KYTC's 2018 Section Engineers' Meeting

ADA Statement of Technical Infeasibility

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Kentucky Transportation Center

Americans with Disabilities Act

In 1990, Congress passed the **Americans with Disabilities Act (ADA)** which prohibits discrimination on the basis of disability.

Americans with Disabilities Act

"to provide a clear and comprehensive national mandate for the **elimination of discrimination against individuals with disabilities**" and "to provide clear, strong, and consistent, enforceable standards **addressing discrimination against individuals with disabilities**." 42 U.S.C. 12101 (b) (1) and (2).

Americans with Disabilities Act

Title II of the ADA applies to **public transportation** provided by public entities through regulations by the **U.S. Department of Transportation (USDOT)**. It includes **sidewalk and street crossing accessibility**.

Americans with Disabilities Act Standards and Guidelines

Guidelines developed to address access to **public rights-of-way**:

- **Proposed Guidelines for Public Rights-of-Way Accessibility Guidelines (PROWAG)**
  - Originally published in 2002; revised in 2005 and 2011
  - Undergoing rulemaking process
  - Considered “Best Practice”

Americans with Disabilities Act Standards and Guidelines

The technical requirements in the proposed **PROWAG** guidelines **make allowances for typical roadway geometry and permit flexibility in alterations to existing facilities** where existing physical constraints make it impractical to fully comply with new construction requirements.

ADA Statement of Technical Infeasibility

Any **new construction** must be accessible to persons with disabilities, except when KYTC can demonstrate it is **structurally impracticable** or **technically infeasible** to fully comply with the requirements of ADA. [2010 ADA]

ADA Statement of Technical Infeasibility

On a **Retrofit (Repair or Maintenance)**, the pedestrian access route shall be made accessible to the **maximum extent feasible** within the scope of the project. [2010 ADA]

PROWAG 2011

R202 Alterations and Elements Added to Existing Facilities:

The proposed guidelines permit flexibility in alterations to existing facilities. Where **existing physical constraints** make it **impracticable** for altered elements, spaces, or facilities to fully **comply with the requirements** for new construction, compliance is required to the **extent practicable** within the **scope of the project** (see R202.3.1).

“Existing Physical Constraints”

Roadway Topography

“Existing Physical Constraints”

Drainage

“Existing Physical Constraints”

Underground Structures

“Existing Physical Constraints”

Utilities

“Existing Physical Constraints”

Right-of-Way

ADA Statement of Technical Infeasibility

A **Technical Infeasibility determination** means that due to existing physical or site constraints the facility (e.g. a sidewalk) **cannot be built** to comply with the accessibility requirements. (Reference: 2010 ADA 106.5, 202.3, & PROWAG R202.3.1)

ADA Statement of Technical Infeasibility

What is KYTC's
ADA Statement of Technical Infeasibility?

A process to **document** Technical Infeasibility.

