

**ADDENDUM NO. 1**  
**STP-3100 (521)**  
**CITY PROJECT NO. 32124**  
**WATER STREET AT LOHMAN'S LANDING**  
**PUBLIC WORKS**  
**April 15, 2014**

1. The bidder will acknowledge receipt of this Addendum and his acceptance of its conditions by signing this Addendum and including it with his bid.

BIDDER: \_\_\_\_\_

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

ADDENDUM

1. For interested bidders, contractors, etc. a representative will be at the project site Wednesday, April 16, 2014 from 2 pm until 3 pm to answer questions, walk through the site, etc.
2. Pre-bid minutes
3. Revised ADA Checklist

CITY OF JEFFERSON, MISSOURI  
MATTHEW MORASCH, P.E.  
DIRECTOR OF PUBLIC WORKS

# City of Jefferson

320 E. McCarty St.  
Jefferson City, MO 65101



Eric J. Struempf, Mayor

Phone: 573-634-6410  
Fax: 573-634-6562

April 15, 2014

**Subject: STP-3100 (521), Project No. 32124 – Water Street at Lohman’s Landing  
Pre-bid Conference Notes**

A pre-bid conference was held in the Thomas Jefferson (small) conference room of City Hall on Thursday, April 10, 2014 for the above noted project. Those attending the meeting are as listed below:

<u>NAME</u>	<u>REPRESENTING</u>	<u>PHONE</u>
Kevin Harvey	J.C. industries, Inc.	573.636.2711
Paul Logan	Logan Excavating	573.422.3492
Luke Hake	Stockman Construction Corp.	573.635.1316
Jenni Jones	MODOT – Central District	573.526.6994
David Bange	City of Jefferson – Public Works	573.634.6433
Tia Griffin	City of Jefferson – Public Works	573.634.6538

The meeting proceeded with a general discussion of the planned project and an overview of the specifications. This memorandum summarizes the proceedings of that meeting and the questions received at the meeting. In addition, this memo contains any questions received by telephone, etc. after the meeting and prior to the closure of the questions period. Below are the items that were specifically discussed.

### IMPORTANT DATES:

- |                                       |   |
|---------------------------------------|---|
| • Monday, April 14, 2014              | Addendum 1 will be sent to the plan holders list      |
| • Tuesday, April 15, 2014 at 5:00pm   | Bidders must be on MODOT’s qualified contractors list |
| • Thursday, April 17, 2014 at 12:00pm | Question Cut off                                      |
| • Friday, April 18, 2014              | Addendum 2 will be sent to the plan holders list      |
| • Tuesday, April 22, 2014 at 1:30pm   | Bid Opening   |
| • Friday, April 25, 2014 at 4:00pm    | DBE submittal form due for lowest 2 bidders           |
| • Monday, July 07, 2014               | Current anticipated notice to proceed                 |

### GENERAL COMMENTS:

- The DBE goal for this project is 10%.
- The project contractor must complete 30% of the original contract price & no second-tier subcontracting will be allowed.
- The contract time is 80 working days.
- The liquidated damages for this project are \$700 per day.
- Wage Order 20 will be in effect for this project.
- Contractors should double check the Bidders Check List before submitting a bid.
- All reference are to the “Missouri Standard Specifications for Highway Construction, 2011”, as revised, unless otherwise noted.
- A revised ADA Checklist will be included with Addendum 1
- Contractors are advised to read all notes and bid documents. If there are any questions, anything is unclear, etc. the contractor should contact Tia Griffin with the City of Jefferson at (573) 634-6538.

### **BID DOCUMENT BOOK REVIEW:**

Attention was drawn to the following sections of the bid document book.

- There is a Bid Packet included as an insert into the book. All paperwork associated with this needs to be filled out and returned with a bid. This information also makes up the first several pages of the bid documents book.
  - Cover Sheet
  - Bidder Checklist (please double check this before submitting your bid)
  - Notice to Contractors
  - Bid Form (please double check the bid is signed, dated, and there is a unit price for all items)
  - Bid Bond (please double check the bid bond or certified check is for 5% of the bid)
  - Anti—Collusion Statement
  - Contractor’s Affidavit
- DBE Submittal Form
  - For the successful low bidder and the second low bidder this form needs to be submitted no later than 4pm CST 3 days after the bid opening (Friday, April 25, 2014)
  - REMINDER the DBE Goal is 10%
- Job Special Provisions
  - A06.2: Working hours are 7am CST to 6pm CST with no Sundays or legal holidays unless approved by the project inspector and project engineer.
  - A06.3: The contractor will need to comply with the City’s DNR operating permit.
  - A06.5: The owner may accept any part or the entire bid for the project.
  - D: The contractor should be aware of the utility conflicts listed in this section.
  - E: The contractor should be aware of the ADA compliance and acceptance in this section.
  - F: The contractor should be aware of the property protections listed in this section.
  - G04: The contractor should be aware of the project scheduling information in this section.
  - G05: All construction access and closure information can be found here.
  - H01: The City will do construction staking, but will not reset/preserve, or locate property pins.
  - I-K: These sections outline the archeologist role in the project and how excavation and found items of interest will be handled.
  - L The contractor should read this section about contract timing.
  - M-Q: These sections outline aspects and details for bid items
  - R: This section outlines how bid items will be paid for.
- Required Contract Provisions; Federal-Aid Construction Contracts
- Annual Wage Order No. 20
- Environmental and DNR documents indicating construction is approved.
- ADA Check List (a revised one will be included in Addendum 1)
- The successful bidder with need to fill out the rest of the documents for the project, either before or after construction. The bidder should still review these documents prior to submitting a bid.

### **PLAN REVIEW:**

Attention was drawn to each area of the plans.

- Page 1, shows the project location.
- Page 2, shows the symbol legend, control points and various notes. Contractors and Bidders are encouraged to read all notes on this page. If anything is unclear, please contact the City of Jefferson, so clarifications can be made. At the meeting special attention was called to the following notes:
  - General Notes: F, H, I, S, and V
  - Water Quality Notes
  - Traffic Notes: 1 and 7
- Page 3 & 4, show the five anticipated traffic control plans. This includes notes about closures, quantities of signs & barricades, and general sign and barricade layouts. The contractor may propose to use different traffic control, but it must be approved before use
- Page 5, shows the right-of-way. Please note, all work should occur on City right-of-way.

- Page 6, shows details for the lighting system to be installed with the project.
- Page 7, shows the curb details as well as the typical pavement section details.
  - Please note the typical payment section details show rock based on the paver we used for design purposes. If the contractor proposing a differ paver the type of rock, thickness of rock, and depth of rock may vary and should be based on the manufactures recommendations. Any paver proposed by the contractor cannot result in a site excavation of more than 2.5 feet.
  - A bidder or contractor wanting to see a paver similar to those used for the bases of design can visit the parking lot at the corner of Leslie Blvd. and Chestnut Street in Jefferson City.
  - Please read all notes.
- Page 8, shows the wall, pillar, and fence details.
  - Three types of wall/pillar block have been specified for this project; however, a contractor could propose using other equal products.
  - The fencing type specified is historically typical to this area.
  - Please read all notes regarding the wall, pillars, and fence.
- Page 9 & 10, show the site plan and street profile for the project.
  - Note the railroad tracks should not be disturbed and all construction activity, materials, etc. should be stored at least 25' from the tracks.
  - Please read all notes.
- Page 11 & 12, show cross section for various points along the project. If a bidder/contractor would like to see an additional cross section, please let us know, and we will send it out with addendum 2.
- Page 13 & 14, list bid item quantities and locations. Please call if you think a quantity is off, cannot find how a bid item is paid, or have similar questions.

**QUESTION/ANSWER: (Received at the pre-bid meeting and those received by telephone, etc. prior to 12:00 PM CST Friday, April 11, 2014)**

**QUESTION:** Can the Contractor shut down the area to all traffic and construct the project?

**ANSWER:** No access must be maintained as indicated. Also, please note as shown on page 1 of the plans there is not access to East Water Street except via Jefferson Street.

