
14 to 16	5	3
17 to 19	6	3
20 to 22	7	4
23 to 25	8	4
26 and over	8, plus 1 for each additional 3, or fraction thereof, over 25	5

P4	If two or more ground level play components are on an accessible route are they dispersed throughout the play area and integrated with other	☐ Yes ☐ No			•

	play components?			Photo #:	
P5	If there is a soft contained play structure with three or fewer entry point, is there an accessible route to at least one entry point? It there are four or more entry points, are there accessible routes to at least two entry points? Notes: 1. A soft contained play area is a play structure made of one or more components on which a person enters a fully enclosed play environment that uses pliable materials such as plastic, soft padding and fabric.	☐ Yes ☐ No ☐ Yes ☐ No		Photo #:	• • •
P6	<u>Accessible Route Connecting Ground Level Play Components</u> Use the checklist for *Priority 1: Approach & Entrance* with the following exceptions and requirements. Note: If there is a water play component and the accessible route is submerged, it is not required to be slip resistant, the running slope may be steeper than 1:12 and the cross slope may be steeper than 1:48.			Photo #:	• • •

P7	Is the vertical clearance of the accessible route at least 80 inches above the ground surface? Note: Objects below 80 inches may not protrude into the accessible route.	☐ Yes ☐ No Measurement:		Photo #:	• • •
P8	If the play area is less than 1000 square feet: Is the route at least 44 inches wide? If the route exceeds 30 feet in length is a wheelchair turning space provided, i.e. a circle at least 60 inches in diameter or a T-shaped space within a 60-inch square?	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:		Photo #:	• • •
P9	If the play area is 1000 square feet or greater is the route at least: 60 inches wide or 36 inches wide for a distance no greater than 60 inches if reduced segments are separated by segments at least 60 wide and at least 60 inches long? Note: This permits flexibility around site features such as trees and equipment.	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:		Photo #:	• • •

P10	Is the route no steeper than 1:16, i.e. for every inch of height change there are at least 16 inches of run?	☐ Yes ☐ No Measurement:		Photo #:	•
P11	If the route is steeper than 1:20 and the rise for a ramp run is higher than 6 inches are there handrails on both sides of the ramp run? Notes: 1. Handrail extensions are not required. 2. Handrails are not required on ramps within ground level use zones. The use zone is the area beneath and adjacent to a play structure upon which a user would land when falling from or exiting a play structure.	☐ Yes ☐ No		Photo #:	•
P12	Is the top of the handrail gripping surface no less than 20 inches and no greater than 28 inches above the ramp surface?	☐ Yes ☐ No Measurement:		Photo #:	•
P13	Is the handrail gripping surface: Circular with an outside diameter of at least .95 inch and no more than 1.55 inches? or Non-circular providing an equivalent gripping surface?	☐ Yes ☐ No Measurement:		Photo #:	•

P14	Elevated Play Components Is there an accessible route to entry and exit points of at least 50 percent of elevated components? Note: An elevated play component is a component approached above or below grade that is part of a structure of two or more play components providing more than one play activity.	☐ Yes ☐ No Measurement:		Photo #:	• • •
P15	If there are 20 or more elevated play components are at least 25% connected by ramps? Are the other 25% that are required to be on an accessible route connected by either ramps or transfer systems?	☐ Yes ☐ No ☐ Yes ☐ No		Photo #:	• • •
P16	If there are fewer than 20 elevated play components are at least 50% connected by either ramps or transfer systems. Note: Ramps are preferred but are not required.	☐ Yes ☐ No		Photo #:	• • •
P17	Elevated Play Components Accessible Route Use the checklist for *Priority 1: Approach & Entrance* and the following exceptions and				• • •

	requirements. Is the accessible route connecting elevated play components: At least 36 inches wide? or At least 32 inches wide for a distance no greater than 24 inches if the reduced width segments are separated by segments at least 48 inches long and at least 36 inches wide? or If part of a transfer system, at least 24 inches wide?	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:		Photo #:	
P18	If there is a ramp are there handrails on both sides? Note: Handrail extensions are not required.	☐ Yes ☐ No		Photo #:	• • •
P19	Is the top of the handrail gripping surface no less than 20 inches and no greater than 28 inches above the ramp surface?	☐ Yes ☐ No Measurement:		Photo #:	• • •

P20	If the handrail gripping surface is: Circular, is the outside diameter no less than .94 inch and no greater than 1.55 inch? Non-circular, is it equivalent to a circular gripping surface with a diameter no less than .94 inch and no greater than 1.55 inch?	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:		Photo #:	• • •
P21	Is the rise for any ramp run connecting elevated play components no greater than 12 inches?	☐ Yes ☐ No Measurement:		Photo #:	• • •
P22	If a transfer system is provided is the transfer system at least 24 inches wide?	☐ Yes ☐ No Measurement:		Photo #:	• • •
P23	Is the top of the transfer platform no less than 11 inches and no greater than 18 inches from the ground?	☐ Yes ☐ No Measurement:		Photo #:	• • •
P24	Is the transfer platform at least 14 inches deep by at least 24 inches wide?	☐ Yes ☐ No Measurement:		Photo #:	• • •

P25	Is there a clear transfer space at least 30 inches wide by at least 48 inches long adjacent to the platform, with the longer dimension centered on and parallel to the 24 inch minimum long side of the platform?	☐ Yes ☐ No Measurement:		Photo #:	•
P26	Is the side of the transfer platform adjacent to the clear space unobstructed?	☐ Yes ☐ No		Photo #:	•
P27	If movement is intended from transfer platforms to levels with elevated play components that are required to be on an accessible route, are transfer steps provided?	☐ Yes ☐ No		Photo #:	•
P28	Are the transfer steps: At least 14 inches deep? At least 24 inches wide? No higher than 8 inches?	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:		Photo #:	•

P29	Is there at least one means of support for transferring: On and off the platform? Up and down the transfer steps? Note: Examples of supports include a rope loop, a loop type handle, a slot in the edge of a flat horizontal or vertical member, poles or bars, or D rings on the corner posts.	☐ Yes ☐ No ☐ Yes ☐ No		Photo #:	• • •
P30	<u>Play Components</u> Is there at least one clear space for a person in a wheelchair to turn around, i.e. a circle at least 60 inches in diameter or a T-shaped space within a 60-inch square, at: Ground level play components on an accessible route? Elevated play components connected by ramps? Note: The turning space is not required at elevated play components connected only by transfer system.	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:		Photo #:	• • •