To be released via **policy memo**…

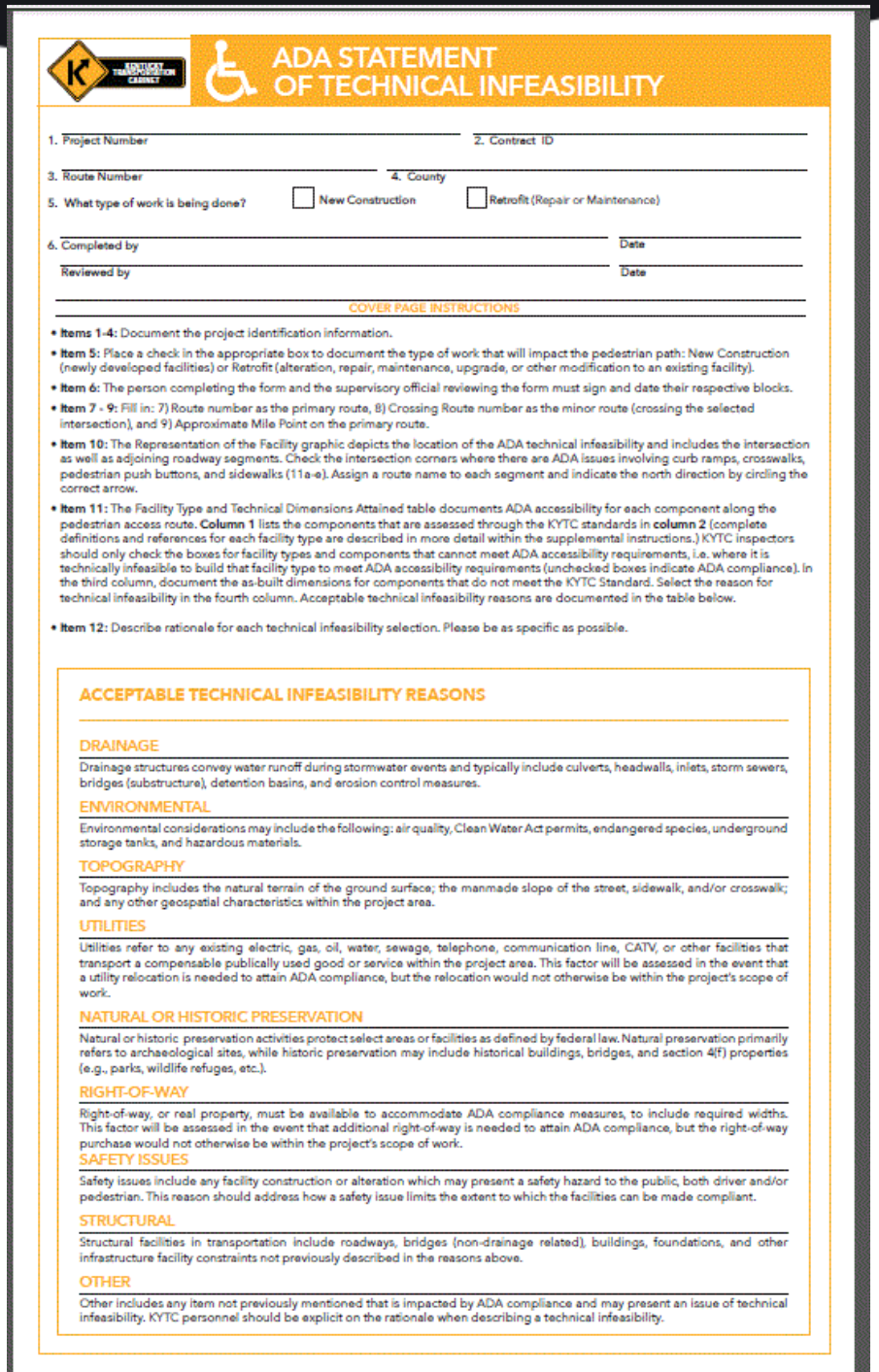
ADA Statement of Technical Infeasibility

A **G.I.S. App, Hard Copy Form & Instruction Pages**:

- **Document** ADA Statement of Technical Infeasibility
- **Assist** Staff with Technical Infeasibility Determinations