**QUESTION:** If there is an error on the Bid Form, and the unit price and amount do not match how will the City determine the amount of the bid?

**ANSWER:** The City will resolve any such errors by using the unit price bid. As such, the City highly recommends double-checking all unit prices and amounts listed on the Bid Form.

**QUESTION:** What type of wood can be used on the fence?

**ANSWER:** We have specified cedar but would be open to considering other types of natural wood.

**QUESTION:** How should the wood rails be cut?

**ANSWER:** The rails and post may be rough-cut, split, or approved equal. The rails should not be finished or manufactured wood.

**QUESTION:** How much fencing is being replaced? How does this tie into the existing fence?

**ANSWER:** We anticipate using 588 feet of fence (per plan). This will replace all the existing fence so no existing fence will be tied into.

**QUESTION:** Are the fence pillars part of the fence price or are they separate? How many are there?

**ANSWER:** The fence pillars are paid under bid item number 15 and there are three of them, as noted on the bid tab. The fencing is paid under bid item number 16.

**QUESTION:** Is there a bid item for the filter fabric and rock used as subgrade for the street?

**ANSWER:** These items are induced in the price of the street pavers (bid item number 36.)

**QUESTION:** How will the street excavation occur?

**ANSWER:** The contractor will work from one end of the excavation area to the other. More specifically, the contractor will place the piece of equipment and excavate 4"-6" inches at a time (more if allowed by the archeologist, JSP J04) until full depth is reached. Then the contractor will move the piece of equipment and excavate the next area, and so on until full depth has been reached for the entire phase.

**\* Note: the contractor should not drive equipment on the excavated area, until rock has been backfilled. This will limit the amount of compaction to soil being used as an infiltration field.**

**QUESTION:** Can a Contractor use a high lift for street excavation?

**ANSWER:** No.

**QUESTION:** Will the archeologist need to be present for conduit installation outside of the street excavation area? And will this need to be removed 4"-6" at a time?

**ANSWER:** The Archeologist will have the right to be present for any excavation activity. However, at this time it anticipated the work for the conduit installation outside of the street excavation area will be conducted using standard construction practices.

**QUESTION:** Is the contractor responsible for paying the Archeologist?

**ANSWER:** No, the archeologist is under contract with the City of Jefferson, and will be paid under that contract.

**QUESTION:** What are bid items 5, 6, and 7 for?

**ANSWER:** These items are paid when the archeologist has the site shut down to investigate an item. They are strictly to pay the contractor for the extra time and effort afforded. The bidder should reference section I, J, K, and R of the Job Special Provisions for more information.

**QUESTION:** Can the contractor store the steps from the Lohman Building onsite?

**ANSWER:** The Contractor may store the steps onsite, in the grass for one week, provided appropriate safety barricades are implemented. After that one week, the contractor must remove the steps or mow the surrounding grass at no cost. If the steps, construction equipment, or workers damage the grass area, the repair shall be made at no cost – this may include seeding, strawing, sodding, watering, etc.

**QUESTION:** Is all new sidewalk concrete standard City gray concrete?

**ANSWER:** All concrete except sidewalk patches for the south circuits 3<sup>rd</sup> and 4<sup>th</sup> light should be standard City gray concrete. The concrete for the sidewalk patches should match the surrounding concrete type per page 6 of the plan set.

**QUESTION:** What should the contractor do with the rock in the sidewalk to the east of the Lohman Building?

**ANSWER:** The contractor may use them to replace any rock disturbed along the north side of the Lohman Building. Otherwise, the rock is to be removed and disposed of in a legal fashion.

**QUESTION:** Can the contractor use stone curb or precast curb along the north side of the Lohman Building?

**ANSWER:** Yes, the contractor may use any stand up curb (precut stone, precast, cast-in-place, etc.) along the north side of the Lohman Building. However, there must not be a gutter pan and after curb construction, water should not pond on the sidewalk behind said curb.

**QUESTION:** Will the trench drain have solid or slotted grates?

**ANSWER:** The trench drain will have a solid grate across the walking surface, and slotted grates along the sloped surfaces.

**QUESTION:** There is an existing handicap spot on Jefferson Street. Should this spot and others in the area be marked by the contractor? If so should paint or pavers be used?

**ANSWER:** The contractor is responsible for signing, painting, and lining the parking lot indicated on the plans. The City will take care of all other parking.

**QUESTION:** What is an approved temporary ADA compliant walkway?

**ANSWER:** An approved temporary ADA walkway will meet the following requirements:

- Be free of all protruding objects, debris, and tripping hazards. (This may require the contractor to inspect the walkway and remove offending objects on a regular basis.)
- Be 48" (4') wide or greater.
- Have a walking surface made of a slip resistant material such as wood, particleboard, metal, plastic, etc.
- Have the edge of the surface marked a contrasting color to the walking surface and soundings ground.
- Have channelizing devices that are detectable (2inches tall min, and vertical with no slopes), and stable enough to handle getting bumped (canes, wheelchairs, etc.).
- Have handrails on one side that are 34-36" off the surface and stable enough to support a person with bad balance.
- Have ramps between uneven surfaces (0.25"± change in elevation), with a max change in elevation of 6", unless otherwise approved.

An example would be using a particleboard walkway, with orange painted edges, a 2-inch wood edge along one edge, and a safety rail along one edge.

**QUESTION:** If a contractor provides a worker to assist any handicap individual access the Union Hotel or Train platform, would they still need to provided ADA compliant temporary walkways?

**ANSWER:** Yes, the contractor will need to provide an ADA compliant temporary walkway. However, if they would like to provide a worker to assist individuals in addition to the walkway they are more than welcome to.

**QUESTION:** Can the contractor utilize the state parking lot as a path into the project when the street is closed?

**ANSWER:** Yes, the contractor can drive thru the state parking lot. However, any drivers must obey the traffic laws (including speed limits), not inhibit other traffic, or cause damage to the lot.

Sincerely,


Tia Griffin, P.E., CPESC  
Design Engineer  
(573) 634-6538  
[TGriffin@jeffcitymo.org](mailto:TGriffin@jeffcitymo.org)

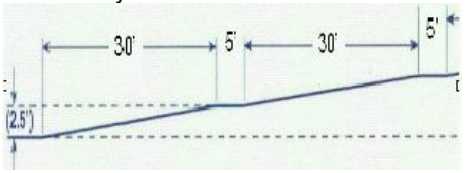
C: Plan Holders, Meeting Attendees, Project File, and Writer's File

# ADA CHECKLIST

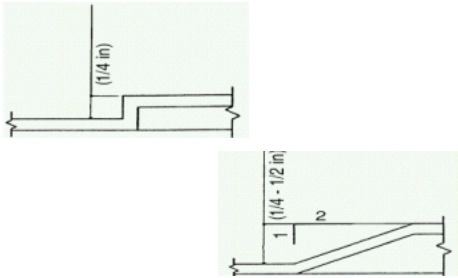

Revision March 31, 2014

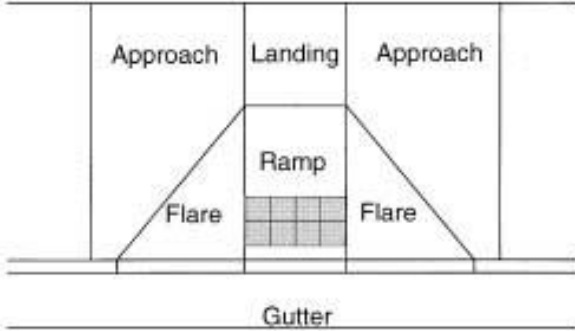
Job No. \_\_\_\_\_ Route \_\_\_\_\_ County \_\_\_\_\_ Location \_\_\_\_\_