P31	If there are swings, is there clear space for a person in a wheelchair to turn around, i.e. a circle at least 60 inches in diameter or a T-shaped space within a 60-inch square, immediately adjacent to at least one swing?	☐ Yes ☐ No		Photo #:	• • •
P32	Is there a clear ground/floor space at least 30 inches wide and 48 inches long at: Each ground level play component required to be on an accessible route? Each elevated play component required to be on an accessible route that is connected by ramps? Notes: 1. The clear ground space is not required at elevated play components connected only by transfer system. 2. Clear ground spaces 30 inches min by 48 inches min, 60 inch min turning spaces and accessible routes may overlap.	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:		Photo #:	• • •

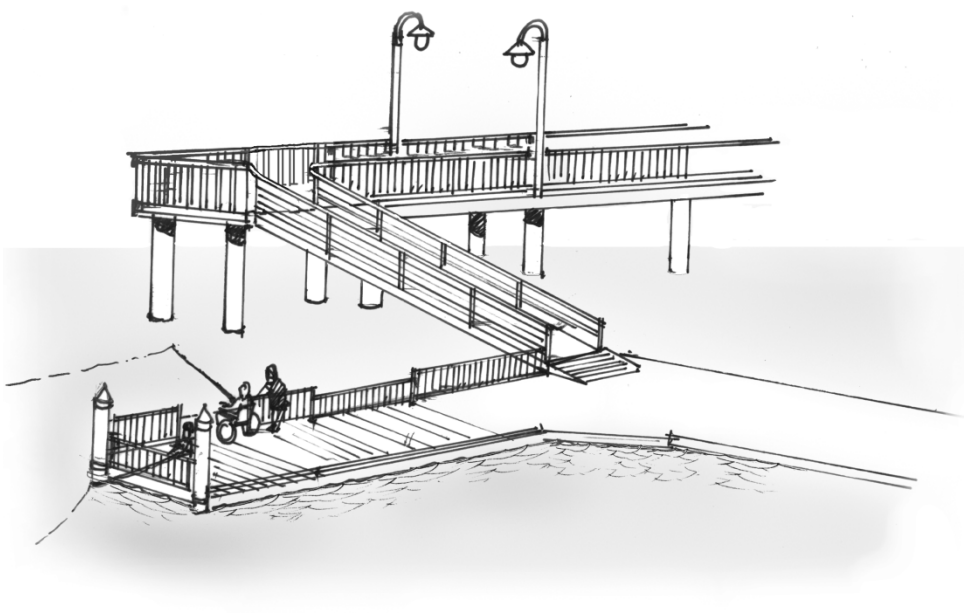
P33	If there is a play table for children older than 5 years: Are the tops of rims, curbs, or other obstructions no greater than 31 inches above the ground? Is there clear ground space at least 30 inches wide by at least 48 inches long for a forward approach? Is there clear knee space underneath: At least 17 inches high? Does it extend at least 17 inches deep? Is it least 30 inches wide?	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:		Photo #:	• • •
P34	If there is a play table for children 5 years or younger: Does it provide knee space as noted above? or Is there clear ground space at least 30 inches wide by at least 48 inches long for a parallel approach?	☐ Yes ☐ No ☐ Yes ☐ No Measurement:		Photo #:	• • •

P35	If a play component on an accessible route requires transfer to entry points or seats: Is the entry point or seat no less than 11 inches and no greater than 24 inches from the clear floor/ground space? Is there at least one means of transfer support? Note: Examples of supports include a rope loop, a loop type handle, a slot in the edge of a flat horizontal or vertical member, poles or bars, or D rings on the corner posts.	☐ Yes ☐ No Measurement: ☐ Yes ☐ No		Photo #:	• • •
P36	<u>Ground Surfaces</u> Do ground surfaces inside the play area (on accessible routes, clear ground spaces, and turning spaces) comply with *ASTM F 1951-99 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment*? Notes: 1. ASTM is the American Society for Testing and Materials. 2 A portable device - the Rotational Penetrometer -	☐ Yes ☐ No			• • •

	measures surface firmness and stability.			Photo #:	
P37	Do the ground surfaces within use zones (the ground level area beneath and immediately adjacent to a play structure or play equipment that is designated for unrestricted circulation around the play equipment and where it is predicted that a user would land when falling from or exiting the play equipment) comply with *ASTM F 1292-04 Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment*?	☐ Yes ☐ No		Photo #:	• • •
		☐ Yes ☐ No		Photo #:	• • •
		☐ Yes ☐ No		Photo #:	• • •

ADA Checklist for Readily Achievable Barrier Removal

Fishing Piers & Platforms



Project

Building

Location

Date

Surveyors

Contact Information

Public fishing piers and platforms should be accessible to everyone, including people with disabilities.

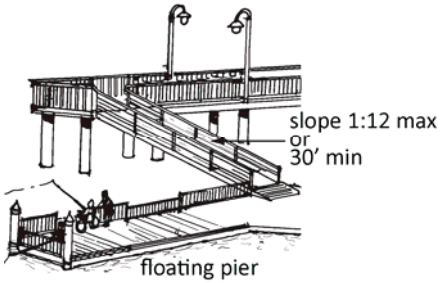
Institute for Human Centered Design
www.HumanCenteredDesign.org
November 2011

ADA National Network
Questions on the ADA 800-949-4232 voice/tty
www.ADAchecklist.org

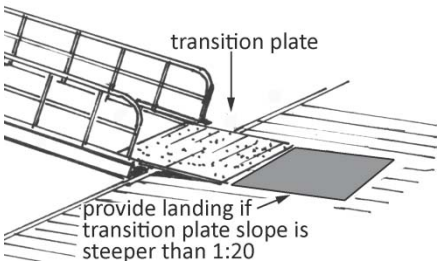
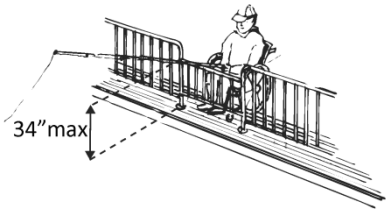
This checklist was produced by the New England ADA Center, a project of the Institute for Human Centered Design and a member of the ADA National Network. This checklist was developed under a grant from the Department of Education, NIDRR grant number H133A060092-09A. However the contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