THE FORM

Available in Digital Format (PDF) or Printable Hard Copy



ADA STATEMENT OF TECHNICAL INFEASIBILITY

1. Project Number _____ 2. Contract ID _____

3. Route Number _____ 4. County _____

5. What type of work is being done? ☐ New Construction ☐ Retrofit (Repair or Maintenance)

6. Completed by _____ Date _____

Reviewed by _____ Date _____

COVER PAGE INSTRUCTIONS

- **Items 1-4:** Document the project identification information.
- **Item 5:** Place a check in the appropriate box to document the type of work that will impact the pedestrian path: New Construction (newly developed facilities) or Retrofit (alteration, repair, maintenance, upgrade, or other modification to an existing facility).
- **Item 6:** The person completing the form and the supervisory official reviewing the form must sign and date their respective blocks.
- **Item 7 - 9:** Fill in: 7) Route number as the primary route, 8) Crossing Route number as the minor route (crossing the selected intersection), and 9) Approximate Mile Point on the primary route.
- **Item 10:** The Representation of the Facility graphic depicts the location of the ADA technical infeasibility and includes the intersection as well as adjoining roadway segments. Check the intersection corners where there are ADA issues involving curb ramps, crosswalks, pedestrian push buttons, and sidewalks (11a-e). Assign a route name to each segment and indicate the north direction by circling the correct arrow.
- **Item 11:** The Facility Type and Technical Dimensions Attained table documents ADA accessibility for each component along the pedestrian access route. **Column 1** lists the components that are assessed through the KYTC standards in **column 2** (complete definitions and references for each facility type are described in more detail within the supplemental instructions.) KYTC inspectors should only check the boxes for facility types and components that cannot meet ADA accessibility requirements, i.e. where it is technically infeasible to build that facility type to meet ADA accessibility requirements (unchecked boxes indicate ADA compliance). In the third column, document the as-built dimensions for components that do not meet the KYTC Standard. Select the reason for technical infeasibility in the fourth column. Acceptable technical infeasibility reasons are documented in the table below.
- **Item 12:** Describe rationale for each technical infeasibility selection. Please be as specific as possible.

ACCEPTABLE TECHNICAL INFEASIBILITY REASONS

DRAINAGE

Drainage structures convey water runoff during stormwater events and typically include culverts, headwalls, inlets, storm sewers, bridges (substructure), detention basins, and erosion control measures.

ENVIRONMENTAL

Environmental considerations may include the following: air quality, Clean Water Act permits, endangered species, underground storage tanks, and hazardous materials.

TOPOGRAPHY

Topography includes the natural terrain of the ground surface; the manmade slope of the street, sidewalk, and/or crosswalk; and any other geospatial characteristics within the project area.

UTILITIES

Utilities refer to any existing electric, gas, oil, water, sewage, telephone, communication line, CATV, or other facilities that transport a compensable publically used good or service within the project area. This factor will be assessed in the event that a utility relocation is needed to attain ADA compliance, but the relocation would not otherwise be within the project's scope of work.

NATURAL OR HISTORIC PRESERVATION

Natural or historic preservation activities protect select areas or facilities as defined by federal law. Natural preservation primarily refers to archaeological sites, while historic preservation may include historical buildings, bridges, and section 4(f) properties (e.g., parks, wildlife refuges, etc.).

RIGHT-OF-WAY

Right-of-way, or real property, must be available to accommodate ADA compliance measures, to include required widths. This factor will be assessed in the event that additional right-of-way is needed to attain ADA compliance, but the right-of-way purchase would not otherwise be within the project's scope of work.

SAFETY ISSUES

Safety issues include any facility construction or alteration which may present a safety hazard to the public, both driver and/or pedestrian. This reason should address how a safety issue limits the extent to which the facilities can be made compliant.

STRUCTURAL

Structural facilities in transportation include roadways, bridges (non-drainage related), buildings, foundations, and other infrastructure facility constraints not previously described in the reasons above.

OTHER

Other includes any item not previously mentioned that is impacted by ADA compliance and may present an issue of technical infeasibility. KYTC personnel should be explicit on the rationale when describing a technical infeasibility.

