









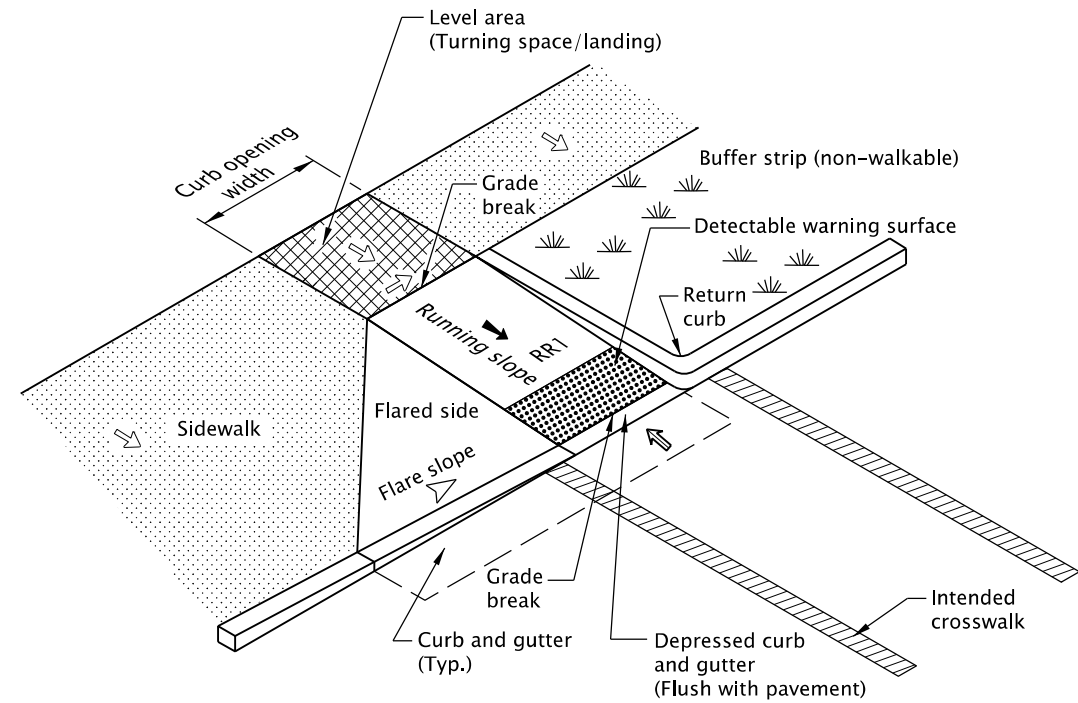


CURB RAMP INDEX

STD. DWG. NO.	STD. DWG. TITLE
RD900	Curb Ramp Components And Legend
RD901	Curb Ramp Legend And Corner Identification
RD902	Detectable Warning Surface Details
RD904	Detectable Warning Surface Placement For Curb Ramps
RD905	Detectable Warning Surface Placement For Directional Curbs
RD906	Detectable Warning Surface Placement For Accessible Route Island
RD908	Detectable Warning Surface Placement
RD910, RD912	Perpendicular Curb Ramp
RD913	Perpendicular Curb Ramp With Closure
RD916	Perpendicular Curb Ramp Single Ramp
RD920	Parallel Curb Ramp
RD922	Parallel Curb Ramp Single Ramp
RD930, RD932	Combination Curb Ramp
RD938	Combination Curb Ramp Single Ramp
RD940	Blended Transition Curb Ramp Single Ramp
RD950 & RD952	End Of Walk Curb Ramp
RD960	Unique Curb Ramp

LEGEND:

-  Marked or intended crossing traversable location
-  Sidewalk or other traversable surface
-  Detectable warning surface (DWS)
-  Level area (Turning space/landing)
-  Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
-  Running slope.
(Max. 4.9% finished surface slope)
-  Running slope 7.5% max.
(Max. 8.3% finished surface slope)
-  Counter slope 4.0% max, ascending or descending
(Max. 5.0% finished surface slope)
Slope as required for drainage
-  Flare slope
(Max. 10.0% finished surface slope)
-  4'x4' clear space
- RR1 Ramp Run Position 1



TYPICAL CURB RAMP SYSTEM COMPONENTS
(PERPENDICULAR TYPE SHOWN)

CALC. BOOK NO. <u> N/A </u>		SDR DATE <u> 20-JULY-2020 </u>	
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications			
<p><i>The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.</i></p>		OREGON STANDARD DRAWINGS	
		CURB RAMP COMPONENTS AND LEGEND	
		2021	
DATE		REVISION	DESCRIPTION
07-2020		DRAWING CREATED	

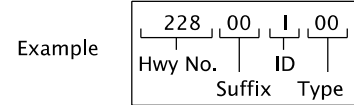
Linear Referencing Method (LRM) Number

Use ODOT TransGIS, turn on layers Roadside > ADA corners and ADA Ramps to see LRM and corner position number of curb ramps inventoried. Select "Identify Features" and click on Map Position to see Information.

This is a code to identify the intersection on a specific state highway.

There is a four part format for the code: Highway Number; Highway Suffix; Roadway ID, Mileage Type.

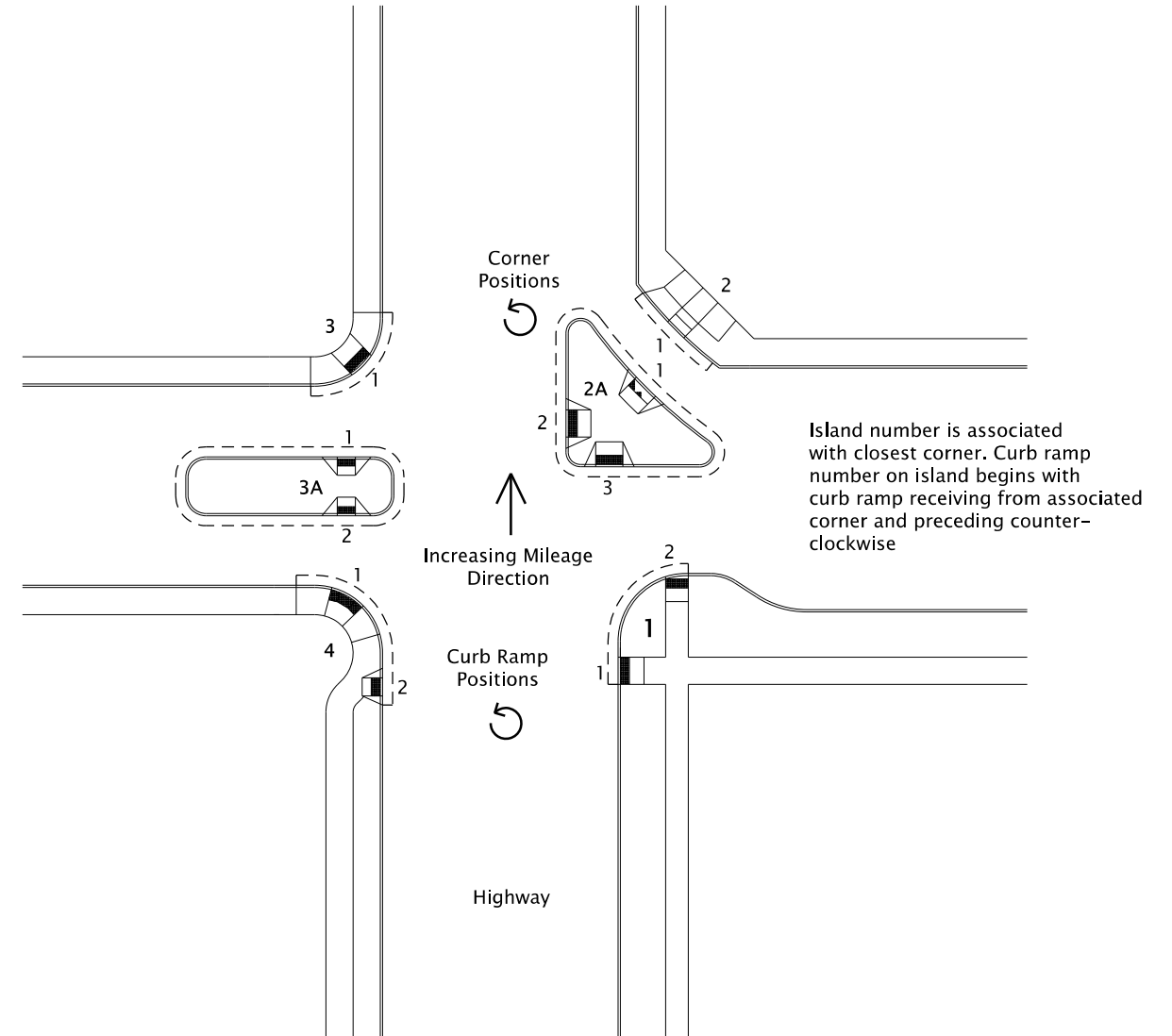
- 1) The Highway Number is a 3 digit number (not the route number) assigned to all state highways by ODOT. Valid numbers are 001-493.
- 2) Highway Suffix is a letter format assigned to frontage roads and connections to identify the unique connection, for example AA or AB. Use the Identify Features tool on the ODOT Trans GIS Road Network layer > Hwy Network-Colored layer for visual reference. Select "Identify Features" and click on Map Position to see Information. If the intersection is not located on a connection use 00 for the code.
- 3) Roadway ID is a one letter code used to identify alignment. There are two possible letter codes; "I" for increasing mile point direction and "D" for decreasing mile point direction. For most highways, the "I" direction is south and east. Note I-5 does not follow this rule. Generally "I" will be used. When there is a separated highway there will be an "I" roadway and a "D" roadway. Check the Digital Video Log to be sure of the direction.
- 4) Mileage Type is used when there are multiple locations of the same mile point on a section of highway. Overlay lapping mileage is listed as "z" mileage.



Milepoint of an intersection is based on the mile point of the center of the intersection listed to the hundredth of a mile.

Corner Position is based on traveling in the increasing mile point direction, beginning with the first corner on the right and proceeding counter-clockwise around the intersection, numbering consecutive 1 through the end of corners. An "A" is added to the number for an island. For example an island between corner positions 1 and 2 and is closer to corner 2 has a corner position number of 2A (See corner position and curb ramp position diagram).

Curb Ramp Position is a number given to each curb ramp beginning with Corner Position 1. The first curb ramp encountered in the Increasing mile point direction is number ramp 1. Then proceeds counter-clockwise around the corner, numbering in consecutive order. Proceed following the pedestrian route and in Corner Position Number order (see corner position and curb ramp position diagram).



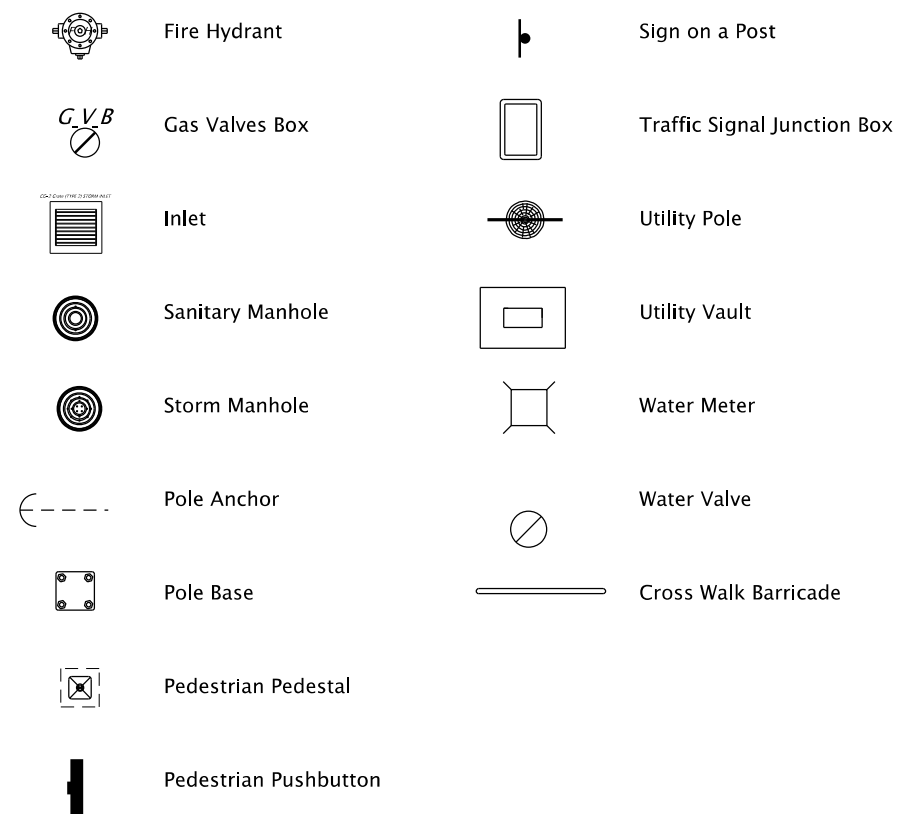
CORNER POSITION AND CURB RAMP POSITION DIAGRAM

(See ODOT Exhibit A for additional ramp and ramp run numbering conventions.)