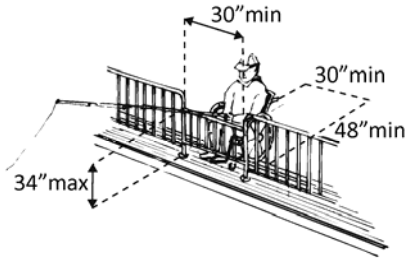
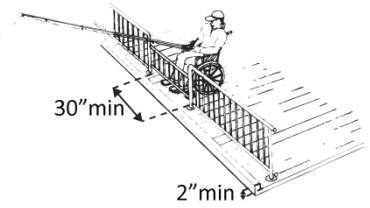
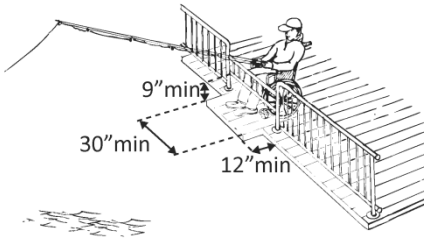
Questions or comments on the checklist contact the New England ADA Center at 617-695-0085 voice/tty or ADAinfo@NewEnglandADA.org

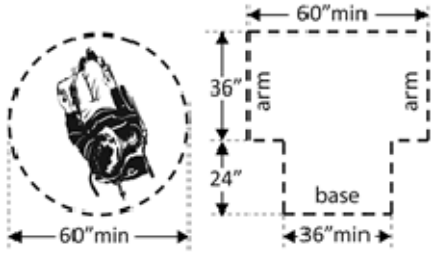
For the full set of checklists, including the checklists for recreation facilities visit www.ADAchecklist.org.

Fishing Piers & Platforms				Comments	Possible Solutions
Fishing Piers & Platforms *(2010 Standards – 206, 237 & 1005)*					
F1	Is there an accessible route to the entrance of the fishing pier or platform? Use the checklist for *Priority 1: Approach & Entrance* .	☐Yes ☐No		Photo #:	•Add a ramp •Regrade to 1:20 maximum slope •Widen route •Change route surface •Add a platform lift, limited use/ limited application elevator or a regular elevator
F2	Is there an accessible route to the fishing area? To deal with varying water levels, exceptions apply when gangways are part of the accessible route. A gangway is a variable-sloped pedestrian walkway that links a fixed structure or land with a floating structure. Exceptions: 1. The gangway rise may be greater than 30 inches. Therefore gangways may be any length and no intermediate landings are required. 2. Where the total length of the gangway or series of gangways is 30 feet minimum, the gangway may be steeper than 1:12.	☐Yes ☐No			•Add a ramp •Regrade to 1:20 maximum slope •Lengthen gangway •Widen route •Change route surface •Add a platform lift, limited use/ limited application elevator or a regular elevator

3. Where the gangway connects to transition plates, ramp landings are not required. 4. Where the gangway and transition plates connect, handrail extensions are not required. 5. Where handrail extensions are provided on the gangway or transition plates, the handrail extensions are not required to be parallel with the ground surface. 6. Changes in level ¼ to ½ inch high, beveled with a slope no steeper than 1:20 are permitted on the surface of the gangway. Note: When gangways, transition plates and floating piers and platforms are part of an accessible route, the cross slope requirement of 1:48 maximum is measured when they are in the static position, i.e. absence of movement that results from waves and wind.			Photo #:	

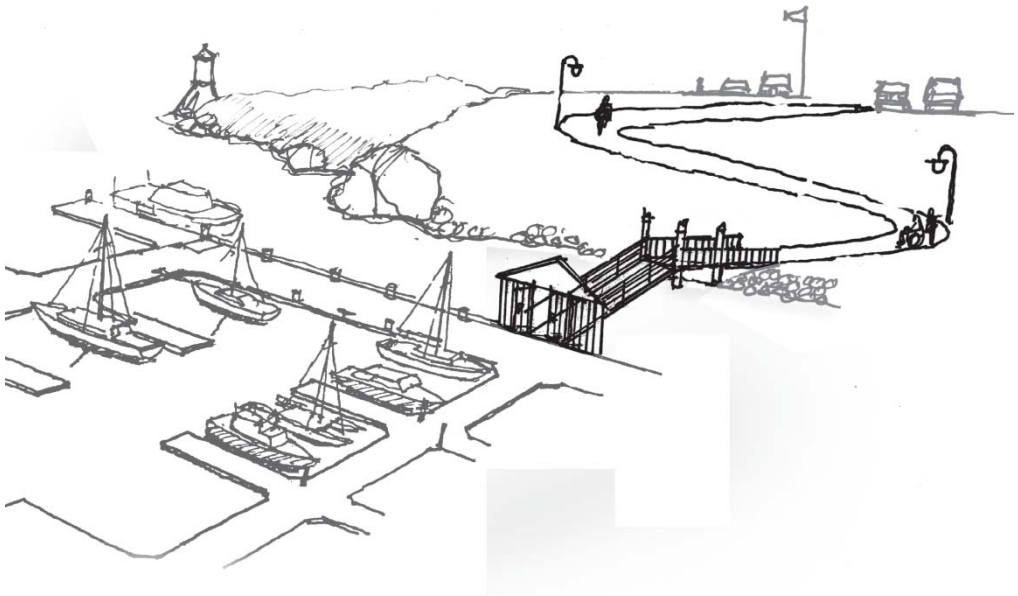
F3	If a transition plate is steeper than 1:20 is a there a landing at the end of the transition plate?	☐Yes ☐No	 Photo #:	• Add landing • •
F4	If there are railings, guards or handrails at the fishing area, are at least 25 percent no more than 34 inches above the ground or deck? Note: Guards may be higher than 34 inches if the higher portion is no less than 42 inches high and balusters or ornamental patterns do not allow a 4-inch diameter sphere to pass through up to a height of 34 inches and do not allow an 8-inch diameter sphere to pass through between 34 inches and 42 inches above the ground. This allows for increased safety at specific locations and compliance with certain building codes.	☐Yes ☐No Number: Measurement:	 Photo #:	• Change railing, guard, and/or handrail height • •
F5	Are the 34-inch maximum high railings, guards or handrails dispersed throughout the fishing pier or platform?	☐Yes ☐No Measurement:	Photo #:	• Relocate railings, guards, and/or handrails • •

F6	Is there a clear floor space at least 30 inches wide by at least 48 inches long at the 34-inch maximum high railing?	☐Yes ☐No Measurement:		Photo #:	• Add clear floor space • •
F7	At the 34-inch maximum high railings, guards or handrails: Is there a curb or barrier extending 2 inches minimum above the surface of the pier or platform? Or Does the ground or deck extend at least 12 inches beyond the inside face of the railing at a clear width of at least 30 inches and clear height of at least 9 inches?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:	 Or 	Photo #:	• Add curb or barrier • Extend ground or deck • Relocate railings, guards, and or handrails • •
F8	If there are no railings, guards or handrails, is there a clear floor space at least 30 inches wide by at least 48 inches long on the pier or platform?	☐Yes ☐No Measurement:		Photo #:	• Add clear floor space • •