KENTUCKY TRANSPORTATION CABINET

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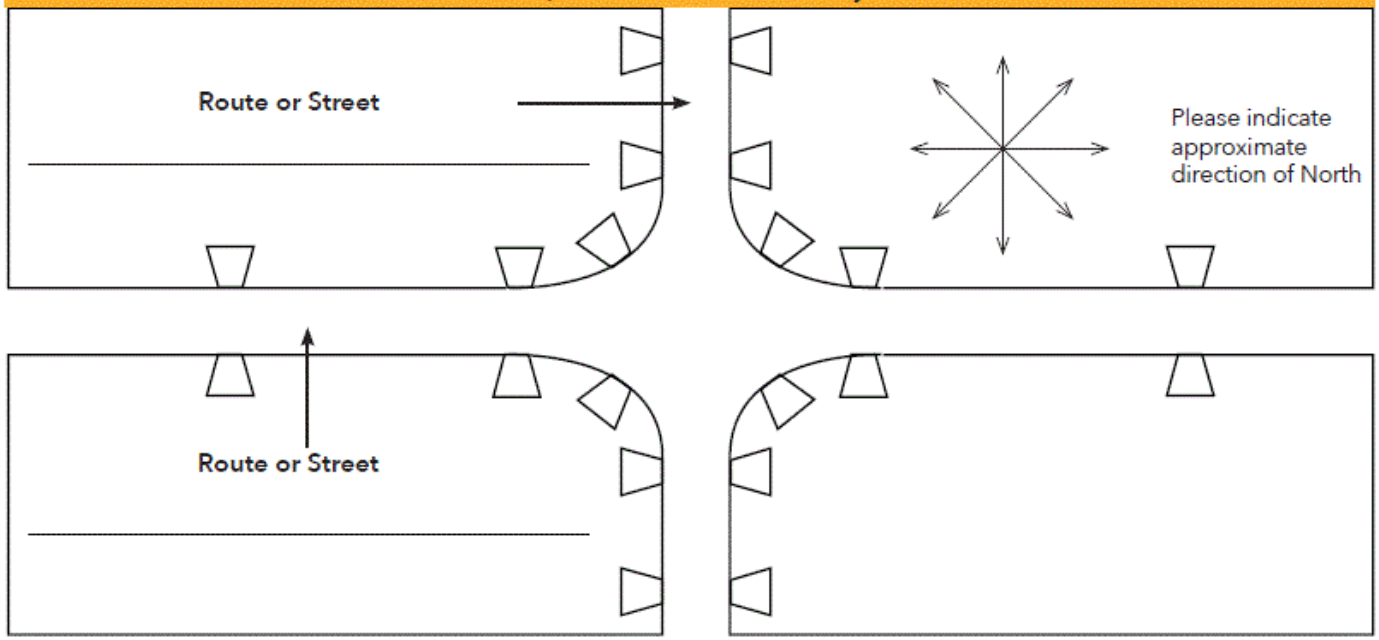
7. Route Number _____ 8. Crossing Route Number (if applicable) _____ 9. Approximate Mile Point _____

10. **Representation of the Facility**



ACCEPTABLE TECHNICAL INFEASIBILITY REASONS

- DRAINAGE
- ENVIRONMENTAL
- TOPOGRAPHY
- UTILITIES
- NATURAL OR HISTORIC PRESERVATION
- RIGHT-OF-WAY
- SAFETY ISSUES
- STRUCTURAL
- OTHER

11. **FACILITY TYPE AND TECHNICAL DIMENSIONS ATTAINED** (Only check boxes for technical infeasibility)

11a. ☐ **Crosswalk**

	COMPONENT	KYTC STANDARD	As-Built Dimension	Technical Infeasibility Reason
☐	Crosswalk Width	48" Min.		
	Crosswalk Cross Slope			
☐	With Stop Control or Yield	2% Max. (50:1)		
☐	Without Stop Control or Yield	5% Max. (20:1)		
☐	Midblock	Same as Roadway Grade		

11b. ☐ **Curb Ramp**

	COMPONENT	KYTC STANDARD	As-Built Dimension	Technical Infeasibility Reason
☐	Ramp Running Slope	8.3% Max. (12:1) 5% Min. (20:1)		
☐	Ramp Width	Perpendicular 48" Min., Parallel 60" Min., Blended 48" + 48"		
☐	Ramp Cross Slope	2% Max. (50:1)		
☐	Ramp Flares (where pedestrian surface is adjacent to ramp)	10% Max. (10:1)		
☐	Landing Dimensions	Adjoining Ramp Width x 60" Length Min.		
☐	Landing Slope	2% Max. (50:1) Parallel & Perpendicular to Path of Travel		
☐	Counter Slope	Street and Ramp Slope Break is 13% Max.		
☐	Grade Break	Perpendicular to Direction of Ramp Travel		
☐	Detectable Warning System	24" length X full ramp width		

11c. ☐ **Pedestrian Push Button**

	COMPONENT	KYTC STANDARD	As-Built Dimension	Technical Infeasibility Reason
☐	Distance from Sidewalk	10" Max.		
☐	Mounting Height	42" Min. to 48" Max. above sidewalk		