STANDARD ABBREVIATION FOR CURB RAMP DETAILS

- FG = Finish Grade (Elevation ft.) i.e. FG XXX.XX'
- TFC = Top Face of Curb (Elevation ft.)
- TBC = Top Back of Curb (Elevation ft.)
- BFC = Bottom Face of Curb (Elevation ft.)
- gtr. = Gutter (Elevation ft.)
- GS = Gutter Slope (%), i.e. X.X%
- E = Curb Exposure (Inch), i.e. X"
- CS = Counter Slope on gutter pan (%)
- RRN = Ramp Run Number, i.e. RRX
- cl.sp. = Clear Space
- TS = Turning Space
- XS = Cross Slope
- LA = Level Area
- DWS = Detectable Warning Surface
- PAR = Pedestrian Access Route

LEGEND:



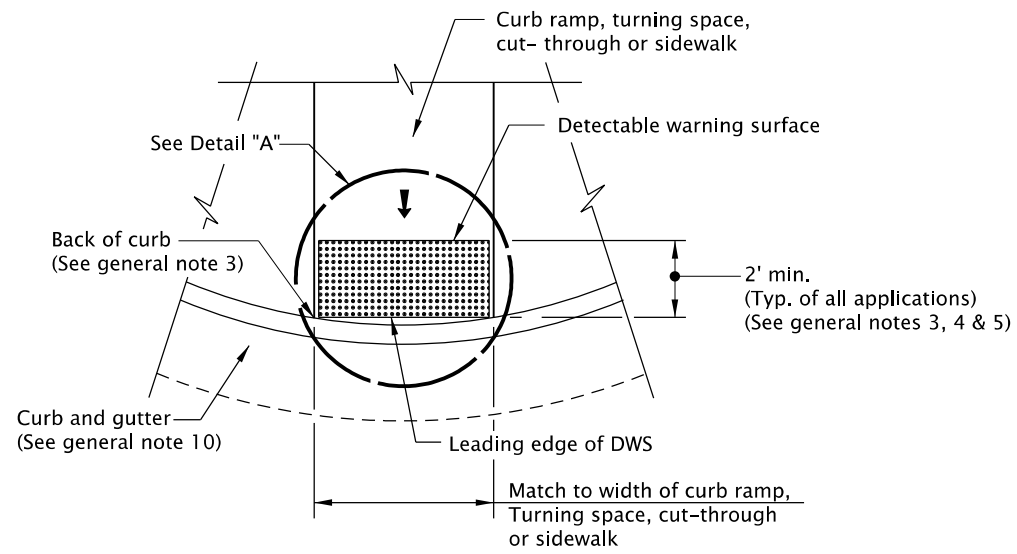
CALC. BOOK NO. N/A		SDR DATE 20-JULY-2020	
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications			
<p><i>The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.</i></p>		OREGON STANDARD DRAWINGS	
		CURB RAMP LEGEND AND CORNER IDENTIFICATION	
		2021	
DATE	REVISION	DESCRIPTION	
07-2020	DRAWING CREATED		

rd901.dgn 20-JUL-2020

RD901

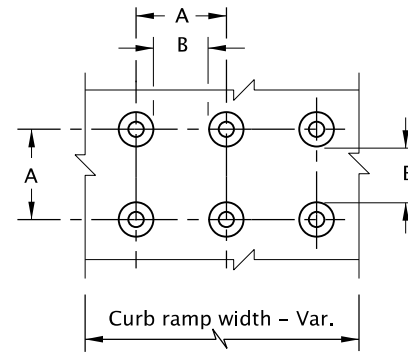
rd902.dgn 20-JUL-2020

RD902

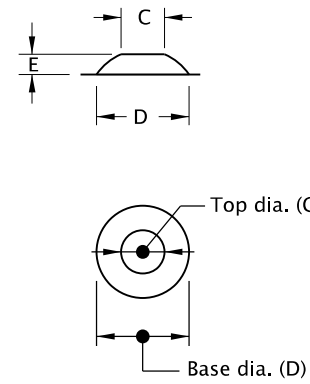


DETECTABLE WARNING SURFACE DETAIL

	A	B	C	D	E
MIN.	1.60"	0.65"	0.45"	0.90"	0.20"
MAX.	2.40"	--	0.91"	1.40"	0.20"

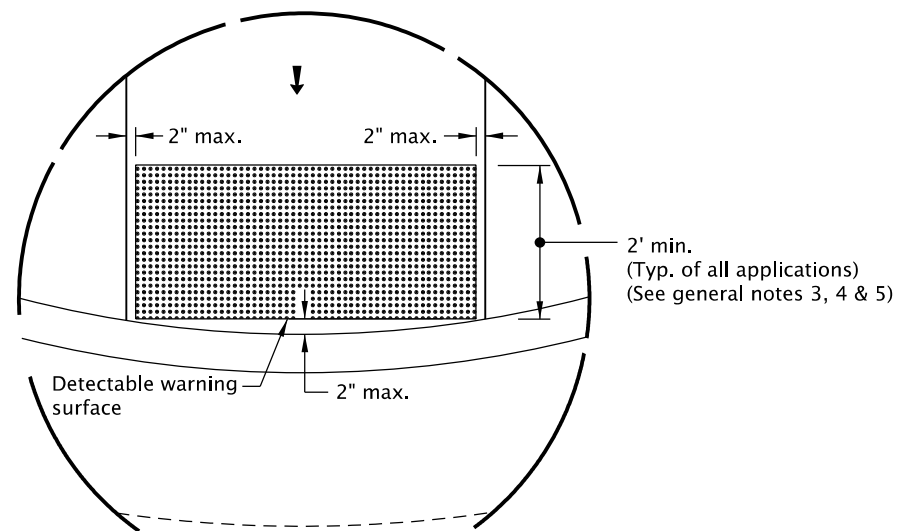


TRUNCATED DOME SPACING



TRUNCATED DOME

TRUNCATED DOME DETAILS






DETAIL "A"

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Detectable warning surface details & locations are based on applicable ODOT Standards.
2. See project plans for details not shown.
See Std. Dwgs. RD700 & RD701 for curbs.
3. The detectable warning surface shall extend the full width of the curb ramp opening, shared use path, blended transition, turning space, or other roadway entrance as applicable. A gap of up to 2 inches on each side of the detectable warning surface is permitted (measured at the leading edge of the detectable warning surface panel).
4. Detectable warning surface shall be placed at the back of curb for a minimum depth of 2 ft. in the direction of pedestrian travel at curb ramps that are adjacent to traffic. Detectable warning surface may be radial or rectangular, but must comply with the truncated dome size and spacing standards. Detectable warning surface may be cut to meet necessary shape as shown in plans. Detectable warning surface across a grade break is prohibited.
5. Color to be safety yellow if no color specified in construction note. Alternative colors require a design exception on or along state highways.
6. Detectable warning surface shall be used in the following locations:
 - a) Curb ramps at street crossings.
 - b) Crossing islands (Accessible Route Islands).
 - c) Rail crossings.
7. Where public transportation stations (rail, bus, etc.) use platform boarding, detectable warning surface shall be placed along the full edge length of the station, when not protected by platform screens or guards, (see Std. Dwg. RD908).
8. Detectable warning surface shall not be used on the following locations:
 - a) End of sidewalk transitions that are not at a crosswalk, (see Std. Dwgs. RD950, RD952 & RD960).
 - b) Driveways, unless constructed with curb return or are signaled.
 - c) Parking lots, access aisles and passenger loading zones where curb ramp does not lead to vehicular way.
9. Where no curb is present, the detectable warning surface shall be placed at the edge of the roadway.
10. On or along state highways, curb and gutter is required at curb ramps.

LEGEND:

-  Detectable warning surface
-  Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
-  Running slope 7.5% max.
(Max. 8.3% finished surface slope)

CALC. BOOK NO. N/A

SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

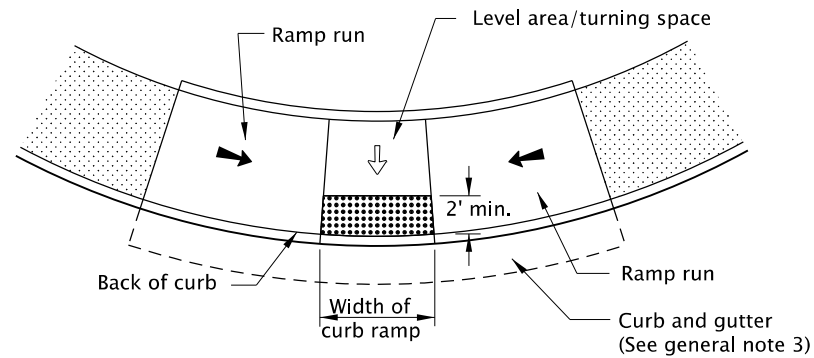
**OREGON STANDARD DRAWINGS
DETECTABLE WARNING SURFACE
DETAILS**

2021

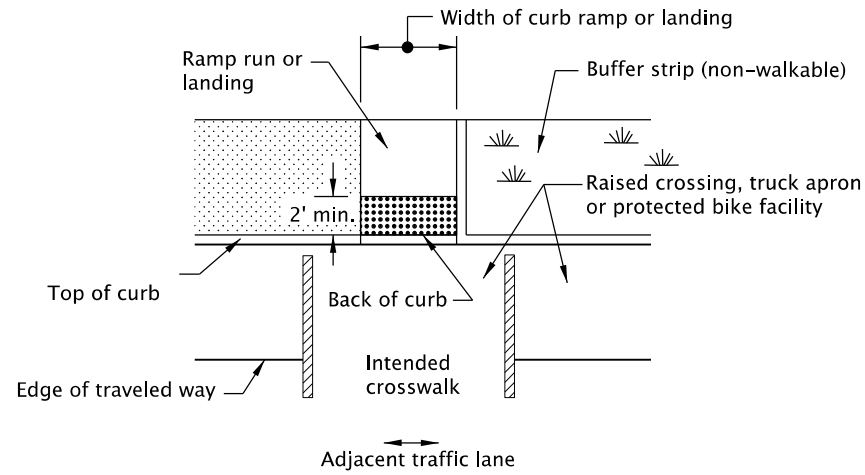
DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

rd904.dgn 20-JUL-2020



PARALLEL CURB RAMP








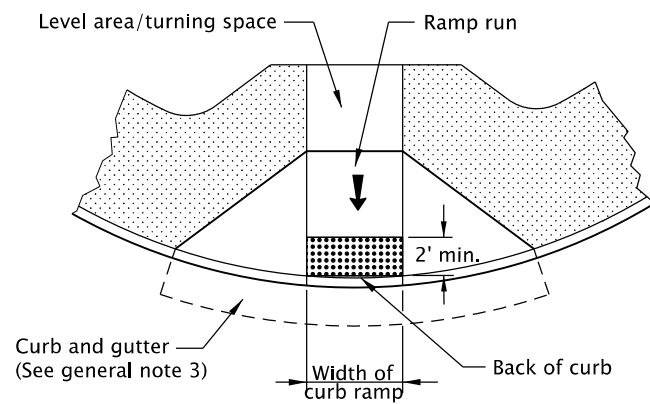
RAISED CROSSING, TRUCK APRON OR PROTECTED BIKE FACILITY

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

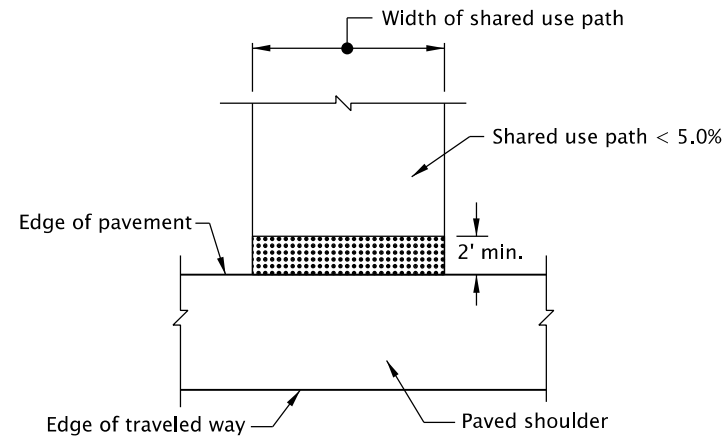
1. Detectable warning surface details & locations are based on applicable ODOT Standards.
2. See project plans for details not shown.
See Std. Dwgs. RD700 & RD701 for curbs.
See Std. Dwg. RD902 for detectable warning surface installation details.
3. On or along state highways, curb and gutter is required at curb ramps.
4. Detectable warning surface placement for perpendicular ramps vary as shown.