F9	Is there a clear floor space for a person in wheelchair to turn around, i.e. a circle at least 60 inches in diameter or a T-shaped space within a 60-inch square, on the fishing pier or platform?	☐Yes ☐No Measurement:		Photo #:	• Add space • Move or remove fixtures or objects • Reconfigure space • •
		☐Yes ☐No		Photo #:	• • •
		☐Yes ☐No		Photo #:	• • •
		☐Yes ☐No		Photo #:	• • •
		☐Yes ☐No		Photo #:	• • •
		☐Yes ☐No		Photo #:	• • •

ADA Checklist for Readily Achievable Barrier Removal

Recreational Boating Facilities



Project _____

Building _____

Location _____

Date _____

Surveyors _____

_____

Contact Information _____

_____

Recreational boating facilities should be accessible to everyone, including people with disabilities.

Institute for Human Centered Design
www.HumanCenteredDesign.org
November 2011

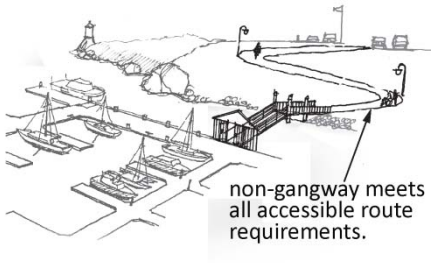
ADA National Network
Questions on the ADA 800-949-4232 voice/tty
www.ADAchecklist.org

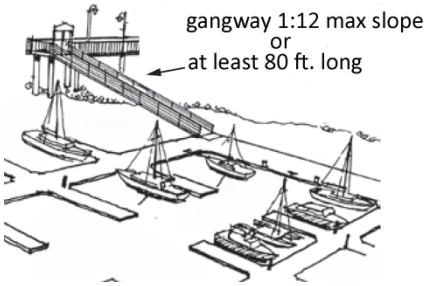
This checklist was produced by the New England ADA Center, a project of the Institute for Human Centered Design and a member of the ADA National Network. This checklist was developed under a grant from the Department of Education, NIDRR grant number H133A060092-09A. However the contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

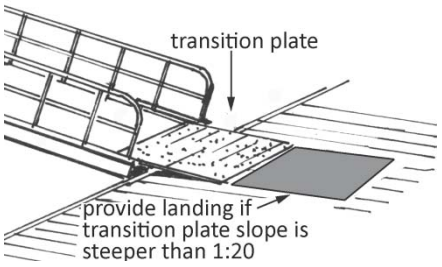
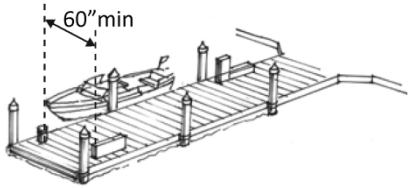
Questions or comments on the checklist contact the New England ADA Center at 617-695-0085 voice/tty or ADAinfo@NewEnglandADA.org

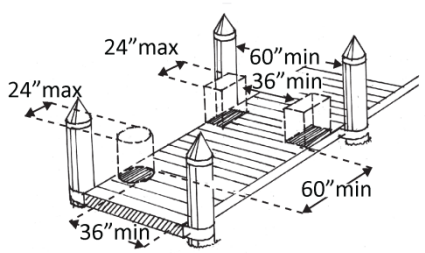
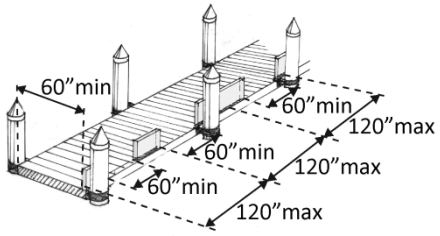
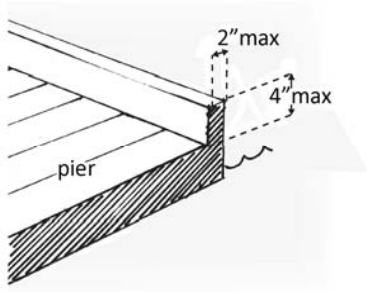
For the full set of checklists, including the checklists for recreation facilities visit www.ADAchecklist.org.

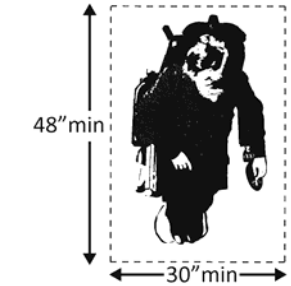
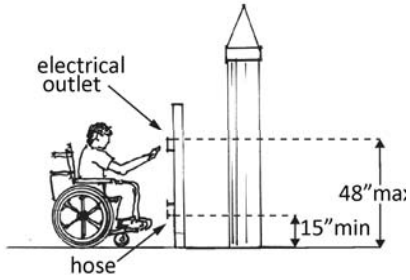
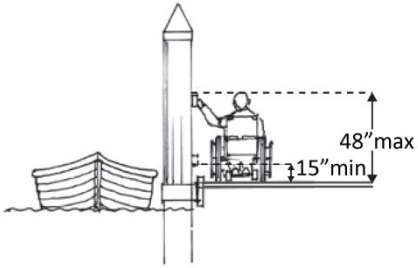
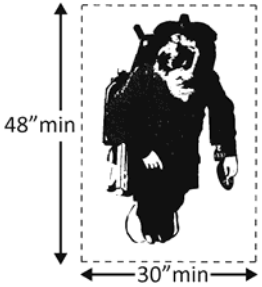
Recreational Boating Facilities				Comments	Possible Solutions
Boating Facilities (Recreational) *(2010 Standards – 206, 235 & 1003)*					
B1	Is there an accessible route to the entrance of the boating facility? Use the checklist for *Priority 1: Approach & Entrance.*	☐ Yes ☐ No		Photo #:	• Add a ramp • Regrade to 1:20 maximum slope • Widen route • Change route surface • Add a platform lift, limited use/limited application elevator or a regular elevator
B2	BOAT SLIPS Where boat slips are provided are there an adequate number of accessible slips? Note: If slips are not demarcated by length, count each 40 feet of slip edge along the pier perimeter as one slip. A boat slip is the portion of a pier, main pier, finger pier or float where a boat is berthed or moored or used for embarking or disembarking that is not part of a boat launch ramp. A boat launch ramp is a sloped surface designed for launching and retrieving trailered boats and other watercraft to and from a body of water.	☐ Yes ☐ No Total slips: Accessible slips:	**Total Slips** / **Accessible Slips** 1 - 25 / 1 26 - 50 / 2 51 - 100 / 3 101 - 150 / 4 151 - 300 / 5 301 - 400 / 6 401 - 500 / 7 501 - 600 / 8 601 - 700 / 9 701 - 800 / 10 801 - 900 / 11 901 - 100 / 12 1001 and over / 12 plus 1 for each 100 or fraction	Photo #:	• Create accessible slips • •