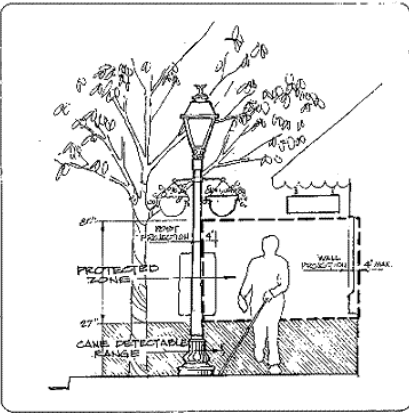
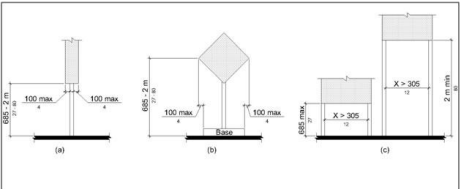

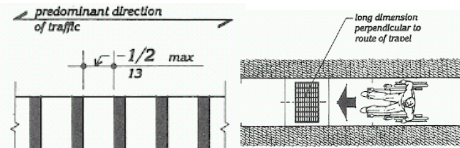
<b>Pedestrian Access Route (PROWAG R204)</b>				
<b>Figures/Examples</b>	<b>Requirements<sup>1</sup></b>	<b>YES</b>	<b>NO</b>	<b>NA</b>
<p>Sidewalk Width</p> 	<ul style="list-style-type: none"> <li>• The minimum continuous and unobstructed clear width of a pedestrian access route shall be 4.0 feet, exclusive of the width of the curb.</li> <li>• The continuous clear width of pedestrian access routes for medians and pedestrian refuge islands must be 5 feet minimum in order to allow for passing space.</li> <li>• MoDOT Sidewalks shall be 5 feet wide minimum.<sup>2</sup></li> <li>• MoDOT Sidewalks located within 2 feet of the back of curb are to be constructed 6 feet wide minimum and constructed adjacent to the back of the curb.<sup>2</sup></li> <li>• Exception: an unaltered, existing sidewalk shall be 3 feet wide minimum and shall provide 5 foot x 5 foot passing spaces at intervals of 200 feet maximum.<sup>2</sup></li> <li>• Detectable warning surfaces shall be provided, where a curb ramp, landing, or blended transition connects to a street. Where commercial driveways are provided with traffic control devices or otherwise are permitted to operate like public streets, detectable warnings should be provided at the junction between the pedestrian route and the street.</li> <li>• Gratings, access covers, and other appurtenances shall not be located on curb ramps, landings, blended transitions, and gutters within the pedestrian access route.</li> <li>• Grade breaks shall not be permitted on the surface of curb ramps, blended transitions, landings, and gutter areas within the pedestrian access route. Surface slopes that meet at grade breaks shall be flush.</li> </ul>			
<p>Passing Spaces</p>	<ul style="list-style-type: none"> <li>• Walkways in pedestrian access routes that are less than 5 feet in clear width shall provide passing spaces at intervals of 200 feet maximum.</li> <li>• Pedestrian access routes at passing spaces shall be 5 feet wide for a distance of 5 feet.</li> </ul>			
<p>Sidewalk Running Slope The grade that is parallel to the direction of travel, expressed as a ratio of rise to run or as a percent.</p>	<ul style="list-style-type: none"> <li>• The running slope of a pedestrian access route shall be 5 percent maximum.</li> <li>• <b><u>Roadway Grade Exception:</u></b> Where pedestrian access routes are contained within a street or highway right-of-way, the grade of the pedestrian access route is permitted to equal the general grade established for the adjacent street or highway.</li> <li>• Running Slopes shall be measured using a calibrated 2 foot long digital level.</li> </ul>			

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
<p><b>Sidewalk Cross Slope</b> The grade that is perpendicular to the direction of accessible pedestrian travel, measured perpendicular to the curb line or edge of the street or highway, or measured perpendicular to the running grade.</p>	<ul style="list-style-type: none"> <li>• The cross slope of the walkway of a pedestrian access route shall be 2 percent maximum. (Roadway Grade Exception may be considered)</li> <li>• 2010 ADA/ABA allows for cross slopes of up to ¼ inch per foot (2.08 percent).</li> <li>• In either case, a cross slope measurement of 2.1percent or greater is not ADA compliant.</li> <li>• Cross Slopes shall be measured using a calibrated 2 foot long digital level.</li> </ul>			
<p><b>Sidewalk Ramps</b> For example, a ramp segment with the maximum allowed running slope of 8.33% would require 5' x 5' landing after every 30' of run.</p>  <p>The diagram illustrates a sidewalk ramp segment. It shows a horizontal line representing the ground level. A dashed line represents the starting grade. A solid line represents the ramp surface, which rises from the starting grade. The ramp is divided into two 30-foot runs by a 5-foot landing. The total rise of the ramp is labeled as 2.5 inches. The landing is shown as a flat section between the two ramp runs.</p>	<ul style="list-style-type: none"> <li>• A sidewalk segment (not contained within a street or highway border) with a running grade in excess of 5 percent but less than 8.33 percent is by definition a sidewalk ramp.</li> <li>• The clear width of landings, blended transitions, and curb ramps, excluding flares, shall be 4.0 feet minimum.</li> <li>• Cross slope of ramp runs shall be 2 percent maximum.</li> <li>• The rise for any ramp run shall be 30 inches maximum.</li> <li>• Ramps shall have landings at the top and the bottom of each ramp run.</li> <li>• Ramp runs with a rise greater than 6 inches shall have handrails.</li> <li>• Handrails shall be provided on both sides of stairs and ramps.</li> <li>• Edge protection shall be provided on each side of ramp runs.</li> <li>• Detectable warning surfaces shall be provided, where a curb ramp, landing, or blended transition connects to a street.</li> <li>• Gratings, access covers, and other appurtenances shall not be located on ramps, landings, blended transitions, and gutters within the pedestrian access route.</li> <li>• Grade breaks shall not be permitted on the surface of ramps, blended transitions, landings, and gutter areas within the pedestrian access route. Surface slopes that meet at grade breaks shall be flush.</li> </ul>			


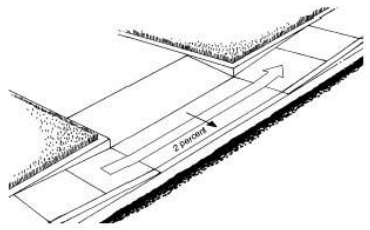
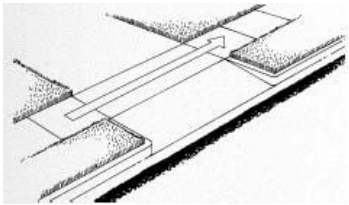
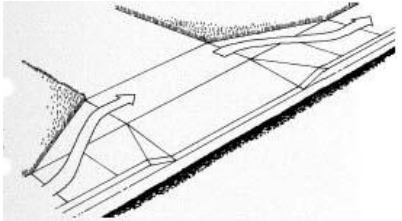


Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
<p data-bbox="92 167 357 203">Vertical Alignment</p>	<ul data-bbox="583 167 1711 613" style="list-style-type: none"> <li>• Vertical alignment shall be planar within curb ramp runs, blended transitions, landings, and gutter areas within the pedestrian access route, and within clear spaces required for accessible pedestrian signals, street furniture, and operable parts.</li> <li>• Grade breaks shall not be permitted on the surface of curb ramps, blended transitions, landings, and gutter areas within the pedestrian access route.</li> <li>• Grade breaks shall be flush.</li> <li>• Running Slopes and Cross Slopes shall be measured using a calibrated 2 foot long digital level.</li> <li>• Where the pedestrian access route crosses rail tracks at grade, the surface of the pedestrian access route shall be level and flush with the top of the rail at the outer edges of the rail. The surface between the rails shall be aligned with the top of the rail.</li> </ul>			
<p data-bbox="92 613 346 649">Changes in Level</p>  	<ul data-bbox="583 613 1711 860" style="list-style-type: none"> <li>• Changes in level at grade breaks shall be flush.</li> <li>• Changes in level of ¼ inch high maximum shall be permitted to be vertical.</li> <li>• Changes in level between ¼ inch high maximum and ½ inch high maximum shall be beveled with a slope not steeper than 1v:2h.</li> <li>• The bevel shall be applied across the entire level change.</li> <li>• Changes in level greater than ½ inch high shall be ramp grade or flatter, a slope of 8.33 percent or less.</li> </ul>			