LEGEND:

-  Marked or intended crossing location
-  Sidewalk
-  Detectable warning surface
-  Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
-  Running slope 7.5% max.
(Max. 8.3% finished surface slope)



**PERPENDICULAR CURB RAMP
GRADE BREAK IN FRONT OF CURB**



SHARED-USE PATH CONNECTION

CALC. BOOK NO. N/A

SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

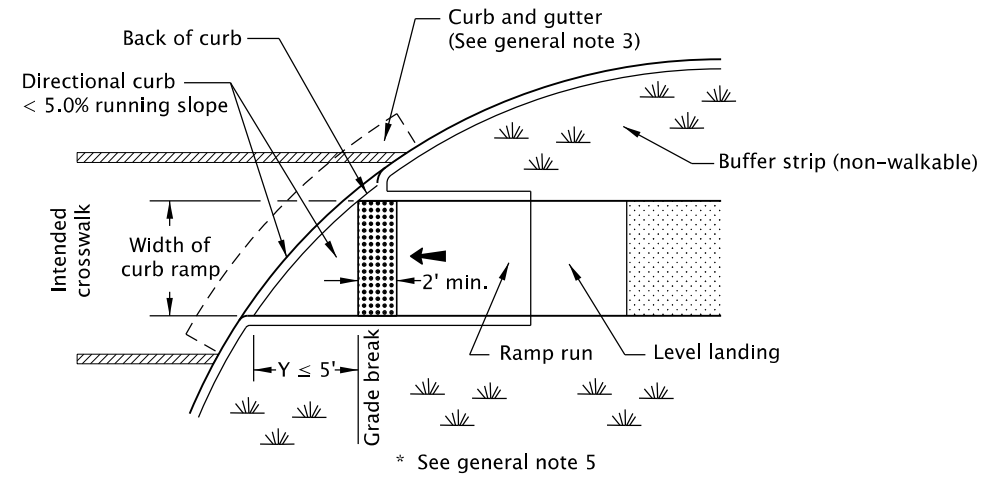
**OREGON STANDARD DRAWINGS
DETECTABLE WARNING SURFACE
PLACEMENT FOR CURB RAMPS**

2021

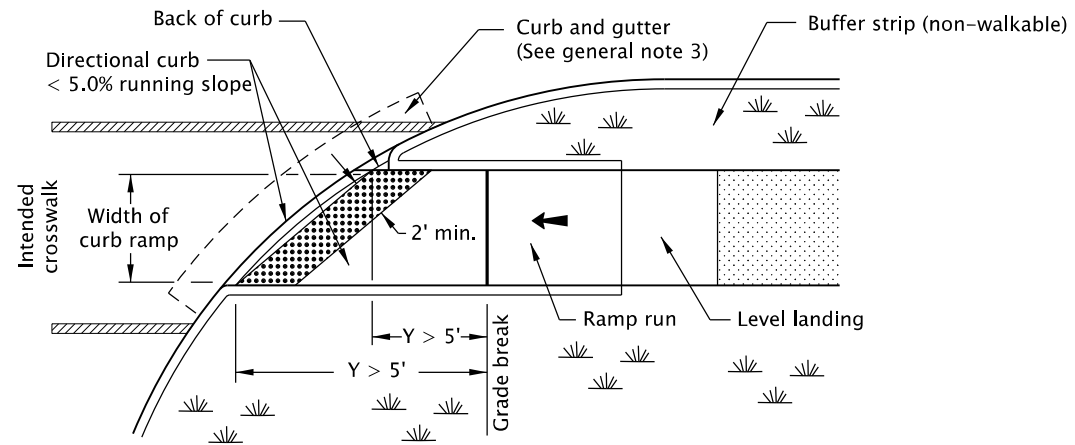
DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

RD904

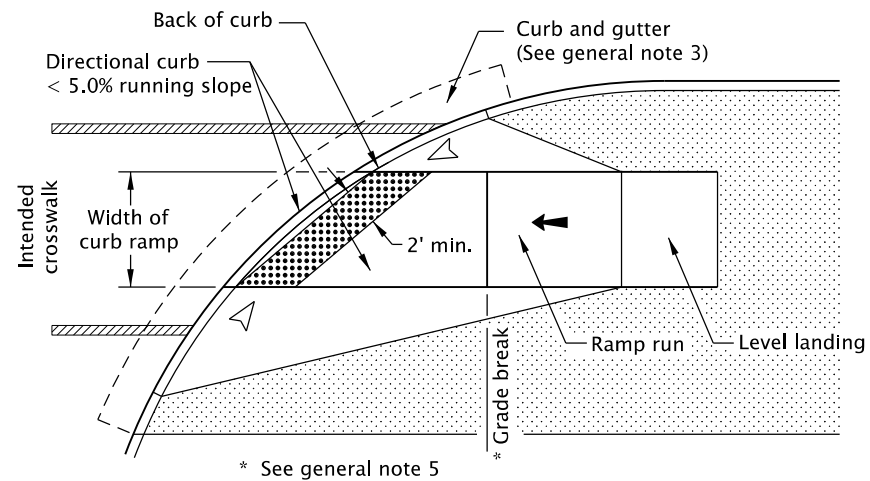
rd905.dgn 20-JUL-2020



**CURB RAMP CROSSING
GRADE BREAK ≤ 5 FT. FROM BACK OF CURB**



**CURB RAMP CROSSING
GRADE BREAK > 5 FT. FROM BACK OF CURB**



**CURB RAMP CROSSING
DIRECTIONAL CURB WITH FLARED CONSTRUCTION**

RD905

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Detectable warning surface details & locations are based on applicable ODOT Standards.
2. See project plans for details not shown.
See Std. Dwgs. RD700 & RD701 for curbs.
See Std. Dwg. RD902 for detectable warning surface installation details.
3. On or along state highways, curb and gutter is required at curb ramps.
4. Detectable warning surface placement for perpendicular ramps vary as shown.
5. Detectable warning surface placement across the grade break is prohibited.

LEGEND:

- Marked or intended crossing location
- Sidewalk
- Detectable warning surface
- Running slope 7.5% max.
(Max. 8.3% finished surface slope)
- Flare slope
(Max. 10.0% finished surface slope)

CALC. BOOK NO. N/A

SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

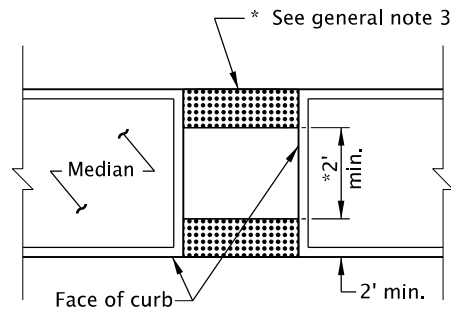
**OREGON STANDARD DRAWINGS
DETECTABLE WARNING SURFACE
PLACEMENT FOR
DIRECTIONAL CURBS**

2021

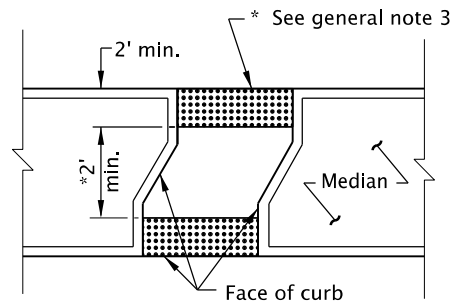
DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

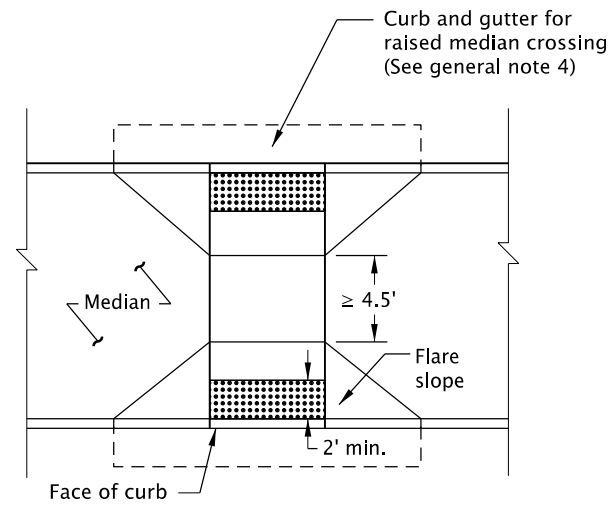
rd906.dgn 20-JUL-2020



* Omit detectable warning surfaces if less than 2'



CUT-THROUGH
(Asph. conc. surface shown)




RAISED MEDIAN
(P.C. conc. surface shown)

MEDIAN CROSSING

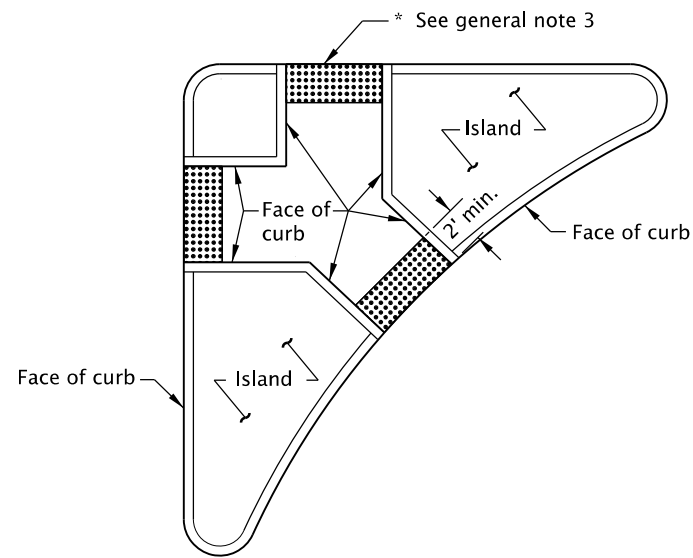
GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Detectable warning surface details & locations are based on applicable ODOT Standards.
2. See project plans for details not shown.
See Std. Dwgs. RD700 & RD701 for curbs.
See Std. Dwgs. RD710 & RD711 for accessible route island.
See Std. Dwg. RD902 for detectable warning surface installation details.
3. Detectable warning surfaces shall be separated by a 2.0 ft minimum length of walkway without detectable warnings. Where the island has no curb, the detectable warning surface shall be placed at the edge of roadway.
4. On or along state highways, curb and gutter is required at curb ramps.
5. Details intended for pedestrian route only. For protected bike lanes on multi-use paths, see project plans for specific details.