B3	Are the accessible boat slips dispersed among the different types of boat slips? Note: Accessible boat slips must be dispersed throughout the various types of slips, but a facility does not have to provide more accessible boat slips than required in the table. Accessible slips may be grouped on one pier if the requirement for different types of slips is met. Types could include shallow-water or deep water; transient or longer-term lease; covered or uncovered; and whether slips are equipped with features such as telephone, water, electricity, or cable connections.	☐ Yes ☐ No		Photo #:	• Relocate accessible slips • •
B4	Is there an accessible route to the accessible boat slips? Use the checklist for *Priority 1: Approach and Entrance* To deal with varying water levels, exceptions apply when gangways are part of the accessible route. A gangway is a variable-sloped pedestrian walkway that links a fixed structure or land with a floating structure.	☐ Yes ☐ No			• Add a ramp • Regrade to 1:20 maximum slope • Widen route • Change route surface • Add a platform lift, limited use/limited application elevator or a regular elevator

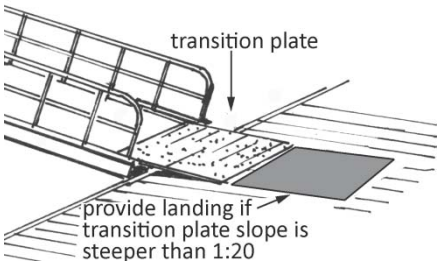
Exceptions: 1. Gangway rises may be greater than 30 inches. Therefore gangways may be any length and no intermediate landings are required. 2. Gangway slopes may be greater than 1:12 if the total length of a gangway or series of gangways serving as part of the accessible route is at least 80 feet. 3. Gangway slopes may be greater than 1:12 if the facility contains fewer than 25 boat slips and the total length of the gangway or series of gangway serving as part of the accessible route is at least 30 feet. 4. Level landings are not required where gangways connect to transition plates. A transition plate is a sloped pedestrian surface at the end of a gangway. 5. Where gangways and transition plates connect, handrail extensions are not required. 6. If there are handrail extensions on gangways or transition plates, the extensions				

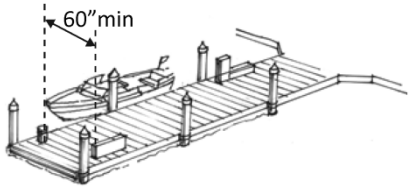
	are not required to be parallel with the ground surface. 7. Changes in level ¼ to ½ inch high, beveled with a slope no steeper than 1:20 are permitted on gangway surfaces. Note: When gangways, transition plates and floating piers and platforms are part of an accessible route, the cross slope requirement of 1:48 maximum is measured when they are in the static position, i.e. absence of movement that results from waves and wind.			Photo #:	
B5	If there are transition plates is the slope of transition plates no greater than 1:20? If the slope is greater than 1:20 is a there a landing at the end of the transition plate?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Regrade to 1:20 maximum slope • •
B6	Is there clear pier space at the accessible boat slips that is: At least as long as the slip by at least 60 inches wide? Or At least 36 inches wide for a	☐Yes ☐No Measurement: ☐Yes ☐No			• Add clear space • Reconfigure clear space •

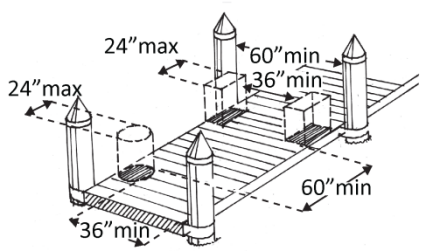
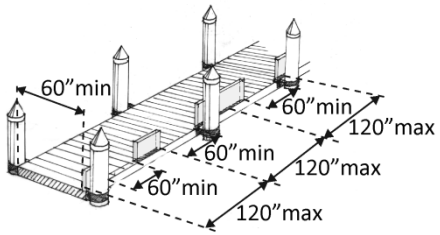
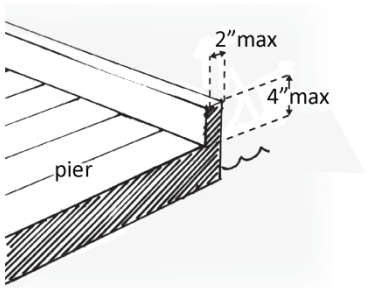
	length no greater than 24 inches, if multiple 36 inch wide segments are separated by segments that are at least 60 inches wide and at least 60 inches long? Note: Clear pier space may be perpendicular to the boat slip if the space extends the width of the slip and the facility has at least one accessible boat slip parallel to the pier.	Measurement:	Or  	Photo #:	
B7	For every 120 inches (10 feet) of linear pier edge serving the slips, is there a continuous clear opening at least 60 inches wide? If there is edge protection at the clear opening, is it no higher than 4 inches and no wider than 2 inches?	☐Yes ☐No Measurement: ☐Yes ☐No Measurement:	  	Photo #:	• Add clear openings • Relocate clear openings • Change edge protection • •