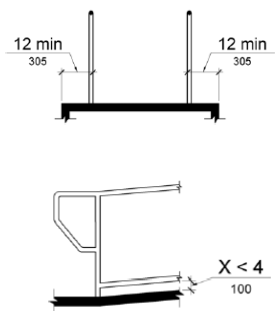
Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
<p><b>Landing</b> A required level space required at both ends of a ramp. An area 5' x 5' with no slope greater than 2 percent. This space can be used as a place to rest, turn or pass another user.</p> <p>Landings that are contained within a street or highway border are permitted to use the Roadway Grade Exception for running slopes or cross slopes in the direction of the roadway travel being matched.</p>	<ul style="list-style-type: none"> <li>• The landing clear width shall be at least as wide as the widest ramp run leading to the landing.</li> <li>• The clear width of landings, blended transitions, and curb ramps, excluding flares, shall be 4 feet minimum.</li> <li>• The landing clear length shall be 5 feet long minimum.</li> <li>• Landing slopes shall be 2 percent maximum.</li> <li>• Changes in level at grade breaks shall be flush.</li> <li>• Detectable warning surfaces shall be provided, where a curb ramp, landing, or blended transition connects to a street. Detectable warning shall be located on the landing or blended transition at the back of curb.</li> <li>• Gratings, access covers, and other appurtenances shall not be located on curb ramps, landings, blended transitions, and gutters within the pedestrian access route.</li> <li>• Grade breaks shall not be permitted on the surface of curb ramps, blended transitions, landings, and gutter areas within the pedestrian access route. Surface slopes that meet at grade breaks shall be flush.</li> <li>• <b>Roadway Grade Exception:</b> The grade of pedestrian access routes within sidewalks is permitted to equal the general grade established for the adjacent street or highway. The cross slope of curb ramps, blended transitions, landings, and turning spaces at pedestrian street crossings without yield or stop control where vehicles can proceed through the intersection without slowing or stopping, and at midblock pedestrian street crossings are permitted to equal the street or highway grade.</li> <li>• Running Slopes and Cross Slopes shall be measured using a calibrated 2 foot long digital level.</li> </ul>			
	 <p>The diagram illustrates a cross-section of a pedestrian access route. It features a central 'Landing' area, which is a flat rectangular platform. This landing is flanked by 'Approach' areas on both sides. Below the landing is a 'Ramp' that slopes down to a 'Gutter' at the bottom. The ramp has 'Flare' sections on both sides, which are wider than the ramp itself. The gutter is a narrow channel at the base of the ramp. The diagram is labeled with 'Approach', 'Landing', 'Approach', 'Ramp', 'Flare', and 'Gutter'.</p>			

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
 	<ul style="list-style-type: none"> <li>• <b>Protruding objects</b> on sidewalks and other pedestrian circulation paths shall not reduce the clear width required for pedestrian accessible routes.</li> <li>• Objects with leading edges more than 27 inches and not more than 80 inches above the finish floor or ground shall protrude 4 inches maximum horizontally into the circulation path.</li> <li>• Free-standing objects mounted on posts or pylons shall overhang circulation paths 4 inches maximum measured horizontally from the post or pylon base when located 27 inches minimum and 80 inches maximum above the finish floor or ground. The base dimension shall be 2.5 inches thick minimum. (2011 PROWAG R402.3)</li> <li>• Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches, the lowest edge of such sign or obstruction shall be 27 inches maximum or 80 inches minimum above the finish floor or ground.</li> <li>• Vertical clearance shall be 80 inches high minimum. Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches high. The leading edge of such guardrail or barrier shall be located 27 inches maximum above the finish floor or ground.</li> <li>• Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches high. The leading edge of such guardrail or barrier shall be located 27 inches maximum above the finish surface or ground.</li> </ul>			
  <p data-bbox="359 1292 548 1325">Wrong Installation</p>	<ul style="list-style-type: none"> <li>• Openings in floor and ground surfaces shall not allow passage of a sphere more than ½ inch diameter. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.</li> <li>• Gratings, access covers, and other appurtenances shall not be located on curb ramps, landings, blended transitions, and gutters within the pedestrian access route.</li> <li>• Lift holes for manhole/utility covers shall not have an opening greater than ½ inch. Plugging of holes greater than ½ inch with a material approved by the engineer is acceptable as long as it complies with the changes in level requirements.</li> </ul>			

### ENTRANCES (PROWAG R301)

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
	<ul style="list-style-type: none"> <li>The minimum continuous and unobstructed clear width of a pedestrian access route provided across commercial and residential entrances shall be 4 feet minimum.</li> <li>Cross slope shall be 2 percent maximum.</li> <li>Be cautious with the transition from the driveway to the roadway to avoid grade combinations that will cause vehicles to bottom out when driving over the transition. <sup>2</sup></li> </ul> <div style="display: flex; justify-content: space-around; margin-top: 10px;">    </div>			


### EDGE PROTECTION (PROWAG R406.8)

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
	<ul style="list-style-type: none"> <li>Edge protection shall be provided on each side of ramp runs and at each side of ramp landings.</li> <li>Edge protection shall not be required on curb ramps and their landings.</li> <li>Edge protection shall not be required on ramps that are not required to have handrails and have flares not steeper than 1:10.</li> <li>Edge protection shall not be required on the sides of ramp landings having a vertical drop-off of ½ inch maximum within 10 inches horizontally of the minimum landing area.</li> <li>The floor or ground surface of the ramp run or landing shall extend 12 inches minimum beyond the inside face of a handrail.</li> <li>A curb or barrier shall be provided that prevents the passage of a 4 inch diameter sphere, where any portion of the sphere is within 4 inches of the finish floor or ground surface.</li> </ul>			

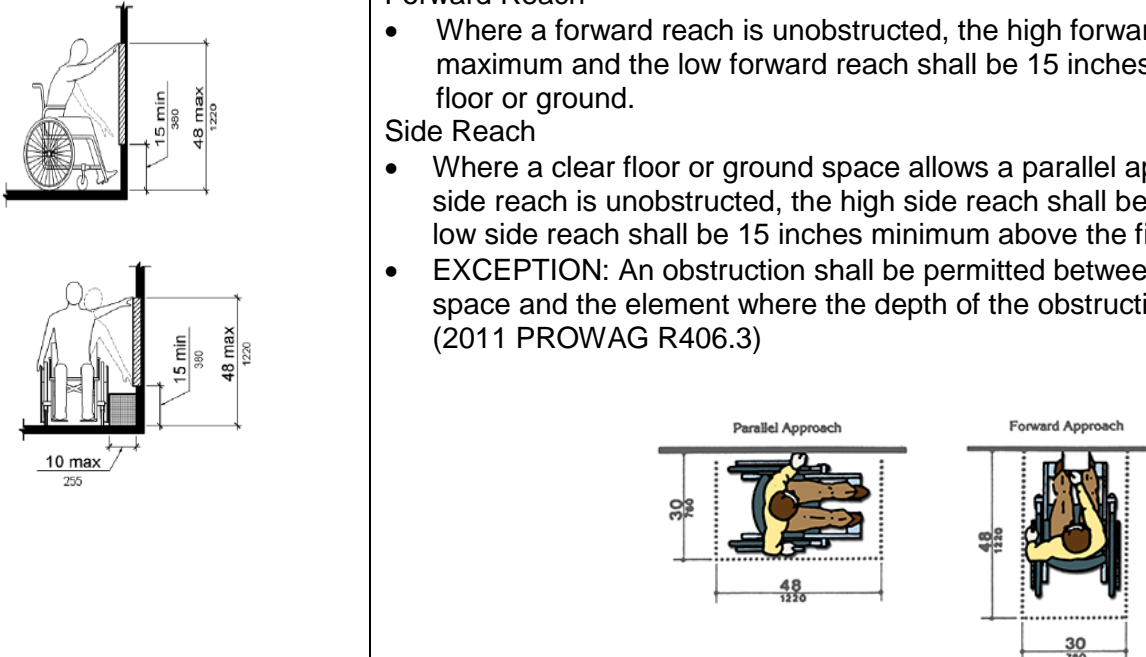
## HANDRAIL AND PEDESTRIAN GUARDRAIL (PROWAG R408)