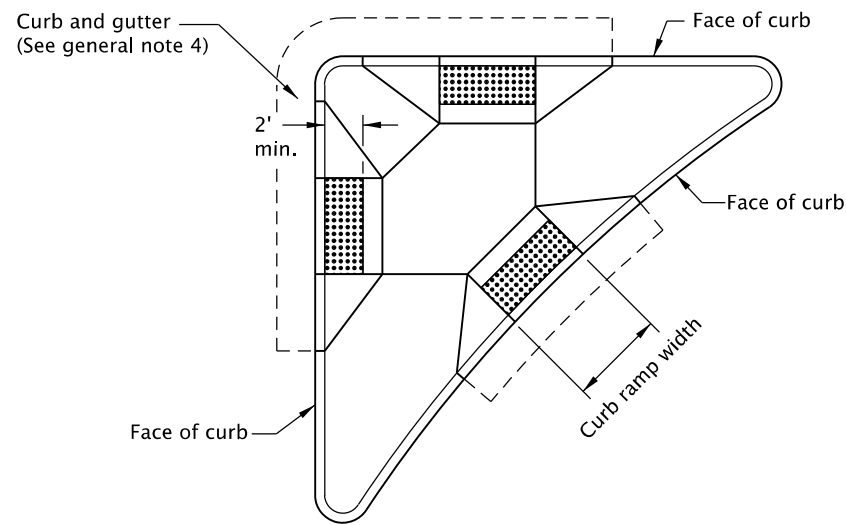
LEGEND:

 Detectable warning surface

* Omit detectable warning surfaces if less than 2'



CUT-THROUGH ISLAND
(Asph. conc. surface shown)



RAISED ISLAND
(P.C. conc. surface shown)

RIGHT TURN CHANNELIZATION ISLAND

CALC. BOOK NO. N/A SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

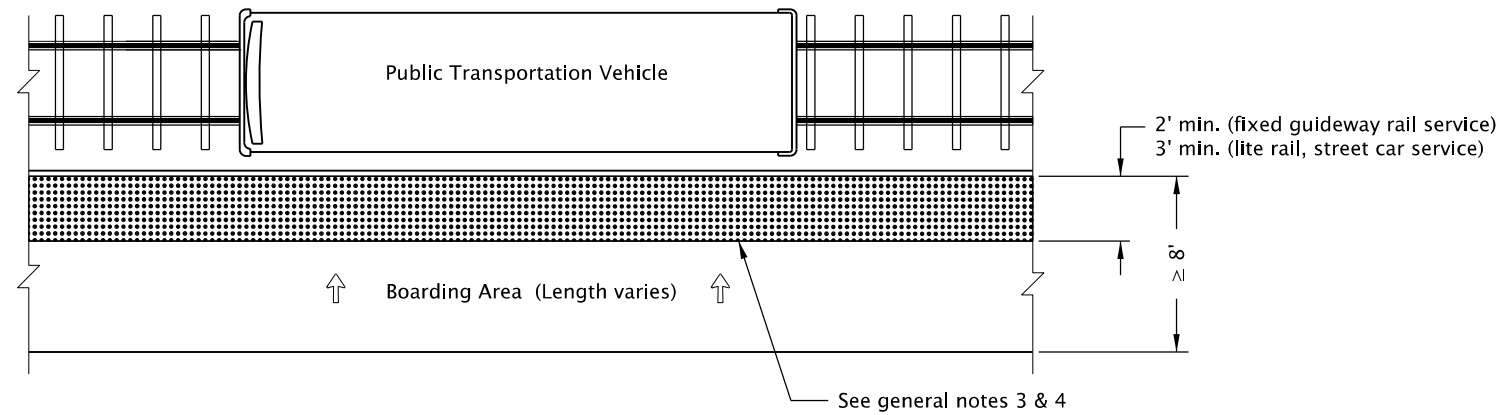
**OREGON STANDARD DRAWINGS
DETECTABLE WARNING SURFACE
PLACEMENT
FOR ACCESSIBLE ROUTE ISLAND**

2021

DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

RD906



PUBLIC TRANSPORTATION STATION
Rail or Transit Service

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

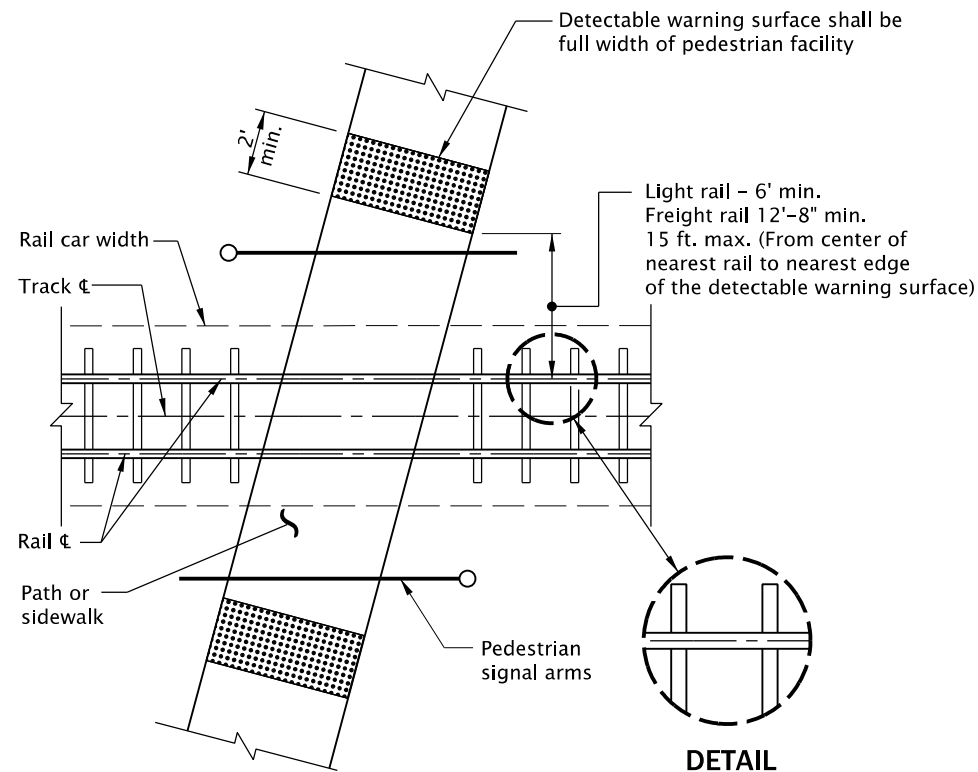
1. Detectable warning surface details & locations are based on applicable ODOT Standards.
2. See project plans for details not shown.
See Std. Dwg. RD902 for detectable warning surface installation details.
3. Place detectable warning surface along the full length of the rail station, when not protected by screens or guards on raised platforms, sidewalk, and street level boarding areas.
4. Place detectable warning surface along the full length of the transit station, when not protected by screens or guards on raised platforms and sidewalk boarding areas.

LEGEND:

- Detectable warning surface
- Cross slope 1.5% max.
(Max. 2.0% finished surface slope)

NOTES:

- a. Detectable warning surfaces shall be outside of crossing arms where they exist.
- b. Pedestrian rail crossings are generally perpendicular to the rail. Skew shown for minimum distance of detectable warning surface.



AT-GRADE RAIL CROSSING

CALC. BOOK NO. N/A	SDR DATE 20-JULY-2020
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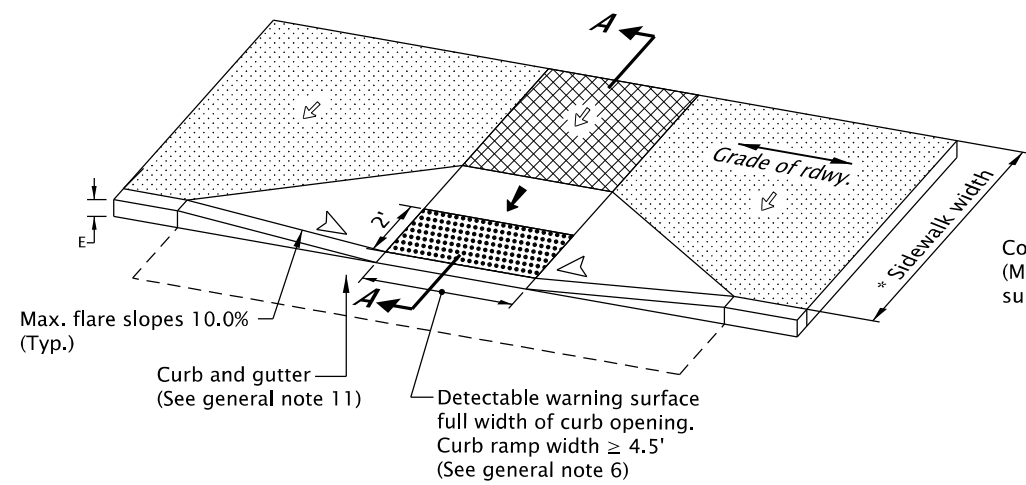
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS
DETECTABLE WARNING SURFACE PLACEMENT

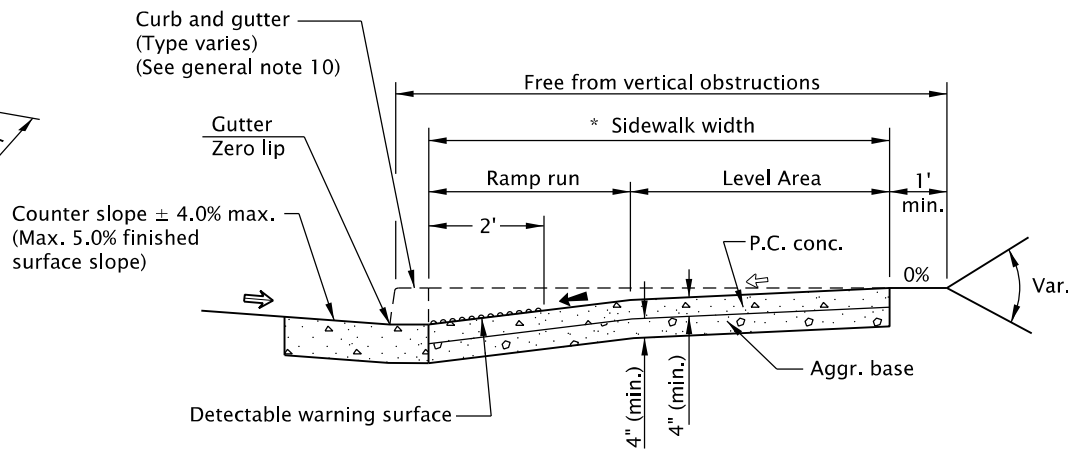
2021	
DATE	REVISION DESCRIPTION
07-2020	DRAWING CREATED

rd910.dgn 20-JUL-2020



PERPENDICULAR CURB RAMP DETAIL

(Use "Parallel Curb Ramp Detail" or "Combination Curb Ramp Detail" when reqd. turning space cannot be obtained)



SECTION A-A

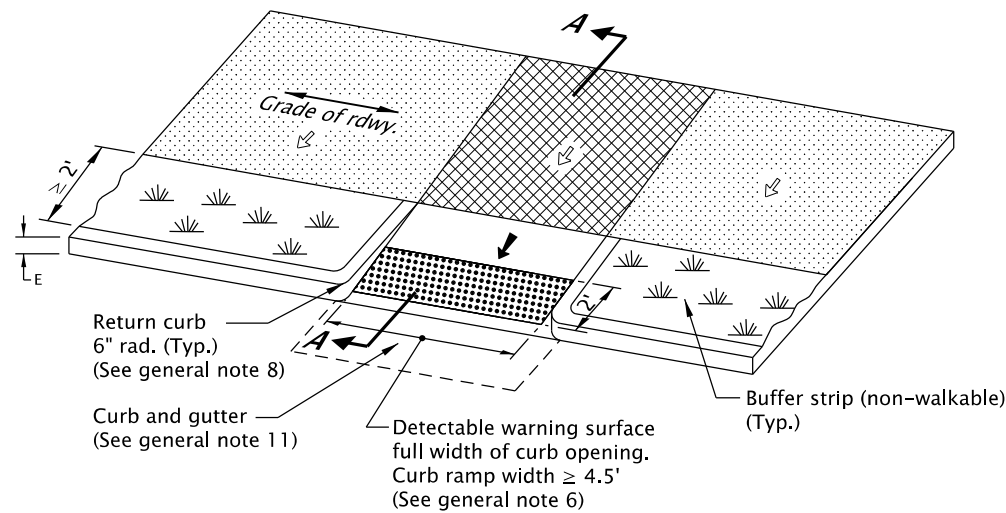
* NOTE: Minimum width of 14.25 feet sidewalk for E=7"