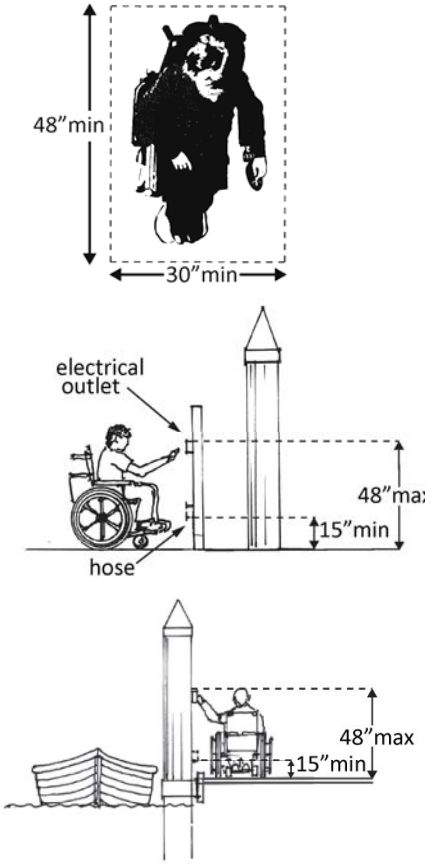
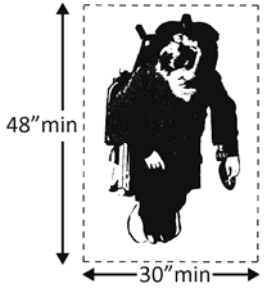
B8	If there are controls and operating mechanisms, such as hose bibbs, water supply hoses, outlets for electrical power, telephones, or cable TV: Are they on an accessible route? Is there a clear floor space next to each that is at least 30 inches by at least 48 inches? Are operable parts no higher than 48 inches and no lower than 15 inches above the surface?*	☐Yes ☐No ☐Yes ☐No Measurement: ☐Yes ☐No Measurement:	  	Photo #:	• Relocate controls and/or operating mechanisms • Relocate route • Add clear floor space • Change height of controls and/or operating mechanisms • • *If constructed before 3/15/2012 and a side reach is provided operable parts may be no higher than 54 inches and no lower than 9 inches above the surface.
B9	If there are cleats or other securement devices serving the accessible boat slips: Are they on an accessible route? Is there a clear floor space next to each that is at least 30 inches by at least 48 inches? Note: Cleats and other boat	☐Yes ☐No ☐Yes ☐No Measurement:			• Relocate securement devices • Add clear floor space • •

	securement devices at accessible slips can be any height; they do not have to comply with reach range requirements.			Photo #:	
B10	<u>BOARDING PIERS AT BOAT LAUNCH RAMPS</u> Where boarding piers are provided at boat launch ramps, are at least 5 percent, but no fewer than one, accessible? Note: A boarding pier (sometimes called a courtesy pier or a launch dock) is where a boat is temporarily moored for embarking and disembarking. A boat launch ramp is a sloped surface for launching and retrieving trailered boats to and from the water. For boarding piers that are not part of a boat launch ramp, use the boat slips section.	☐Yes ☐No Number:		Photo #:	• Create accessible boarding piers • •
B11	Is there an accessible route to and connecting the accessible boarding piers? Use the checklist for *Priority 1: Approach & Entrance.* To deal with varying water levels, exceptions apply when	☐Yes ☐No			• Add a ramp • Regrade to 1:20 maximum slope • Lengthen gangway • Widen route • Change route surface • Add a platform lift, limited use/ limited application elevator or a

an accessible route connects to floating piers. Exceptions: 1. Where the accessible route serving a floating boarding pier or skid pier is within a boat launch ramp, that portion does not have to comply with ramp requirements. 2. Gangway rises may be greater than 30 inches. Therefore gangways may be any length and no intermediate landings are required. A gangway is a variable-sloped pedestrian walkway that links a fixed structure or land with a floating structure. 3. Gangway slopes may be greater than 1:12 if the total length of a gangway or series of gangways serving as part of the accessible route is at least 30 feet. 4. Landings are not required where gangways connect to transition plates. A transition plate is a sloped pedestrian surface at the end of a gangway. 5. Where gangways and				regular elevator

	transition plates connect, handrail extensions are not required. 6. If there are handrail extensions on gangways or transition plates, the extensions are not required to be parallel with the ground surface. 7. Changes in level ¼ to ½ inch high, beveled with a slope no steeper than 1:20 are permitted on gangway surfaces. Note: When gangways, transition plates and floating piers and platforms are part of an accessible route, the cross slope requirement of 1:48 maximum is measured when they are in the static position, i.e. absence of movement that results from waves and wind.			Photo #:	
B12	Is there clear pier space at the boarding pier that is the full length of the boarding pier and: At least 60 inches wide? Or At least 36 inches wide for a length of no greater than 24	☐ Yes ☐ No Measurement: ☐ Yes ☐ No	 Or		• Add clear space • Reconfigure clear space •

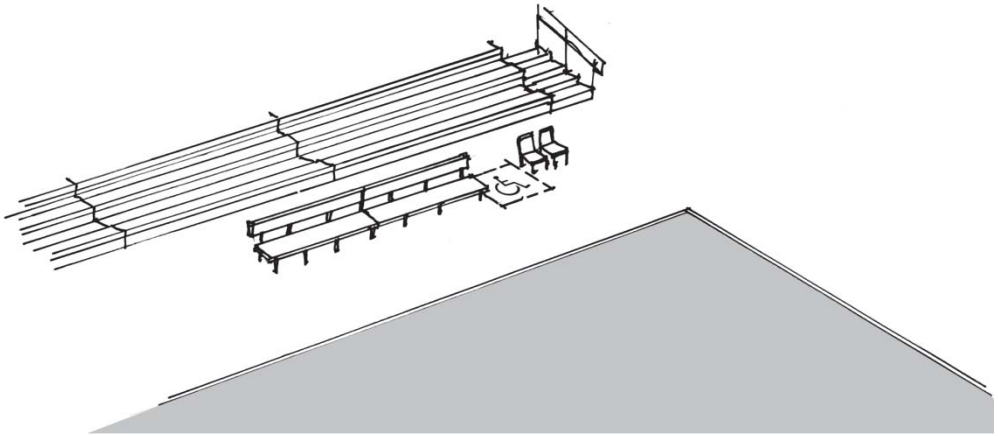
	inches if there are multiple 36-inch-wide segments that are separated by segments measuring at least 60 inches wide and at least 60 inches long? Note: There is no minimum length of the pier. The accessible boarding pier should be at least as long as other piers provided at the facility.	Measurement:		Photo #:	
B13	For every 120 inches (10 feet) of linear pier edge, is there a continuous clear opening at least 60 inches wide? If there is edge protection at the clear opening, is it no higher than 4 inches and no wider than 2 inches?	☐ Yes ☐ No Measurement: ☐ Yes ☐ No Measurement:	 	Photo #:	• Add clear openings • Relocate clear openings • Change edge protection • •