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
	<ul style="list-style-type: none"> <li>• The clear width of walking surfaces shall be 4.0 feet minimum.</li> <li>• Handrails are required on ramp runs with a rise greater than 6 inches and on certain stairways. Handrails are not required on walking surfaces with running slopes less than 1:20. Where required, handrails shall be provided on both sides of stairs and ramps.</li> <li>• Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs and ramps shall be continuous between flights or runs.</li> <li>• Top of gripping surfaces of handrails shall be 34 inches minimum and 38 inches maximum vertically above walking surfaces, stair nosings, and ramp surfaces. Handrails shall be at a consistent height above walking surfaces, stair nosings, and ramp surfaces.</li> <li>• Clearance between handrail gripping surfaces and adjacent surfaces shall be 1 1/2 inches minimum.</li> <li>• Handrail gripping surfaces with a circular cross section shall have an outside diameter of 1 1/4 inches minimum and 2 inches maximum.</li> <li>• Handrail gripping surfaces with a non-circular cross section shall have a perimeter dimension of 4 inches minimum and 6 1/4 inches maximum, and a cross-section dimension of 2 1/4 inches maximum.</li> <li>• Handrail gripping surfaces and any surfaces adjacent to them shall be free of sharp or abrasive elements and shall have rounded edges.</li> <li>• Handrails shall not rotate within their fittings.</li> <li>• Ramp handrails shall extend horizontally above the landing for 12 inches minimum beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent ramp run.</li> <li>• At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches minimum beginning directly above the first riser nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.</li> <li>• At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance at least equal to one tread depth beyond the last riser nosing. Extension shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.</li> <li>• The surface of the ramp run or landing shall extend 12 inches minimum beyond the inside face of a handrail.</li> </ul>			

### STAIRWAYS (PROWAG R407)

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
	<ul style="list-style-type: none"> <li>All steps on a flight of stairs shall have uniform riser heights and uniform tread depths. Risers shall be 4 inches high minimum and 7 inches high maximum. Treads shall be 11 inches deep minimum.</li> <li>Open risers are not permitted.</li> <li>See 2011 Proposed Accessibility Guidelines R408.4</li> <li>The radius of curvature at the leading edge of the tread shall be 1/2 inch maximum. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled. Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical. The permitted projection of the nosing shall extend 1 1/2 inches maximum over the tread below.</li> <li>Stairs shall have handrails complying with PROWAG 2005 R408.</li> </ul>			

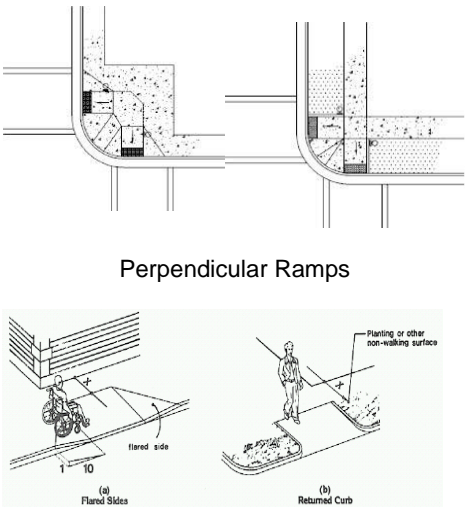
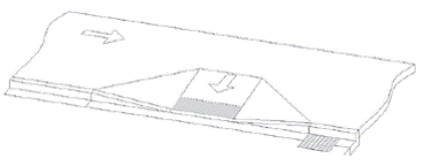
### UNOBSTRUCTED REACH RANGES (PROWAG R404)

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
	<p><b>Forward Reach</b></p> <ul style="list-style-type: none"> <li>Where a forward reach is unobstructed, the high forward reach shall be 48 inches maximum and the low forward reach shall be 15 inches minimum above the finish floor or ground.</li> </ul> <p><b>Side Reach</b></p> <ul style="list-style-type: none"> <li>Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches maximum and the low side reach shall be 15 inches minimum above the finish floor or ground.</li> <li><b>EXCEPTION:</b> An obstruction shall be permitted between the clear floor or ground space and the element where the depth of the obstruction is 10 inches maximum. (2011 PROWAG R406.3)</li> </ul>			


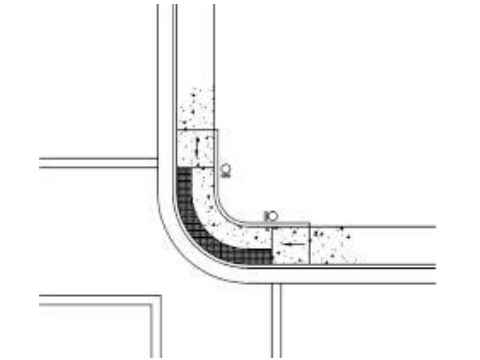


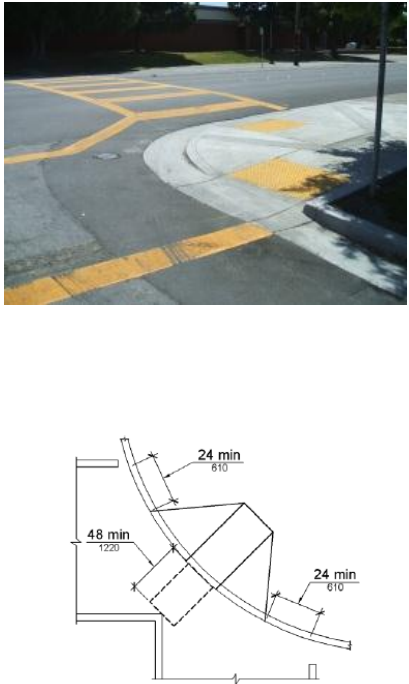
## CURB RAMPS (PROWAG R303)

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
<p>A curb ramp, blended transition, or a combination of curb ramps and blended transitions shall connect the pedestrian access routes at each pedestrian street crossing.</p> <p><b>15 Foot Rule:</b> For a compliant curb ramp to exceed 8.33 percent running grade, its constructed length must exceed 15.0 feet.</p>	<ul style="list-style-type: none"> <li>• The clear width of ramps, excluding the flares, shall be 4.0 feet minimum.</li> <li>• Ramp runs shall have a running slope between 5 percent minimum and 8.33 percent maximum but shall not require the ramp length to exceed 15.0 feet.             <ul style="list-style-type: none"> <li>- Exception: <b>15 Foot Rule:</b> The running slope for a curb ramp is not limited to 8.33 percent maximum if the constructed curb ramp length exceeds 15 feet in length.</li> </ul> </li> <li>• Cross slope of ramp runs shall be 2 percent maximum. (Roadway Grade Exception may be considered)</li> <li>• The cross slope at midblock crossings shall be permitted to be warped to meet street or highway grade.</li> <li>• Ramps shall have landings at the top and the bottom of each ramp run.             <ul style="list-style-type: none"> <li>- The landing clear width shall be at least as wide as the widest ramp run leading to the landing.</li> <li>- The landing clear length shall be 5.0 feet long minimum.</li> <li>- Ramps that change direction between runs at landings shall have a clear landing 5.0 feet minimum by 5.0 feet minimum.</li> </ul> </li> <li>• Handrails and Edge protection shall not be required on curb ramps and their landings.</li> <li>• Curb height = 0 inches within curb ramp spaces.<sup>2</sup></li> <li>• Curb ramps must be flush with street.</li> <li>• The counter slope of the gutter or street at the foot of a curb ramp, landing, or blended transition shall be 5 percent maximum. (R303.3.5)</li> <li>• The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.</li> <li>• Flared sides with a slope of 10 percent maximum, measured parallel to the curb line, shall be provided where a pedestrian circulation path crosses the curb ramp.             <ul style="list-style-type: none"> <li>- In alterations, where there is no landing at the top of curb ramps, curb ramp flares shall be provided and shall not be steeper than 1:12.</li> </ul> </li> <li>• Detectable warning surfaces shall be provided, where a curb ramp, landing, or blended transition connects to a street.</li> <li>• Gratings, access covers, and other appurtenances shall not be located on curb ramps, landings, blended transitions, and gutters within the pedestrian access route.</li> <li>• Grade breaks shall not be permitted on the surface of curb ramps, blended transitions, landings, and gutter areas within the pedestrian access route. Surface slopes that meet at grade breaks shall be flush.</li> <li>• Grade Breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run.</li> </ul>			