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

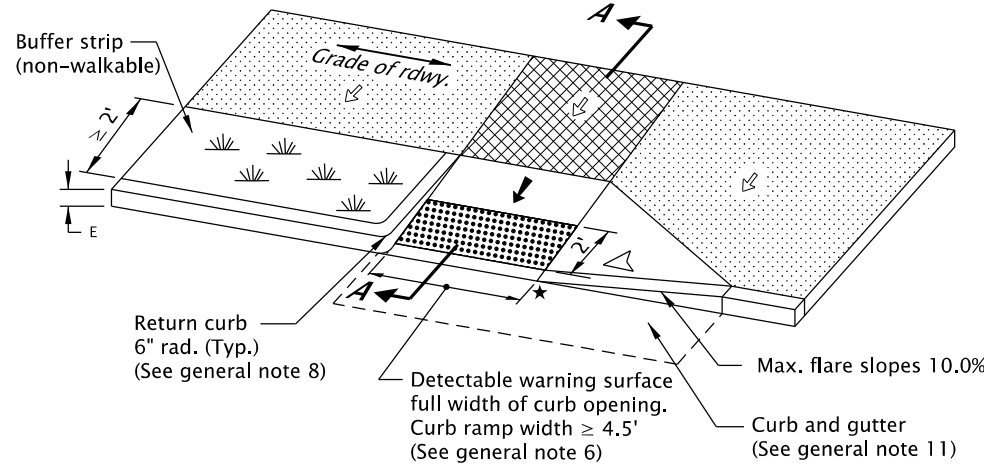
1. Curb ramp details are based on applicable ODOT Standards.
2. See Std. Dwgs. RD700 & RD701 for curbs. See Std. Dwgs. RD720 & RD721 for sidewalks. See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details. See Std. Dwgs. RD912 through RD916 for curb ramp placement options.
3. Site conditions normally require a project specific design. See project plans for details not shown.
4. Tooled dummy joints are required at all curb ramp grade break lines, (see Std. Dwg. RD722).
5. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
6. Place detectable warning surface at the back of curb for a minimum depth of 2' in the direction of pedestrian travel full width of curb ramp opening that is adjacent to traffic.
7. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
8. Return curb may be provided in lieu of flared slope only if protected from traverse travel by landscaping, see Std. Dwg. RD721. Return curb shall not reduce width of approaching sidewalk.
9. Curb ramps for shared use paths intersecting a roadway shall be full width of path, excluding flares. When a curb ramp is used to provide bicycle access from a roadway to a sidewalk, the curb ramp opening will be $\geq 8'$ wide.
10. Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
11. On or along state highways, curb and gutter is required at curb ramps.

LEGEND:

- Sidewalk
- Detectable warning surface
- Level area (Turning space/landing)
Unobstructed 4.5' x 4.5'
With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
- Running slope 7.5% max.
(Max. 8.3% finished surface slope)
- Counter slope 4.0% max. ascending or descending,
(Max. 5.0% finished surface slope)
Slope as required for drainage
- Flare slope
(Max. 10% finished surface slope)



THROUGH BUFFER STRIP



WITH SINGLE FLARE

CALC. BOOK NO. N/A SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

PERPENDICULAR CURB RAMP

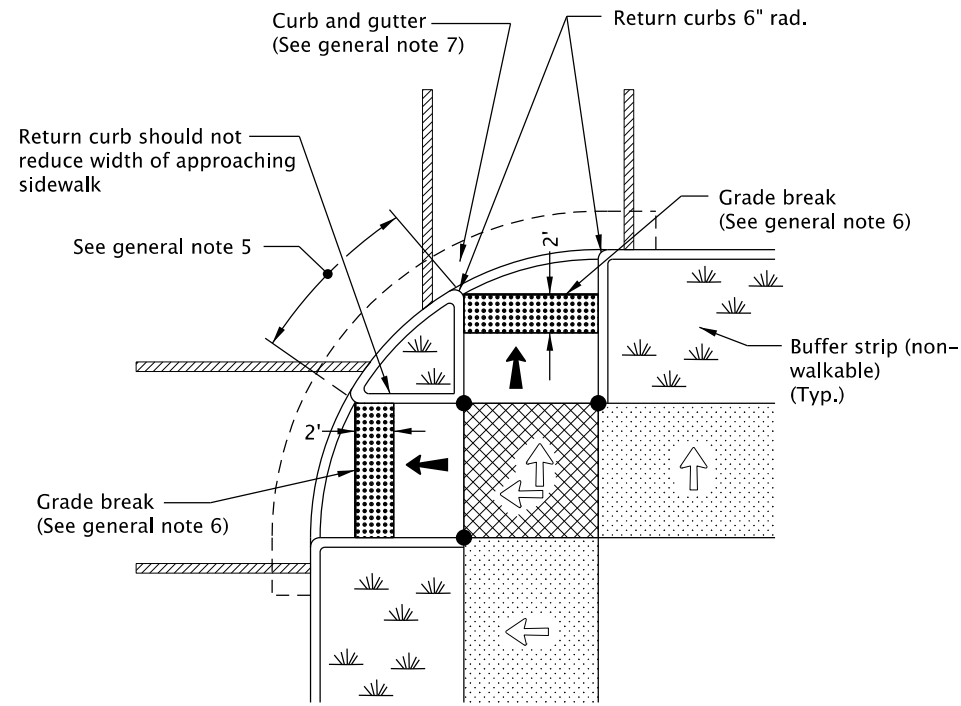
2021

DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

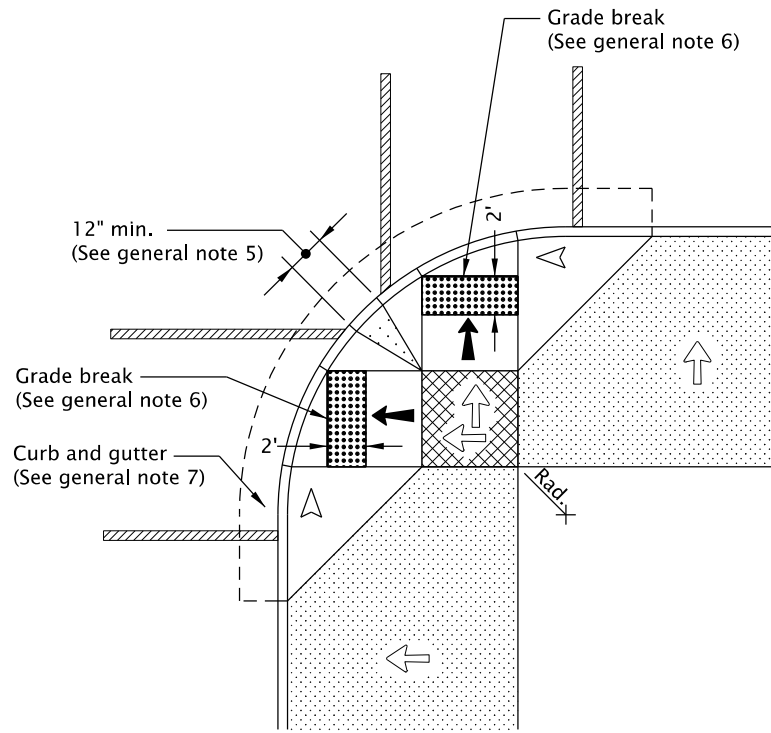
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

RD910

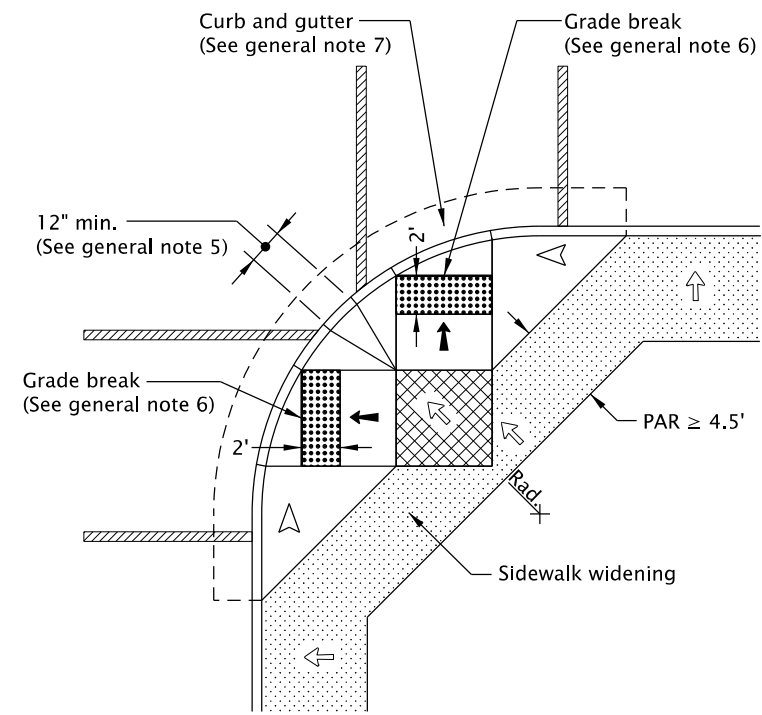
rd912.dgn 20-JUL-2020



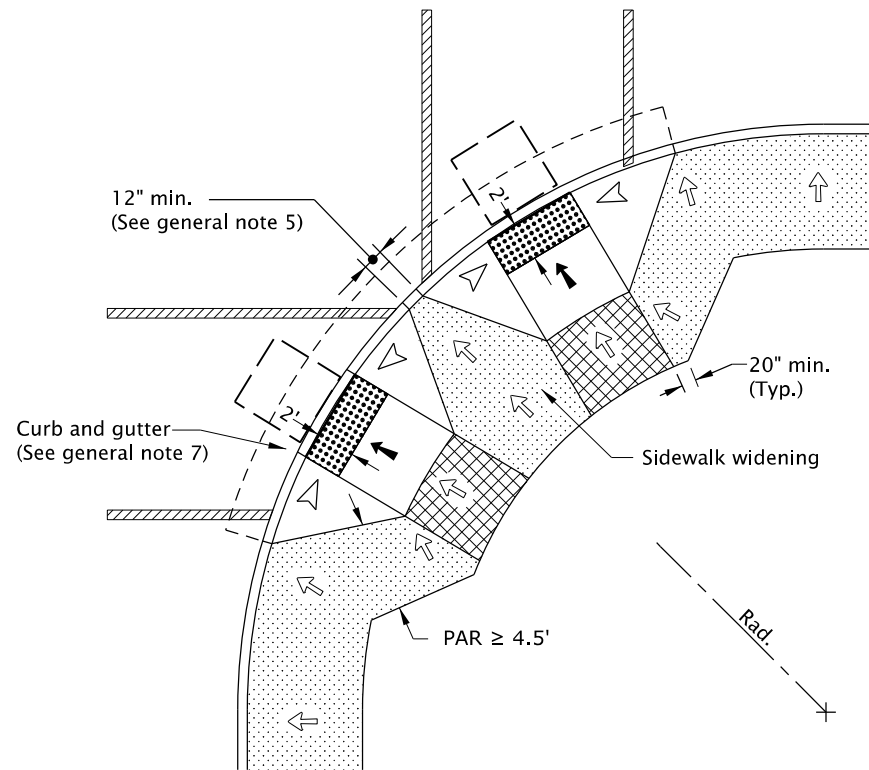
**WITH LANDSCAPED BUFFER STRIP
OPTION "PR-1"**



**FOR WIDE SIDEWALKS
OPTION "PR-2"**



**FOR NARROW SIDEWALKS
OPTION "PR-3"**



**FOR NARROW SIDEWALKS
OPTION "PR-4"**

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT Standards.
2. See project plans for details not shown.
See Std. Dwgs. RD700 & RD701 for curbs.
See Std. Dwgs. RD720 & RD721 for sidewalks.
See Std. Dwg. RD910 for perpendicular curb ramp details.
See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details.
3. Tooled dummy joints are required at all curb ramp grade break lines, (see Std. Dwg. RD722).
4. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
5. When 2 curb ramps are immediately adjacent, the curb exposure (E) between the adjacent side flares may range between 3" and full design exposure.
6. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
7. On or along state highways, curb and gutter is required at curb ramps.