B14	If there are controls and operating mechanisms, such as hose bibbs, water supply hoses, outlets for electrical power: Are they on an accessible route? Is there a clear floor space next to each that is 30 inches by 48 inches minimum? Are operable parts no higher than 48 inches and no lower than 15 inches above the surface?*	☐Yes ☐No ☐Yes ☐No Measurement: ☐Yes ☐No Measurement:		Photo #:	• Relocate controls and/or operating mechanisms • Relocate route • Add clear floor space • Change height of controls and/or operating mechanisms • • *If constructed before 3/15/2012 and a side reach is provided operable parts may be no higher than 54 inches and no lower than 9 inches above the surface.
B15	If there are cleats or other securement devices serving boarding piers at boat launch ramps: Are they on an accessible route? Is there a clear floor space next to each that is at least 30 inches by at least 48 inches?	☐Yes ☐No ☐Yes ☐No Measurement:			• Relocate securement devices • Add clear floor space • •

Note: Cleats and other boat securement devices at boarding piers at boat launch ramps can be any height; they do not have to comply with reach range requirements.			Photo #:	
	☐Yes ☐No		Photo #:	• • •
	☐Yes ☐No		Photo #:	• • •
	☐Yes ☐No		Photo #:	• • •
	☐Yes ☐No		Photo #:	• • •
	☐Yes ☐No		Photo #:	• • •

ADA Checklist for Readily Achievable Barrier Removal

Sports Activities, Team or Player Seating, Exercise Machines & Equipment, Bowling Lanes, Saunas & Steam Rooms and Shooting Facilities



Project

Building

Location

Date

Surveyors

Contact Information

Institute for Human Centered Design
www.HumanCenteredDesign.org
November 2011

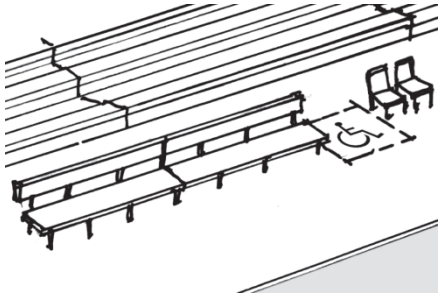
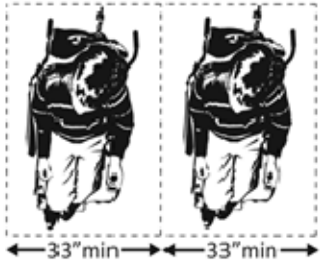
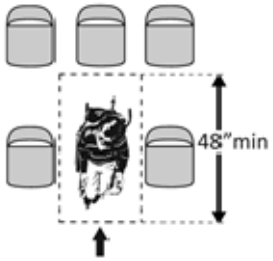
ADA National Network
Questions on the ADA 800-949-4232 voice/tty
www.ADAchecklist.org

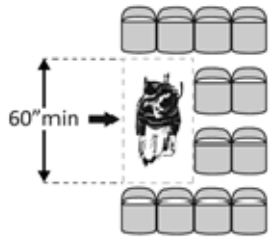
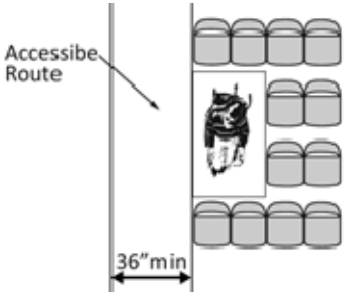
This checklist was produced by the New England ADA Center, a project of the Institute for Human Centered Design and a member of the ADA National Network. This checklist was developed under a grant from the Department of Education, NIDRR grant number H133A060092-09A. However the contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

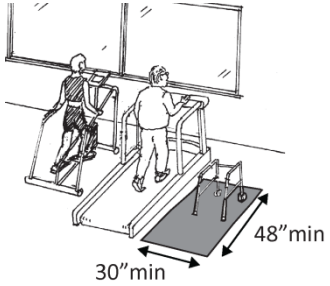
Questions or comments on the checklist contact the New England ADA Center at 617-695-0085 voice/tty or ADAinfo@NewEnglandADA.org

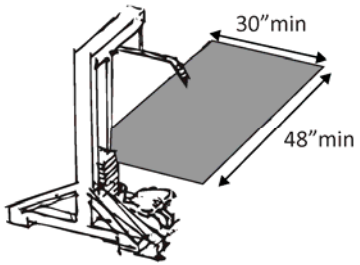
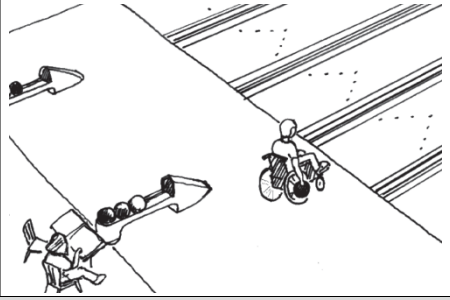
For the full set of checklists, including the checklists for recreation facilities visit www.ADAchecklist.org.

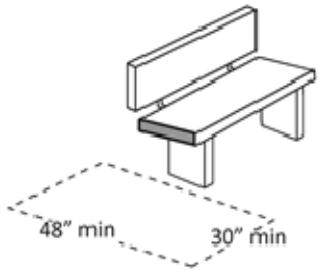
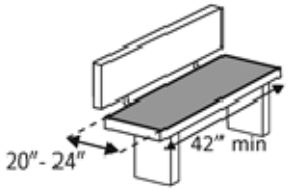
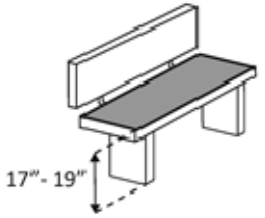
Misc. Recreation				Comments	Possible Solutions
Sports Activities *(2010 Standards – 206 & Ch. 4)* **Soccer fields, basketball courts, tennis courts, baseball fields, running tracks, skating rinks, etc.**					
S1	Is there an accessible route to each type of sport activity? For exterior routes use the checklist for *Priority 1: Approach & Entrance*. For interior routes use the checklist for *Priority 2: Access to Goods & Services.*	☐ Yes ☐ No		Photo #:	• Add a ramp • Regrade to 1:20 maximum slope • Widen route • Change route surface • Add a platform lift, limited use/ limited application elevator or a regular elevator
S2	At court sports (tennis, basketball, volleyball, etc.) does at least one accessible route connect both sides of the court? Note: This is particularly important in sports such as tennis, where changing sides is part of the game.	☐ Yes ☐ No		Photo #:	• Add a ramp • Regrade to 1:20 maximum slope • Widen route • Change route surface
Team or Player Seating *(2010 Standards – 206, 221 & 802)* **Baseball, hockey, basketball, football, etc.**					
T1	At areas of sport activity, is there an accessible route to each side of team or player seating? For exterior routes use the checklist for *Priority 1: Approach & Entrance*. For interior routes use the checklist for *Priority 2: Access to*	☐ Yes ☐ No			• Add a ramp • Regrade to 1:20 maximum slope • Widen route • Change route surface • Add a platform lift