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
 <p style="text-align: center;">Perpendicular Ramps</p> <p>(a) Flared Sides X = 4' Min. Flared Sides in Pathway    Flared Sides Not in Pathway</p> <p>(b) Returned Curb Flaring or other non-walking surface</p> <p><b>Roadway Grade Exception:</b> Where curb ramps, landings and blended transitions are contained within a street or highway right-of-way, the grade of the pedestrian access route is permitted to be modified to equal the general grade established for the adjacent street or highway.</p> 	<ul style="list-style-type: none"> <li>• <b>Perpendicular curb ramps</b> shall have a running slope that cuts through or is built up to the curb at right angles or meets the gutter grade break at right angles.</li> <li>• The clear width of landings, blended transitions, and curb ramps, excluding flares, shall be 4.0 feet minimum.</li> <li>• The running slope shall be 5 percent minimum and 8.33 percent maximum but shall not require the ramp length to exceed 15.0 feet.</li> <li>• The cross slope at intersections shall be 2 percent maximum. (Roadway Grade Exception may be considered)</li> <li>• The cross slope at midblock crossings shall be permitted to be warped to meet street or highway grade.</li> <li>• <b>Roadway Grade Exception:</b> The grade of pedestrian access routes within sidewalks is permitted to equal the general grade established for the adjacent street or highway. The cross slope of curb ramps, blended transitions, landings, and turning spaces at pedestrian street crossings without yield or stop control where vehicles can proceed through the intersection without slowing or stopping, and at midblock pedestrian street crossings are permitted to equal the street or highway grade.</li> <li>• A landing 4.0 feet minimum by 4.0 feet minimum shall be provided at the top of the curb ramp and shall be permitted to overlap other landings and clear space.</li> <li>• Flared sides with a slope of 10 percent maximum, measured parallel to the curb line, shall be provided where a pedestrian circulation path crosses the curb ramp.</li> <li>• If the flared sides are not in the pathway (grass next to ramp), then there is no maximum slope and can be vertical curbs. (See adjacent figure for further explanation.)</li> <li>• Detectable warning surfaces shall be provided, where a curb ramp, landing, or blended transition connects to a street.</li> <li>• Gratings, access covers, and other appurtenances shall not be located on curb ramps, landings, blended transitions, and gutters within the pedestrian access route.</li> <li>• Grade breaks at the top and bottom of perpendicular curb ramps shall be perpendicular to the direction of ramp run. At least one end of the bottom grade break shall be at the back of curb.</li> <li>• Grade breaks shall not be permitted on the surface of curb ramps, blended transitions, landings, and gutter areas within the pedestrian access route. Surface slopes that meet at grade breaks shall be flush.</li> <li>• Where both ends of the bottom grade break are 5.0 feet or less from the back of curb, the detectable warning shall be located on the ramp surface at the bottom grade break. Where either end of the bottom grade break is more than 5.0 feet from the back of curb, the detectable warning shall be located on the lower landing.</li> </ul>			




Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
 <p data-bbox="86 630 562 1057">Curb Ramps and landings that are contained within a street or highway border may use the Roadway Grade Exception for slopes or cross slopes in the direction of the roadway travel being matched.</p>	<ul style="list-style-type: none"> <li>• <b>Parallel curb ramps</b> shall have a running slope that is in-line with the direction of sidewalk travel.</li> <li>• The clear width of landings, blended transitions, and curb ramps, excluding flares, shall be 4.0 feet minimum.</li> <li>• The running slope shall be 5 percent minimum and 8.33 percent maximum but shall not require the ramp length to exceed 15.0 feet.</li> <li>• The cross slope shall be 2 percent maximum. (Roadway Grade Exception may be considered)</li> <li>• <b>Roadway Grade Exception:</b> The grade of pedestrian access routes within sidewalks is permitted to equal the general grade established for the adjacent street or highway. The cross slope of curb ramps, blended transitions, landings, and turning spaces at pedestrian street crossings without yield or stop control where vehicles can proceed through the intersection without slowing or stopping, and at midblock pedestrian street crossings are permitted to equal the street or highway grade.</li> <li>• A landing 4.0 feet minimum by 4.0 feet minimum shall be provided at the bottom of the ramp run and shall be permitted to overlap other landings and clear floor or ground space.</li> <li>• Where a parallel curb ramp does not occupy the entire width of a sidewalk, drop-offs at diverging segments shall be protected.</li> <li>• Detectable warning surfaces shall be provided, where a curb ramp, landing, or blended transition connects to a street.</li> <li>• Gratings, access covers, and other appurtenances shall not be located on curb ramps, landings, blended transitions, and gutters within the pedestrian access route.</li> <li>• Grade breaks shall not be permitted on the surface of curb ramps, blended transitions, landings, and gutter areas within the pedestrian access route. Surface slopes that meet at grade breaks shall be flush.</li> </ul>			
	<ul style="list-style-type: none"> <li>• <b>Blended Transitions</b> shall have a running slope of 5 percent maximum and cross slope shall be 2 percent maximum.</li> <li>• The clear width blended transitions, excluding flares, shall be 4.0 feet minimum.</li> <li>• Detectable warning surfaces shall be provided where a blended transition connects to a street.</li> <li>• Gratings, access covers, and other appurtenances shall not be located on blended transitions within the pedestrian access route.</li> <li>• Grade breaks at the top and bottom of perpendicular curb ramps shall be perpendicular to the direction of ramp run. At least one end of the bottom grade break shall be at the back of curb. Grade breaks shall not be permitted on the surface of blended transitions and gutter areas within the pedestrian access route. Surface slopes that meet at grade breaks shall be flush.</li> </ul>			

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
	<ul style="list-style-type: none"> <li>• <b>Diagonal Curb Ramps or corner type curb ramps are no longer preferred design types. A design that provides individual ramps for each crossing direction is recommended by the US Access Board.</b></li> <li>• Diagonal Curb Ramps or corner type curb ramps with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow.</li> <li>• The bottom of diagonal curb ramps shall have a clear space 48 inches minimum outside active traffic lanes of the roadway.</li> <li>• Diagonal curb ramps provided at marked crossings shall provide the 48 inches minimum clear space within the markings.</li> <li>• Diagonal curb ramps with flared sides shall have a segment of curb 24 inches long minimum located on each side of the curb ramp and within the marked crossing.</li> <li>• <b>Roadway Grade Exception:</b> The grade of pedestrian access routes within sidewalks is permitted to equal the general grade established for the adjacent street or highway. The cross slope of curb ramps, blended transitions, landings, and turning spaces at pedestrian street crossings without yield or stop control where vehicles can proceed through the intersection without slowing or stopping, and at midblock pedestrian street crossings are permitted to equal the street or highway grade.</li> <li>• Detectable warning surfaces shall be provided, where a curb ramp, landing, or blended transition connects to a street.</li> <li>• Gratings, access covers, and other appurtenances shall not be located on curb ramps, landings, blended transitions, and gutters within the pedestrian access route.</li> <li>• Grade breaks shall not be permitted on the surface of curb ramps, blended transitions, landings, and gutter areas within the pedestrian access route. Surface slopes that meet at grade breaks shall be flush.</li> <li>• Running and cross slope at midblock crossings shall be permitted to be warped to meet street or highway grade.</li> </ul>			