LEGEND:

- Marked or intended crossing location
- Sidewalk
- Detectable warning surface
- Level area (Turning space/landing)
Unobstructed 4.5' x 4.5'
With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
- Running slope 7.5% max.
(Max. 8.3% finished surface slope)
- Flare slope
(Max. 10% finished surface slope)
- Zero curb exposure
- 4' x 4' clear space
- PAR Pedestrian Access Route

CALC. BOOK NO. N/A

SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

**OREGON STANDARD DRAWINGS
PERPENDICULAR CURB RAMP**

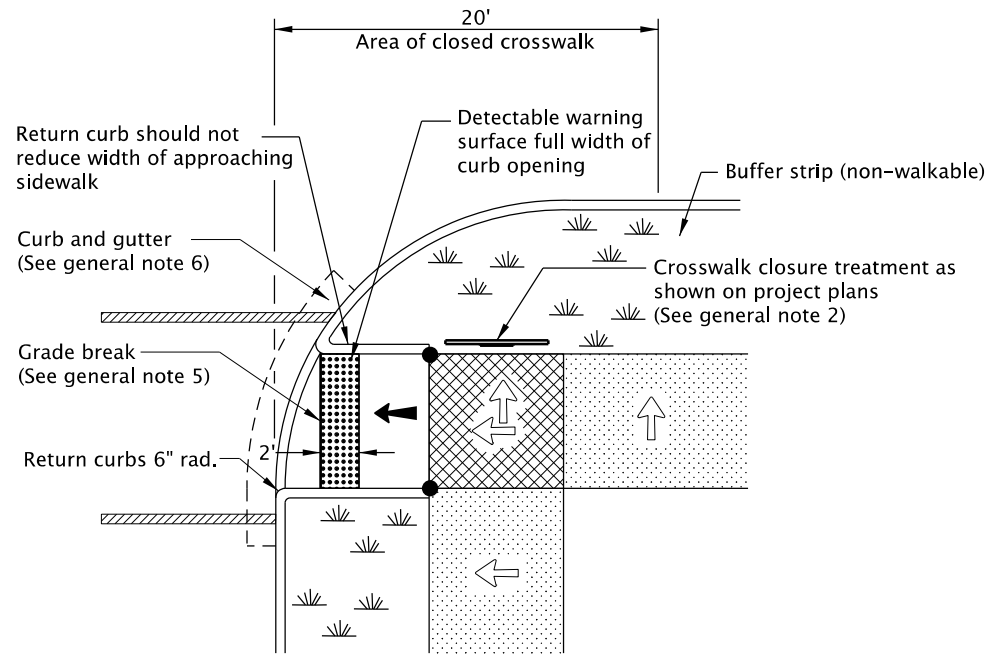
2021

DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

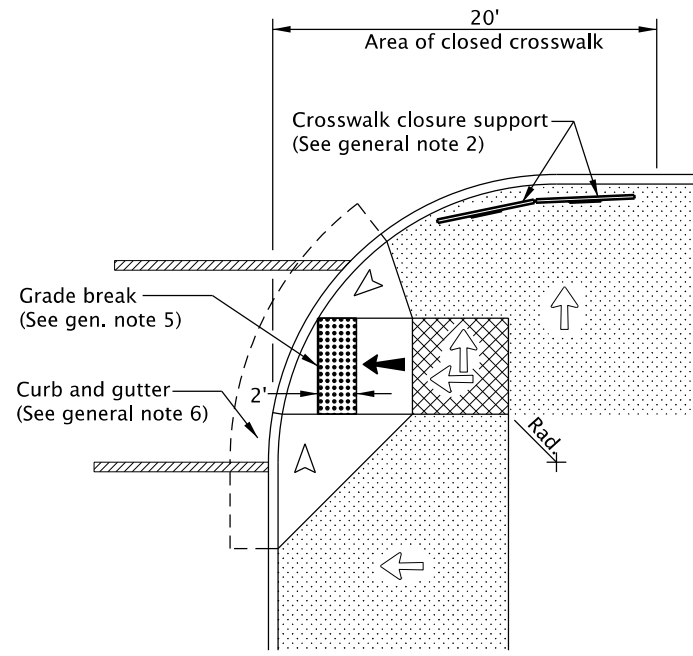
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

RD912

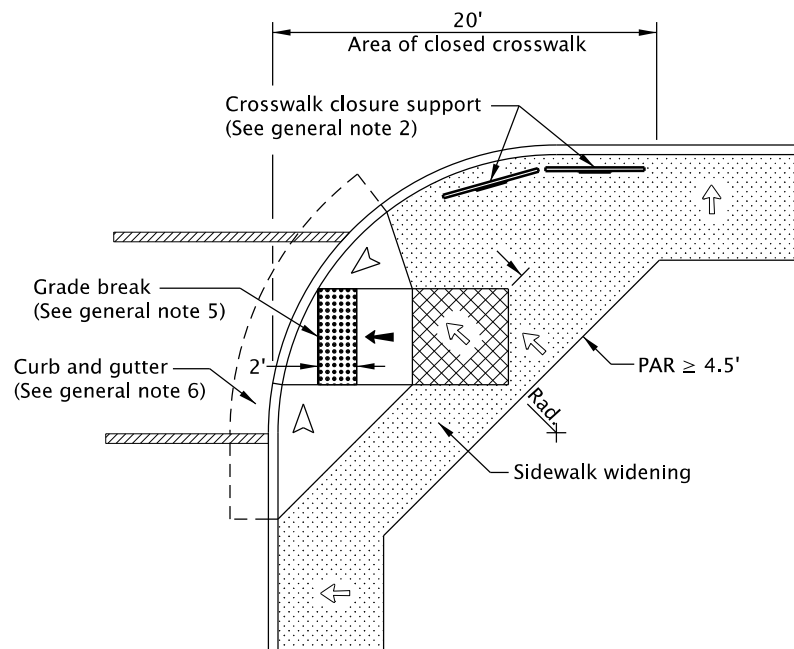
rd913.dgn 20-JUL-2020



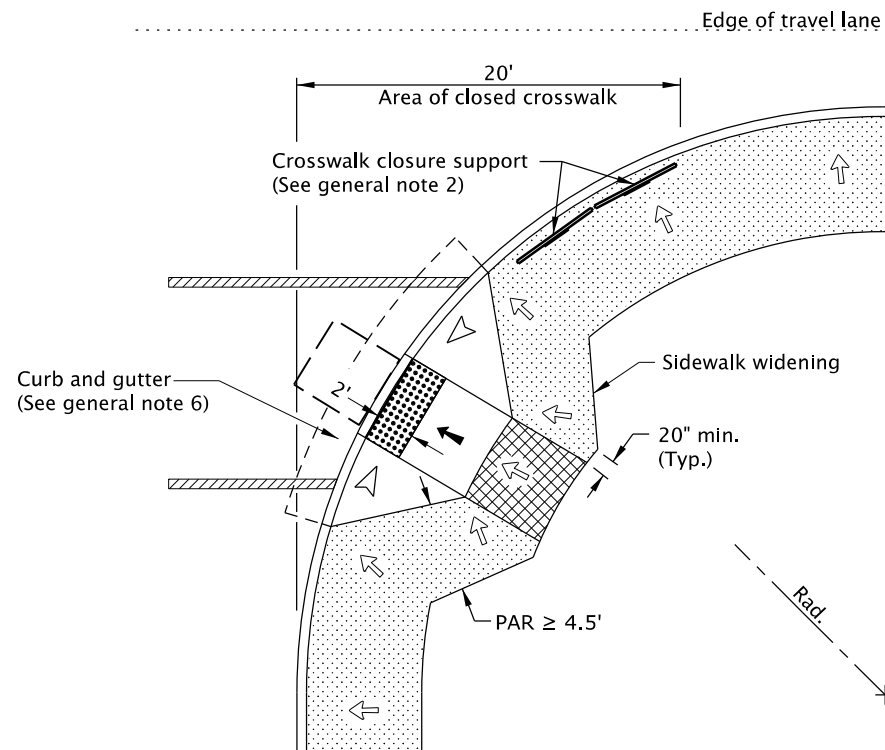
**CROSSWALK CLOSURE WITH LANDSCAPE BUFFER STRIP
OPTION "PR-5"**



**CROSSWALK CLOSURE FOR WIDE SIDEWALK
OPTION "PR-6"**



**CROSSWALK CLOSURE FOR NARROW SIDEWALK
OPTION "PR-7"**



**CROSSWALK CLOSURE
OPTION "PR-8"**

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT Standards.
2. See project plans for details not shown.
See Std. Dwgs. RD700 & RD701 for curbs.
See Std. Dwgs. RD720 & RD721 for sidewalks.
See Std. Dwg. RD910 for perpendicular curb ramp details.
See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details.
See Std. Dwg. TM240 for crosswalk closure detail.
3. Tooled dummy joints are required at all curb ramp grade break lines, (see Std. Dwg. RD722).
4. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
5. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
6. On or along state highways, curb and gutter is required at curb ramps.

LEGEND:

- Marked or intended crossing location
- Sidewalk
- Detectable warning surface
- Level area (Turning space/landing)
Unobstructed 4.5' x 4.5'
With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
- Running slope 7.5% max.
(Max. 8.3% finished surface slope)
- Flare slope
(Max. 10% finished surface slope)
- Zero curb exposure
- 4' x 4' clear space
- PAR Pedestrian Access Route

CALC. BOOK NO. N/A

SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

**OREGON STANDARD DRAWINGS
PERPENDICULAR CURB RAMP
WITH CLOSURE**

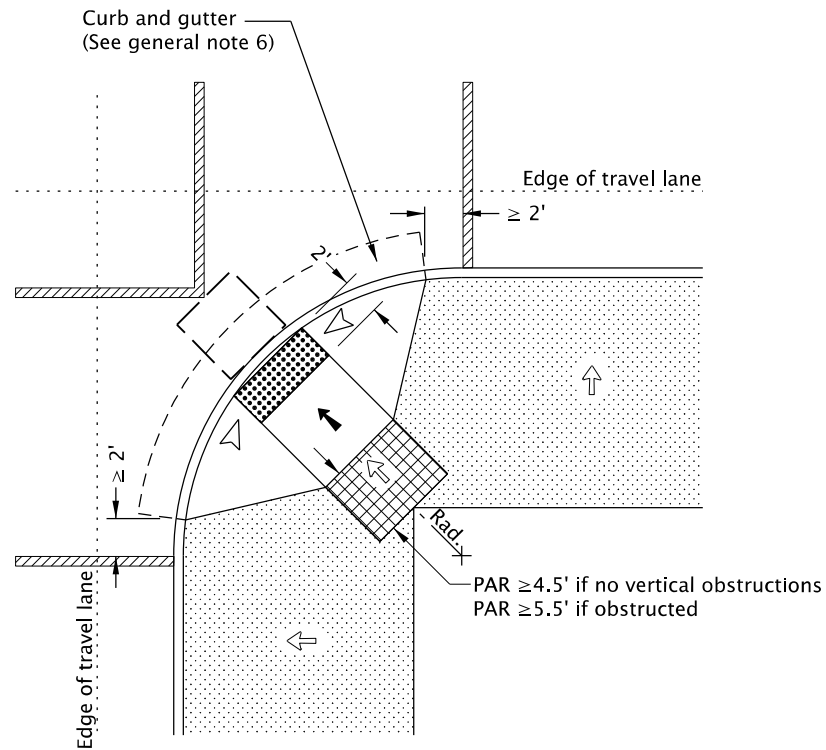
2021

DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

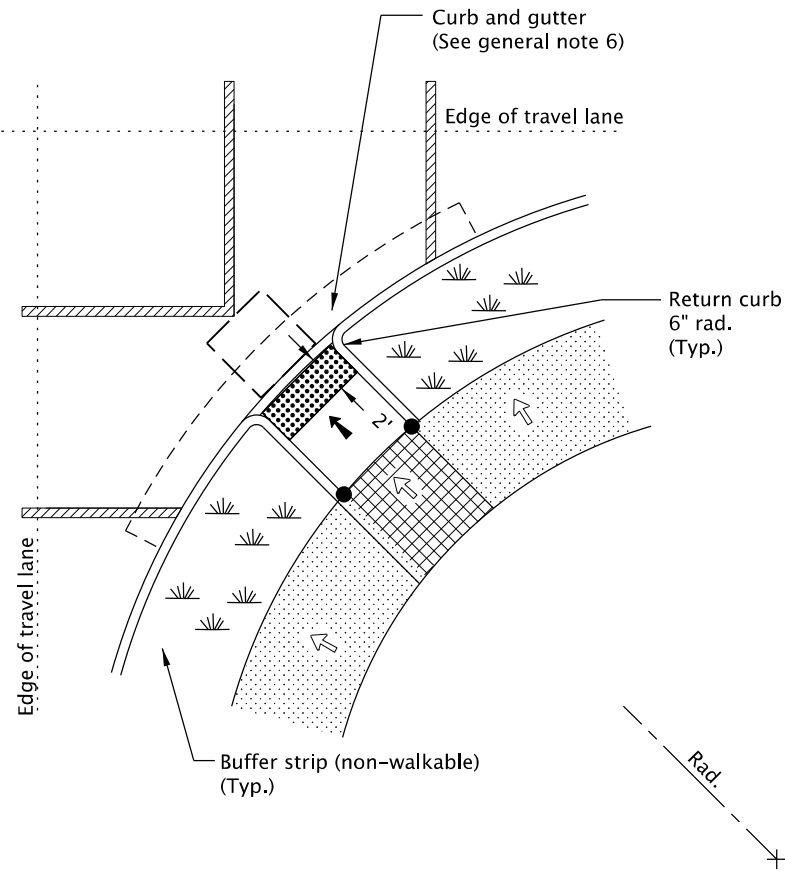
RD913

rd916.dgn 20-JUL-2020



**DIAGONAL CURB RAMP FOR WIDE SIDEWALKS
OPTION "PR-9"**

(Use only when site constraints prohibit installing two curb ramps)