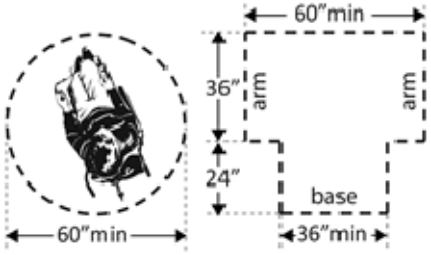
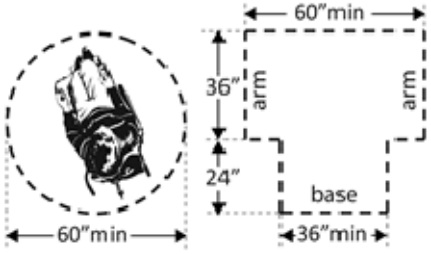
	Goods & Services.			Photo #:	
T2	Is there at least one wheelchair space at team or player seating areas?	☐Yes ☐No Measurement:		Photo #:	• Add wheelchair space • •
T3	If there is a single wheelchair space, is it at least 36 inches wide?	☐Yes ☐No Measurement:		Photo #:	• Alter space • •
T4	If there are 2 adjacent wheelchair spaces, are they each at least 33 inches wide?	☐Yes ☐No Measurement:		Photo #:	• Alter spaces • •
T5	If the wheelchair space can be entered from the front or rear, is it at least 48 inches deep?	☐Yes ☐No Measurement:		Photo #:	• Alter space • •

T6	If the wheelchair space can only be entered from the side, is it at least 60 inches deep?	☐Yes ☐No Measurement:		Photo #:	• Alter space • •
T7	Do wheelchair spaces adjoin, but not overlap, accessible routes?	☐Yes ☐No		Photo #:	• Alter spaces • •
T8	Do wheelchair spaces not overlap circulation paths? Note: The term "circulation paths" means aisle width required by applicable building or life safety codes for the specific assembly occupancy. Where the circulation path provided is wider than the required aisle width, the wheelchair space may intrude into that portion of the circulation path that is provided in excess of the required aisle width.	☐Yes ☐No		Photo #:	• Alter spaces • •

Exercise Machines & Equipment *(2010 Standards – 206, 236 & 1004)*					
E1	Is there an accessible route to at least one of each type of exercise machine and equipment? *Use the checklist for Priority 2: Access to Goods & Services* Note: Most strength training equipment and machines are considered different types. For example, a bench press machine is different from a biceps curl machine. Cardiovascular exercise machines, such as stationary bicycles, rowing machines, stair climbers and treadmills, are all different types.	☐Yes ☐No		Photo #:	• Add a ramp • Regrade to 1:20 maximum slope • Widen route • Change route surface • Add a platform lift, limited use/ limited application elevator or a regular elevator
E2	Is there clear floor space at least 30 inches wide by at least 48 inches long positioned for transfer or for use by a person seated in a wheelchair next to at least one of each type of exercise machine and equipment? Notes: 1. To make a shoulder press accessible, the clear floor space should be next to the seat. For a bench press, the clear floor space should be centered on the operating mechanisms.	☐Yes ☐No Measurement:			• Add clear floor space • •

	2. Machines and equipment can share clear floor space. 3. The exercise equipment and machines do not need to comply with the 2010 Standards specifications for controls and operating mechanism.			Photo #:	
Bowling Lanes *(2010 Standards – 206 & Ch.4)*					
B1	Is there an accessible route to at least 5 percent but no less than one of each type of bowling lane? For interior routes use the checklist for *Priority 2: Access to Goods & Services*.	☐Yes ☐No Number:		Photo #:	• Add a ramp • Regrade to 1:20 maximum slope • Widen route • Change route surface • Add a platform lift
Saunas & Steam Rooms *(2010 Standards – 241 & 612)*					
S1	Is there an accessible route to at least one sauna and steam room? If there are separate rooms for men and women, is there an accessible route to at least one for each gender? For interior routes use the checklist for *Priority 2: Access to Goods & Services*.	☐Yes ☐No ☐Yes ☐No		Photo #:	• Add a ramp • Regrade to 1:20 maximum slope • Widen route • Change route surface • Add a platform lift, limited use/ limited application elevator or a regular elevator

S2	If there is seating in the room does at least one bench: Have clear floor space at least 30 wide inches by at least 48 inches long at the end of the bench and parallel to the short axis of the bench? Is the clear space free from the swing of the room door? Is the bench seat: At least 42 inches long? No less than 20 inches and no greater than 24 inches deep? Is the top of the bench seat no less than 17 inches and no greater than 19 inches above the floor or ground? Does the bench have back support or is it affixed to a wall? Does the back extend from a point no more than 2 inches and a point no less than 18 inches above the seat surface?	☐Yes ☐No Measurement: ☐Yes ☐No ☐Yes ☐No Measurement: ☐Yes ☐No Measurement: ☐Yes ☐No Measurement: ☐Yes ☐No Measurement:	  	Photo #:	• Move bench • Replace bench • Affix bench to wall • •

S3	Is there a clear floor space for a person in wheelchair to turn around in the room, i.e. a circle at least 60 inches in diameter or a T-shaped space within a 60-inch square? Note: A readily removable bench is permitted to obstruct the turning space.	☐Yes ☐No Measurement:		Photo #:	• Add space • Move or remove partitions, fixtures or objects •
Shooting Facilities with Firing Positions *(2010 Standards – 243 & 1010)*					
S1	Is there an accessible route to the shooting facility? For exterior routes use the checklist for *Priority: 1 Approach & Entrance*. For interior routes use the checklist for *Priority 2: Access to Goods & Services.*	☐Yes ☐No		Photo #:	• Add a ramp • Regrade to 1:20 maximum slope • Widen route • Change route surface • Add a platform lift, limited use/ limited application elevator or a regular elevator
S2	Is there a clear floor space for a person in wheelchair to turn around, i.e. a circle at least 60 inches in diameter, for at least 1 of each type of firing position?	☐Yes ☐No Measurement:		Photo #:	• Add space • Move or remove partitions, fixtures or objects •