11d. ☐ **Sidewalk**

	COMPONENT	KYTC STANDARD	As-Built Dimension	Technical Infeasibility Reason
☐	Continuous Clear Width	48" Min.		
☐	Sidewalk Cross Slope	2% Max. (50:1)		
☐	Sidewalk Running Slope	Same as Adjoining Roadway in ROW or 5% Max. outside of ROW		
☐	Pinch Point	32" Min. Width by 24" in Direction of Travel		

11e. ☐ **Other**

_____

_____

_____

12. **Describe rationale for technical infeasibility factor/s (all that apply). Attach photos.**

_____

_____

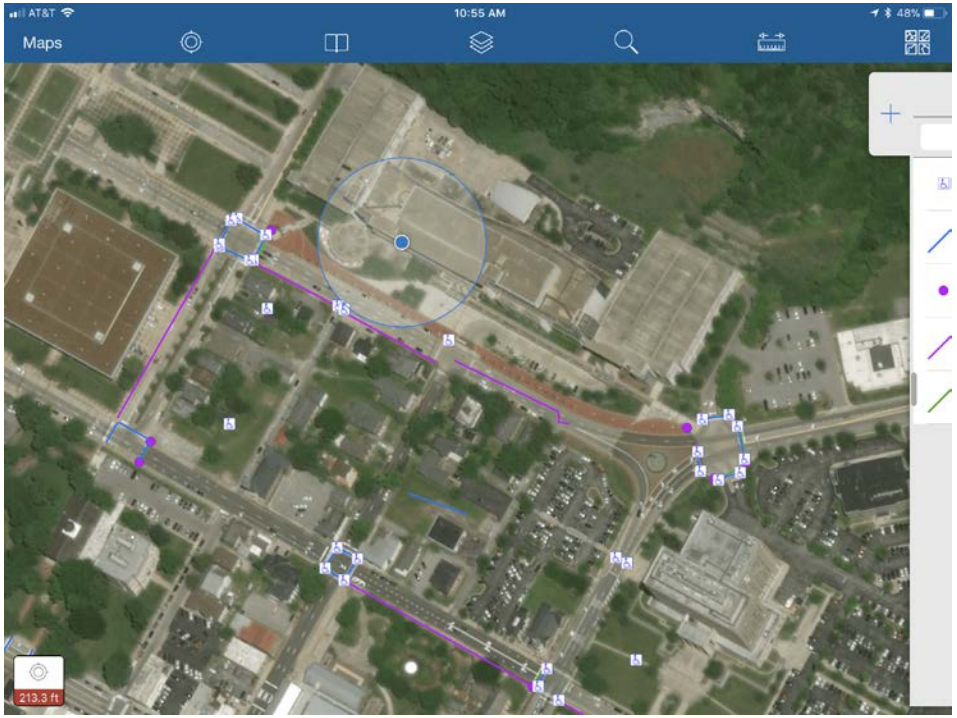
_____

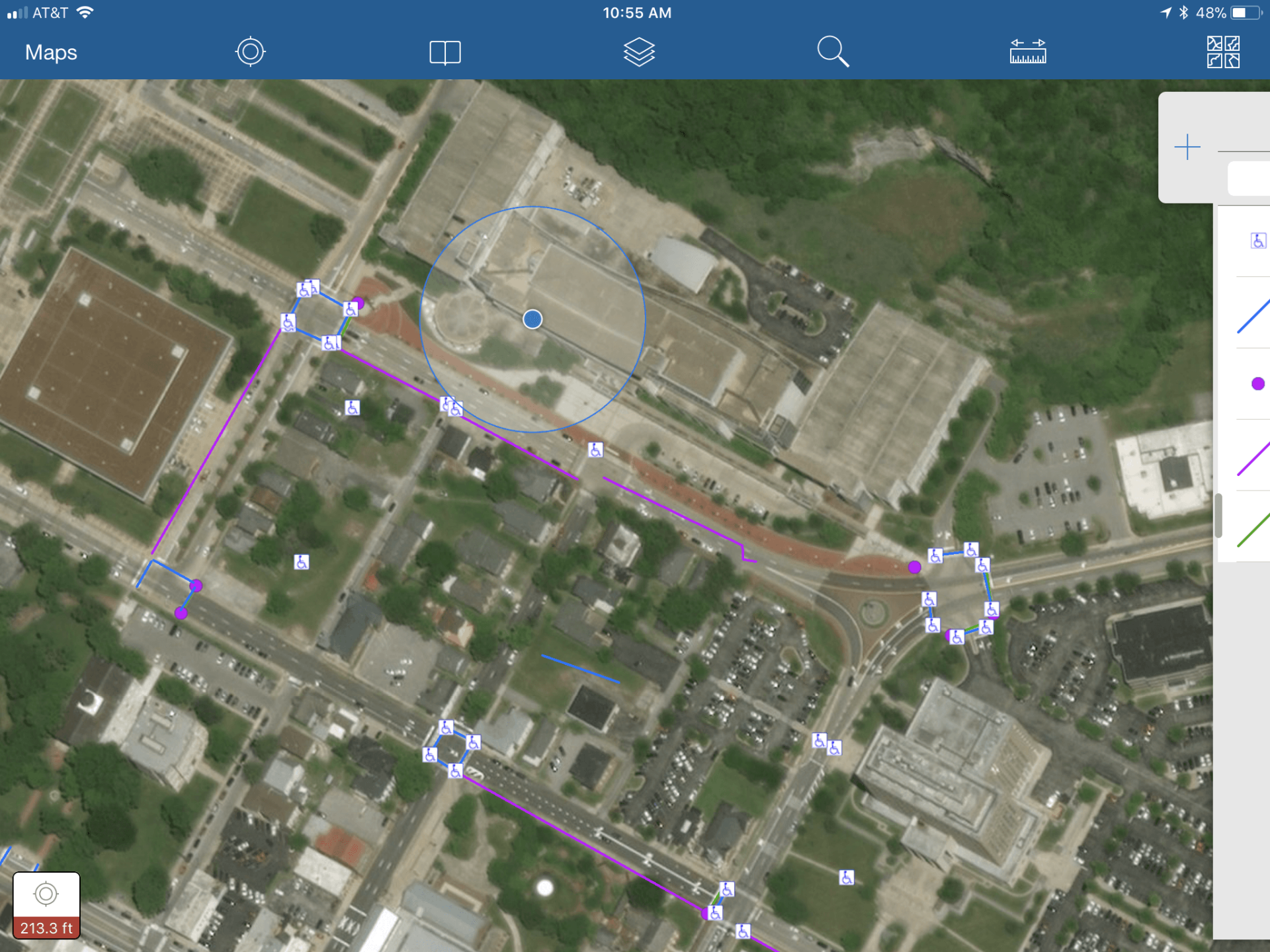
_____

_____

THE APP

GIS based application
Usable on IPads
Available Soon!