## DETECTABLE WARNINGS DEVICES (TRUNCATED DOMES) (PROWAG R304)

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
<p>A surface feature of truncated dome material built in or applied to the walking surface to advise of an upcoming change from pedestrian to vehicular way.</p>	<ul style="list-style-type: none"> <li>• Detectable warnings shall consist of a surface of truncated domes aligned in a square or radial grid pattern complying with 2010 ADA Standards. Detectable warning surfaces shall contrast visually with adjacent gutter, street or highway, or walkway surfaces, either light-on-dark or dark-on-light.</li> <li>• Detectable warning surfaces shall extend 24 inches minimum in the direction of travel and the full width of the curb ramp (exclusive of flares), the landing, or the blended transition. Detectable warning surfaces are required where curb ramps, blended transitions, or landings provide a flush pedestrian connection to the street.</li> <li>• Sidewalk crossings of residential driveways should not generally be provided with detectable warnings, since the pedestrian right-of-way continues across most driveway aprons and overuse of detectable warning surfaces should be avoided in the interests of message clarity. However, where commercial driveways are provided with traffic control devices or otherwise are permitted to operate like public streets, detectable warnings should be provided at the junction between the pedestrian route and the street.</li> <li>• Perpendicular Curb Ramps: Where both ends of the bottom grade break are 5 feet or less from the back of curb, the detectable warning shall be located on the ramp surface at the bottom grade break. Where either end of the bottom grade break is more than 5 feet from the back of curb, the detectable warning shall be located on the lower landing.</li> <li>• Landings and Blended Transitions: The detectable warning shall be located on the landing or blended transition at the back of curb.</li> <li>• Rail Crossings: The detectable warning surface shall be located so that the edge nearest the rail crossing is 6 feet minimum and 15 feet maximum from the centerline of the nearest rail. The rows of truncated domes in a detectable warning surface shall be aligned to be parallel with the direction of wheelchair travel.</li> <li>• Detectable warnings at cut-through islands shall be located at the curb line in-line with the face of curb and shall be separated by a 2.0 foot minimum length of walkway without detectable warnings. Where the island has no curb, the detectable warning shall be located at the edge of roadway.</li> <li>• Exception, when detectable warnings are required by a manufacturer's installation specifications to be embedded into concrete with a surrounding edge, domes may be installed at less than the required full width. Under this exception, the detectable warning surface shall never be more than 2 inches from the edge of the curb ramp, the landing, or the blended transition. <sup>2</sup></li> <li>• Detectable warnings shall not be stamped into concrete.</li> </ul>			

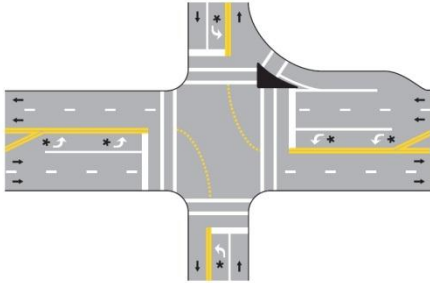

**ISLANDS AND MEDIANS (PROWAG R305.4)**

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
 <p>(a) cut through at island</p> <p>(b) curb ramp at island</p>	<ul style="list-style-type: none"> <li>• Medians and pedestrian refuge islands in crosswalks shall contain a pedestrian access route, including passing space and connecting to each crosswalk.</li> <li>• Raised islands in crossings shall be cut through level with the street or have curb ramps and required landings at both sides.</li> <li>• All median island passage spaces shall provide a clear width of 5 feet minimum. <sup>2</sup></li> <li>• Medians and pedestrian refuge islands shall be 6.0 feet minimum in length in the direction of pedestrian travel.</li> <li>• <b>Roadway Grade Exception:</b> The grade of pedestrian access routes within sidewalks is permitted to equal the general grade established for the adjacent street or highway. The cross slope of curb ramps, blended transitions, landings, and turning spaces at pedestrian street crossings without yield or stop control where vehicles can proceed through the intersection without slowing or stopping, and at midblock pedestrian street crossings are permitted to equal the street or highway grade.</li> <li>• Each curb ramp shall have a level area 48 inches long minimum by 36 inches wide minimum at the top of the curb ramp in the part of the island intersected by the crossings.</li> <li>• Each 48 inch minimum by 36 inch minimum area shall be oriented so that the 48 inch minimum length is in the direction of the running slope of the curb ramp it serves. The 48 inch minimum by 36 inch minimum areas and the accessible route shall be permitted to overlap.</li> <li>• Detectable warning surfaces shall be provided, where a curb ramp, landing, or blended transition connects to a street. Medians and pedestrian refuge islands shall have detectable warnings at curb ramps and blended transitions.</li> <li>• Detectable warnings at cut-through islands shall be located at the curb line in-line with the face of curb and shall be separated by a 2.0 foot minimum length of walkway without detectable warnings. Where the island has no curb, the detectable warning shall be located at the edge of roadway.</li> <li>• Gratings, access covers, and other appurtenances shall not be located on curb ramps, landings, blended transitions, and gutters within the pedestrian access route.</li> <li>• Grade breaks shall not be permitted on the surface of curb ramps, blended transitions, landings, and gutter areas within the pedestrian access route. Surface slopes that meet at grade breaks shall be flush.</li> </ul>			

**ACCESSIBLE PEDESTRIAN SIGNALS (PUSHBUTTONS) (PROWAG R306)**


Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
    	<ul style="list-style-type: none"> <li>• Each crosswalk with pedestrian signal indication shall have an accessible pedestrian signal which includes audible and vibrotactile indications of the WALK interval. Where a pedestrian pushbutton is provided, it shall be integrated into the accessible pedestrian signal. <b>← ON HOLD waiting for MoDOT Specs and APL March 2014</b></li> <li>• Accessible pedestrian signals shall be located so that the vibrotactile feature can be contacted from the level landing serving a curb ramp, if provided, or from a clear floor or ground space that is in line with the crosswalk line adjacent to the vehicle stop line.</li> <li>• Accessible pedestrian pushbuttons shall be located within a reach range complying with PROWAG 2005 R404.</li> <li>• A clear floor or ground space shall be provided at the pushbutton and shall connect to or overlap the pedestrian access route.</li> <li>• <b>Roadway Grade Exception:</b> Clear spaces required at accessible pedestrian signals and pedestrian pushbuttons and at other accessible elements are permitted to have a running slope or cross slope consistent with the grade of the adjacent pedestrian access route.</li> <li>• Pedestrian signals shall comply with PROWAG 2005 R306.             <ul style="list-style-type: none"> <li>- Pushbuttons are a minimum 2 inches across in one dimension, raised (not recessed), contrast visually with the housing or mounting, and have a maximum force of 5 pounds to activate operable parts.</li> <li>- The control face of the pushbuttons is installed parallel to the direction of the crosswalk it serves.</li> <li>- The location of pushbuttons for new construction are within a longitudinal distance of 5 feet maximum from the crosswalk line, and 30 inches minimum to 6 feet maximum from the curb line.</li> <li>- For audible pedestrian signal devices only, pushbuttons are a minimum 10 feet apart at crossings and a minimum 5 feet apart at islands or medians. This minimum distance may be waived for audible pushbuttons in medians and islands with the use of voice commands.</li> <li>- Pushbuttons are located no higher than 42 inches from the ground and within 10 inch reach from a level paved landing with minimum dimensions of 48 inches x 30 inches positioned for a parallel approach to the pushbutton. For a forward approach space (30 x 48 inches) the allowed reach range is 0 inches.</li> <li>- Where pushbuttons for the visually impaired are installed, tactile signs are to be provided that meet ADA requirements.</li> </ul> </li> </ul>			