**DIAGONAL CURB RAMP WITH LANDSCAPED BUFFER STRIP
OPTION "PR-10"**

(Use only when site constraints prohibit installing two curb ramps)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT Standards.
2. See project plans for details not shown.
See Std. Dwg. RD700 & RD701 for curbs.
See Std. Dwg. RD720 & RD721 for sidewalks.
See Std. Dwg. RD910 for perpendicular curb ramp details.
See Std. Dwg. RD902 through RD908 for detectable warning surface installation details.
3. Tooled dummy joints are required at all curb ramp slope break lines, (see Std. Dwg. RD722).
4. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
5. Only use curb ramp options allowed by jurisdiction. Single ramps required design exceptions on or along state highways.
6. On or along state highways, curb and gutter is required at curb ramps.

LEGEND:

- Marked or intended crossing location
- Sidewalk
- Detectable warning surface
- Level area (Turning space/landing)
Unobstructed 4.5' x 4.5'
With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
- Running slope 7.5% max.
(Max. 8.3% finished surface slope)
- Flare slope
(Max. 10% finished surface slope)
- 4'x4' clear space
- PAR Pedestrian Access Route
- Zero curb exposure

CALC. BOOK NO. N/A

SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

**OREGON STANDARD DRAWINGS
PERPENDICULAR CURB RAMP
SINGLE RAMP**

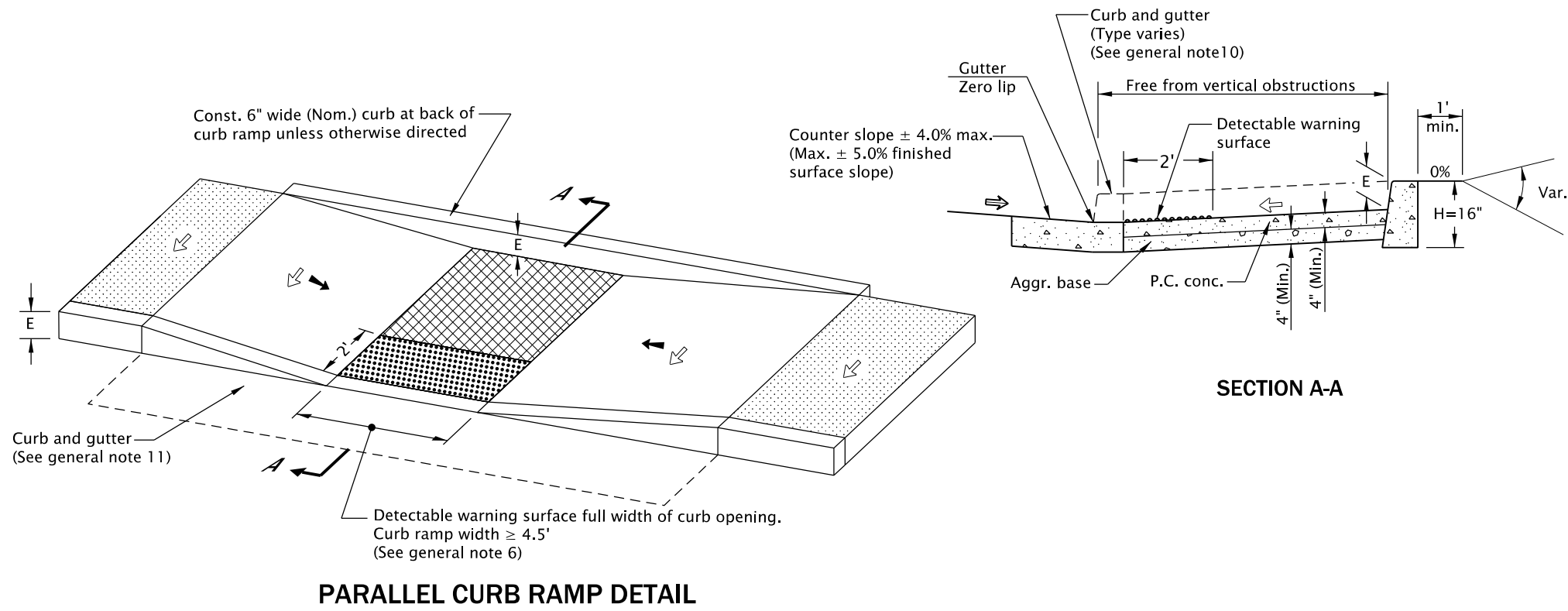
2021

DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

RD916

rd920.dgn 20-JUL-2020



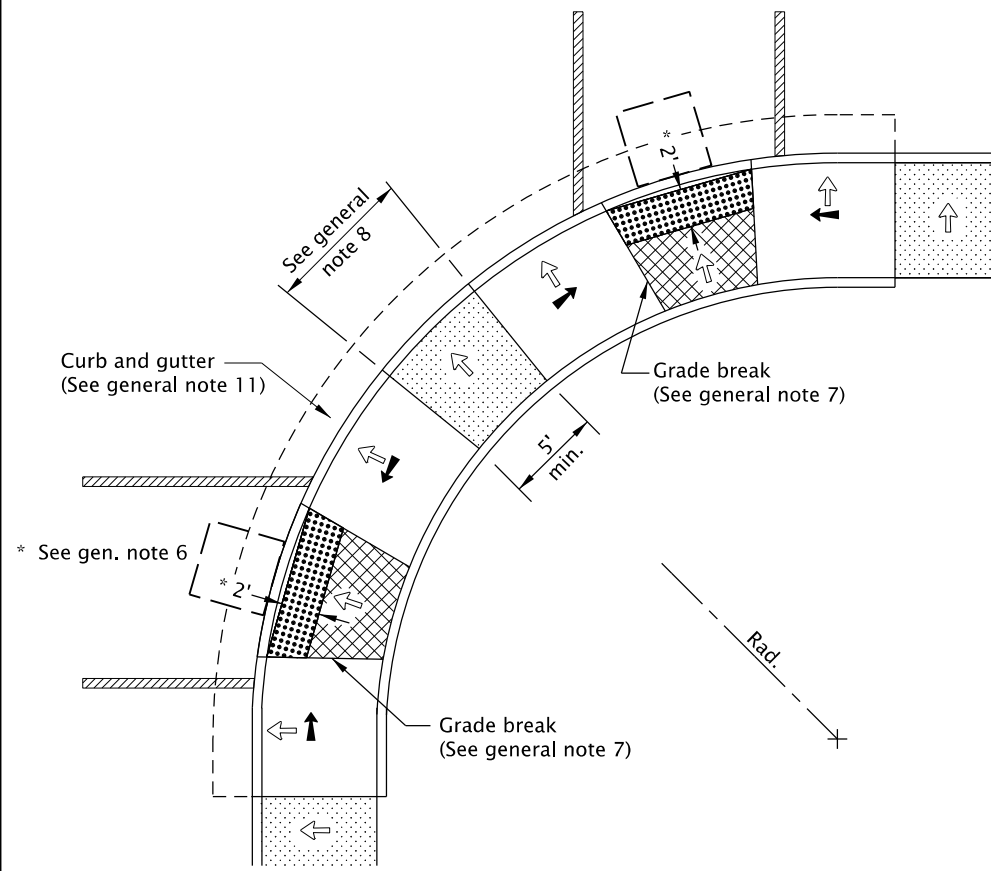
PARALLEL CURB RAMP DETAIL

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

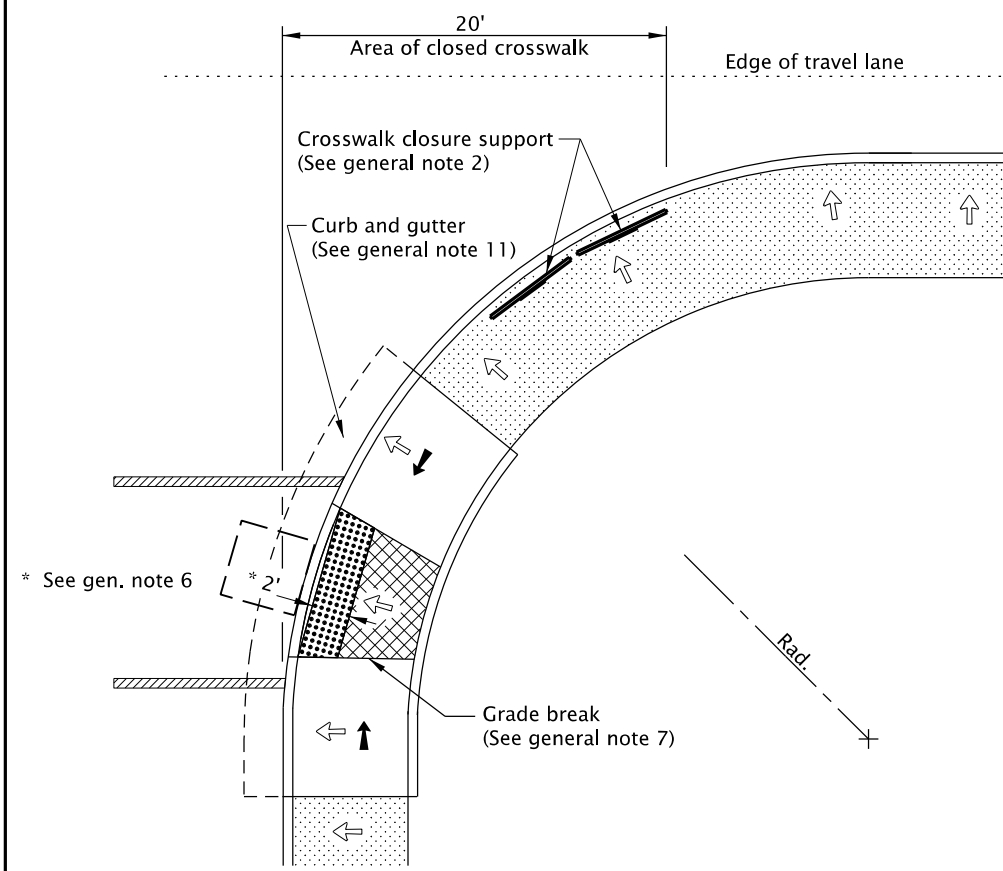
1. Curb ramp details are based on applicable ODOT Standards.
2. See Std. Dwgs. RD700 & RD701 for curbs. See Std. Dwgs. RD720 & RD721 for sidewalks. See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details. See Std. Dwg. TM240 for crosswalk closure detail.
3. Site conditions normally require a project specific design. See project plans for details not shown.
4. Tooled dummy joints are required at all curb ramp grade break lines, (see Std. Dwg. RD722).
5. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
6. Place detectable warning surface at the back of curb for a minimum depth of 2' in the direction of pedestrian travel full width of curb ramp opening that is adjacent to traffic.
7. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
8. When 2 ramp runs are immediately adjacent, the curb exposure (E) between the adjacent side may range between 3" and full design exposure.
9. Curb ramps for shared use paths intersecting a roadway shall be full width of path, excluding flares. When a curb ramp is used to provide bicycle access from a roadway to a sidewalk, the curb ramp opening will be $\geq 8'$ wide.
10. Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
11. On or along state highways, curb and gutter is required at curb ramps.