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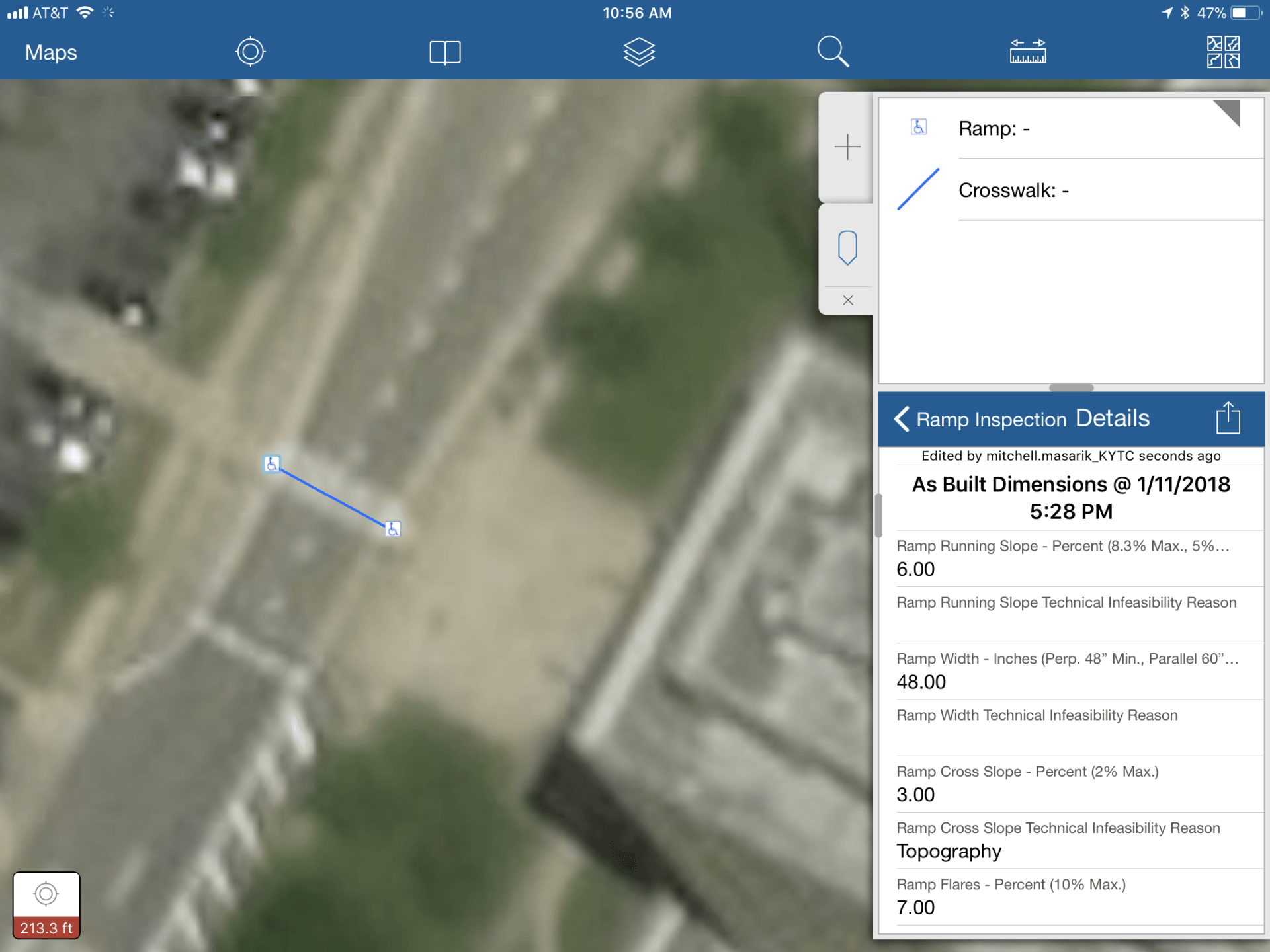
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Crosswalk: -
Ramp Inspection Details
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Ramp Running Slope - Percent (8.3% Max., 5%…
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Ramp Running Slope Technical Infeasibility Reason
Ramp Width - Inches (Perp. 48” Min., Parallel 60”…
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Ramp Width Technical Infeasibility Reason
Ramp Cross Slope - Percent (2% Max.)
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Ramp Cross Slope Technical Infeasibility Reason
Topography
Ramp Flares - Percent (10% Max.)
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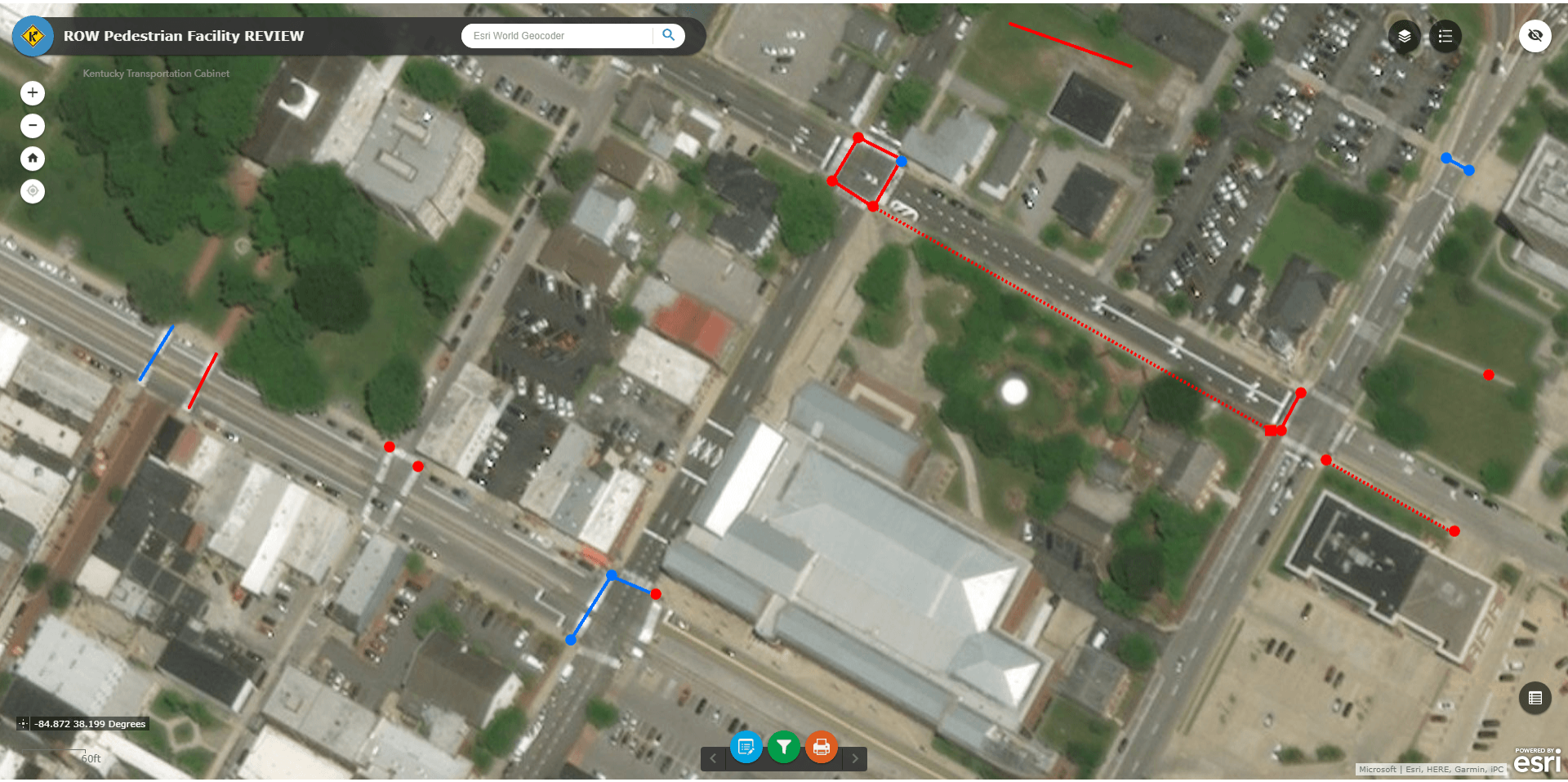
ROW Pedestrian Facility REVIEW
Esri World Geocoder
Kentucky Transportation Cabinet
-84.872 38.199 Degrees
60ft
Microsoft | Esri, HERE, Garmin, iPC
esri


ROW Pedestrian Facility REVIEW
Esri World Geocoder
Kentucky Transportation Cabinet
Edit
Select a template to create features
Ramp
Ramp
Crosswalk
Crosswalk
Pedestrian Push Button
Ped_Push_button
Sidewalk
(1 of 2)
As Built Dimensions @ 1/11/2018, 5:28 PM
Ramp Running Slope - Percent (8.3% Max., 5% Min.)
6
Ramp Running Slope Technical Infeasibility Reason
Ramp Width - Inches (Perp. 48" Min., Parallel 60" Min., Blend 48"+48")
48
Ramp Width Technical Infeasibility Reason
Ramp Cross Slope - Percent (2% Max.)
3
Ramp Cross Slope Technical Infeasibility
-84.872 38.200 Degrees
Microsoft | Esri, HERE, Garmin, iPC
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Conclusions

1. ADA requires accessible sidewalks to the maximum extent feasible.
2. There are some allowable exceptions for roadway construction & retrofits.
3. A Technical Infeasibility determination must be made & documented.

ADA Statement of Technical Infeasibility

Questions?

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KTC

KENTUCKY TRANSPORTATION CABINET