**PEDESTRIAN STREET CROSSINGS (PROWAG R305)**

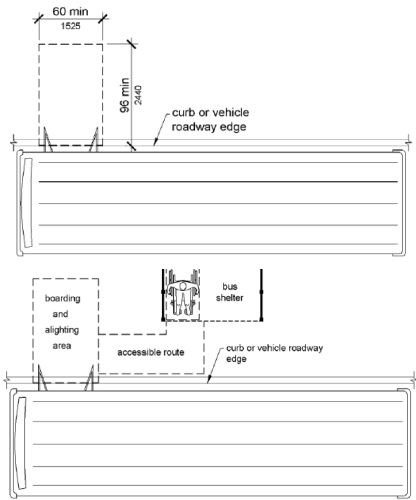
Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
 	<ul style="list-style-type: none"> <li>• Crosswalks shall contain a pedestrian access route that connects to departure and arrival walkways through any median or pedestrian refuge island.</li> <li>• Marked crosswalks shall be 6 feet wide minimum.</li> <li>• The grade of the pedestrian access route is permitted to equal the general grade established for the adjacent street or highway, except that where pedestrian access routes are contained within pedestrian street crossings a maximum grade of 5 percent is required.</li> <li>• A 5 percent maximum cross slope is specified for pedestrian access routes contained within pedestrian street crossings without yield or stop control.</li> <li>• Crossings with Stop Control: The cross slope shall be 2 percent maximum.</li> <li>• The cross slope at midblock crossings shall be permitted to be warped to meet street or highway grade.</li> <li>• The running slope shall be 5 percent maximum, measured parallel to the direction of pedestrian travel in the crosswalk.</li> <li>• Where pedestrian signals are provided at pedestrian street crossings, they shall include accessible pedestrian signals and pedestrian pushbuttons complying with sections 4E.08 through 4E.13 of the MUTCD. Operable parts shall comply with R403. (2011 PROWAG R209.1) <b>← ON HOLD waiting for MoDOT Specs and APL March 2014</b></li> <li>• Crosswalk pavement marking is 6 inches wide white.</li> <li>• Stop bar is at minimum 4 feet from the crosswalk.</li> <li>• Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides.</li> <li>• Gratings, access covers, and other appurtenances shall not be located on curb ramps, landings, blended transitions, and gutters within the pedestrian access route.</li> <li>• Grade breaks shall not be permitted on the surface of curb ramps, blended transitions, landings, and gutter areas within the pedestrian access route. Surface slopes that meet at grade breaks shall be flush.</li> <li>• Beyond the curb face, a clear space of 4.0 feet minimum by 4.0 feet minimum shall be provided within the width of the crosswalk and wholly outside the parallel vehicle travel lane.</li> </ul>			



**ALTERNATE CIRCULATION PATH (PROWAG R302)**

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
	<ul style="list-style-type: none"> <li>• Alternate circulation paths shall contain a pedestrian access route.</li> <li>• To the maximum extent feasible, the alternate circulation path shall be provided on the same side of the street as the disrupted route.</li> <li>• Where the alternate circulation path is exposed to adjacent construction, excavation drop-offs, traffic, or other hazards, it shall be protected with a pedestrian barricade or channelizing device complying with MUTCD 6F-58, 6F-63, and 6F-66.</li> <li>• Pedestrian barricades and channelizing devices shall be continuous, stable, and non-flexible and shall consist of a wall, fence, or enclosures specified in section 6F-58, 6F-63, and 6F-66 of the MUTCD (incorporated by reference; see PROWAG 2005 R104.2.4).</li> <li>• A detectable continuous bottom edge shall be provided 2 inches maximum above the ground or walkway surface.</li> <li>• Devices shall provide a continuous surface or upper rail at 3.0 feet minimum above the ground or walkway surface.</li> <li>• Support members shall not protrude into the alternate circulation path.</li> </ul>			

**BUS BOARDING AND ALIGHTING AREAS (PROWAG R410)**

Figures/Examples	Requirements <sup>1</sup>	YES	NO	NA
	<ul style="list-style-type: none"> <li>• Bus stop boarding and alighting areas shall have a firm, stable surface.</li> <li>• Bus stop boarding and alighting areas shall provide a clear length of 8 feet minimum, measured perpendicular to the curb or vehicle roadway edge, and a clear width of 5 feet minimum, measured parallel to the vehicle roadway.</li> <li>• Bus stop boarding and alighting areas shall be connected to streets, sidewalks, or pedestrian paths by an accessible route.</li> <li>• Parallel to the roadway, the slope of the bus stop boarding and alighting area shall be the same as the roadway, to the maximum extent practicable. Perpendicular to the roadway, the slope of the bus stop boarding and alighting area shall not be steeper than 2 percent.</li> <li>• Bus shelters shall provide a minimum 30 inch by 48 inch clear floor or ground space entirely within the shelter.</li> <li>• Bus shelters shall be connected by an accessible route to a boarding and alighting area.</li> </ul>			

<sup>1</sup> Any “NO” answer means that location is ADA non-compliant and needs to be corrected before final acceptance of the work, except as follows. Although exceptions listed in the above requirements may not meet MoDOT current policy standards, work that does meet the minimum ADA standards will be accepted as ADA compliant. Where it is technically infeasible to correct deficiencies as part of the current work, those locations will be labeled as non-compliant and marked “NO”. These items will be added to the Transition Plan Inventory for correction at a later date. (Guidance is provided in ADA documents and in the EPG on what may be considered as technically infeasible.)

<sup>2</sup> A MoDOT requirement.

**Unless otherwise noted, all notes on this form are direct ADA requirements as published in either the PROWAG dated November 23, 2005 or ADA/ABA Standards from 2010.**

All exceptions and technically infeasible locations should be discussed with the project manager and/or area engineer prior to acceptance of the work. All exceptions and technically infeasible locations will need to be thoroughly documented by the engineer, and that documentation will be attached to this form and retained as part of the final acceptance records.

All slope and grade measurements for ADA compliance will be made using a calibrated 2 foot long digital level.

**US Access Board PROWAG**

**R202.3.1 Prohibited Reduction in Required Access.** An alteration shall not decrease or have the effect of decreasing the accessibility of a facility or an accessible connection to an adjacent building or site below the requirements for new construction in effect at the time of the alteration.

<b>Inspector Name:</b> _____ <b>Inspector Signature:</b> _____	<b>Date:</b> _____
<b>Resident Engineer or Area Engineer Name:</b> _____ <b>Resident Engineer or Area Engineer Signature:</b> _____	<b>Date:</b> _____
<b>Distribution:</b> <input type="checkbox"/> <b>Project Office</b> <input type="checkbox"/> <b>District Permit Office</b>	



# **SAMPLE**

## **ADA EXCEPTIONS DOCUMENTATION**

Job No. \_\_\_\_\_ Route \_\_\_\_\_ County \_\_\_\_\_ Location \_\_\_\_\_

<u>Item</u>	<u>Location</u>	<u>Standard</u>	<u>As Built</u>	<u>Discussion</u>
Sidewalk Width	Third Street Sta 3+00 to 7+00 RT	5' wide	Exist 3' wide	Required 5' x 5' Passing Space added at 5+00
Curb Ramp Grade	SE Quad of Main & First	8.33%	11.2%	As-built Curb Ramp is 16.0' long
Parallel Ramp Landing running grade (turning space)	Sta 35+20 to 35+25 Rt Rte 14	2.00%	2.6%	Landing running grade matches existing roadway grade
Sidewalk Grade	Sta 23+45 to 23+52	5.0%	8.4%	Match existing floor at two exist doorways, Straight grade between fixed elevations

Inspector Name: _____	
Inspector Signature: _____	<b>Date:</b>
Resident Engineer or Area Engineer Name: _____	
Resident Engineer or Area Engineer Signature: _____	<b>Date:</b>
<b>Distribution:</b> <input type="checkbox"/> Project Office <input type="checkbox"/> District Permit Office	