LEGEND:

- Sidewalk
- Detectable warning surface
- Level area (Turning space/landing)
Unobstructed 4.5' x 4.5'
With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
- Running slope 7.5% max.
(Max. 8.3% finished surface slope)
- Counter slope 4.0% max. ascending or descending,
(Max. 5.0% finished surface slope)
Slope as required for drainage
- 4'x4' clear space



**PARALLEL CURB RAMPS
OPTION "PL-1"**



**PARALLEL CURB RAMP WITH CROSSWALK CLOSURE
OPTION "PL-2"**

CALC. BOOK NO. N/A SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

PARALLEL CURB RAMP

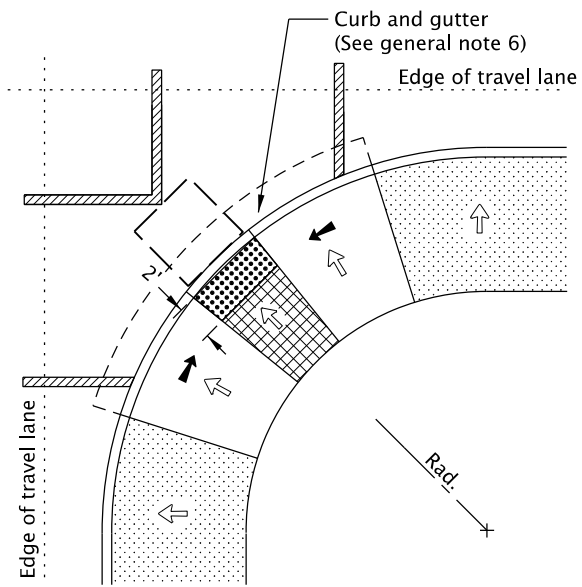
2021

DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

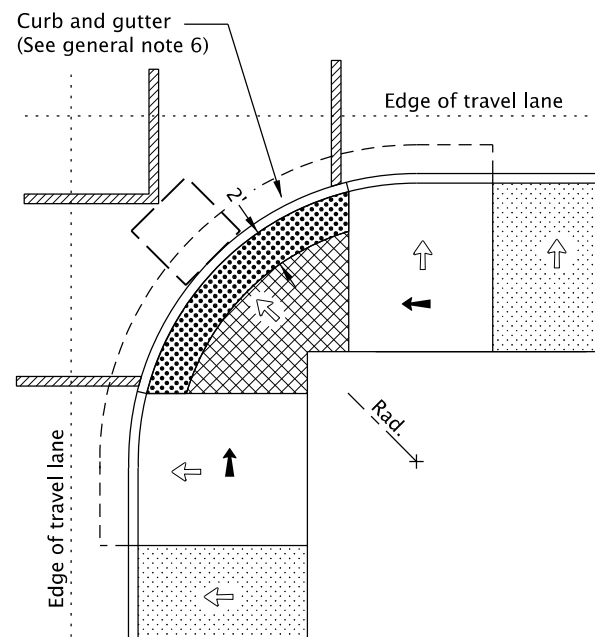
RD920

rd922.dgn 20-JUL-2020



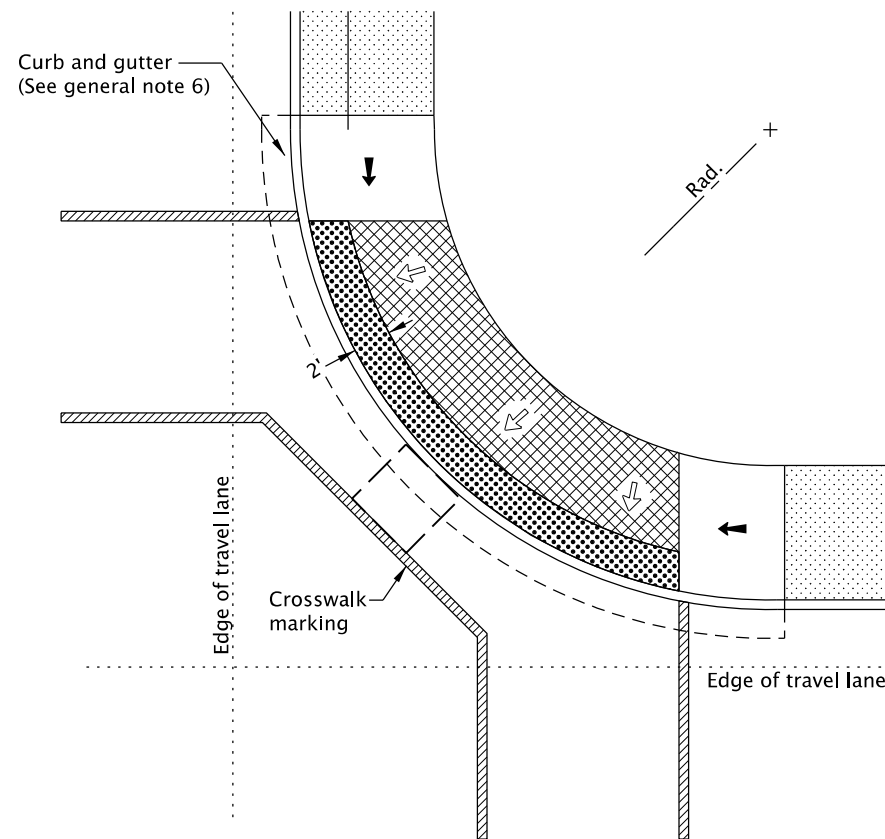
**DIAGONAL PARALLEL CURB RAMP
OPTION "PL-3"**

(Use only when site constraints prohibit installing two curb ramps)



**DEPRESSED CURB RAMP SMALL RADIUS
OPTION "PL-4"**

(Use only when site constraints prohibit installing two curb ramps)










**DEPRESSED CURB RAMP LARGE RADIUS
OPTION "PL-5"**

(Use only when site constraints prohibit installing two curb ramps)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT Standards.
2. See project plans for details not shown.
See Std. Dwgs. RD700 & RD701 for curbs.
See Std. Dwgs. RD720 & RD721 for sidewalks.
See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details.
See Std. Dwg. RD920 for parallel curb ramp details.
3. Tooled dummy joints are required at all curb ramp slope break lines, (see Std. Dwg. RD722).
4. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
5. Place an inlet at upstream side of curb ramp or perform other approved design mitigation.
Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
6. On or along state highways, curb and gutter is required at curb ramps.
7. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
8. Only use curb ramp options allowed by jurisdiction. Single ramps require design exceptions on or along state highways.

LEGEND:

-  Marked or intended crossing location
-  Sidewalk
-  Detectable warning surface
-  Level area (Turning space/landing)
Unobstructed 4.5' x 4.5'
With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
-  Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
-  Running slope 7.5% max.
(Max. 8.3% finished surface slope)
-  4'x4' clear space

CALC. BOOK NO. N/A

SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

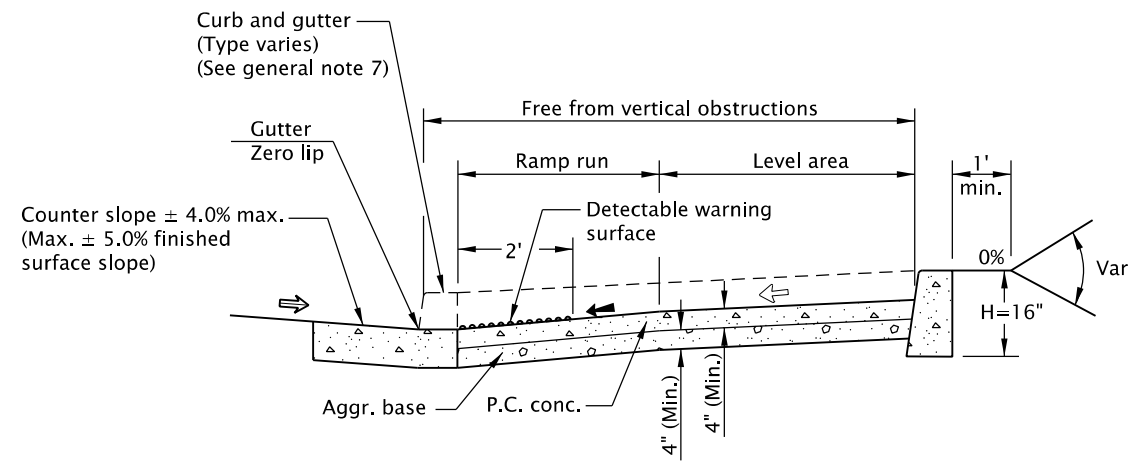
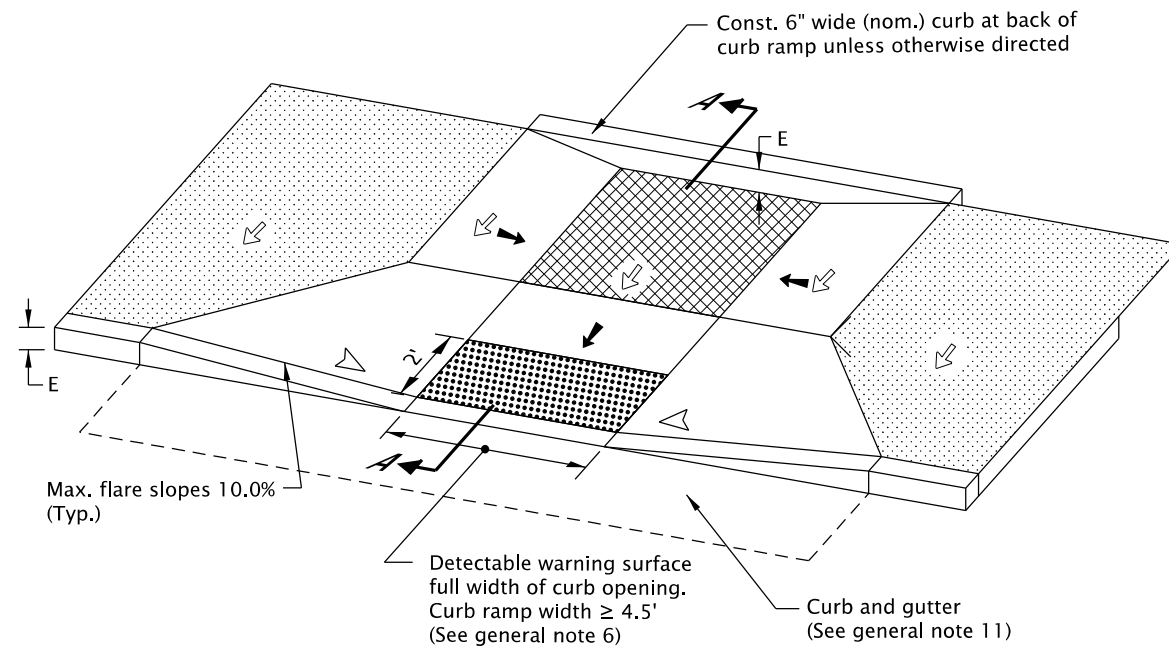
**OREGON STANDARD DRAWINGS
PARALLEL CURB RAMP
SINGLE RAMP**

2021

DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

RD922



SECTION A-A

COMBINATION CURB RAMP DETAIL

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT Standards.
2. See project plans for details not shown. See Std. Dwgs. RD700 & RD701 for curbs. See Std. Dwgs. RD720 & RD721 for sidewalks. See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details.
3. Site conditions normally require a project specific design. See project plans for details not shown.
4. Tooled dummy joints are required at all curb ramp slope break lines, (see Std. Dwg. RD722).
5. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
6. Place detectable warning surface at the back of curb for a minimum depth of 2' in the direction of pedestrian travel full width of curb ramp opening that is adjacent to traffic.
7. Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
8. Return curb may be provided in lieu of flared slope only if protected from traverse travel by landscaping. Return curb shall not reduce width of approaching sidewalk.
9. Curb ramps for shared use paths intersecting a roadway shall be full width of path, excluding flares. When a curb ramp is used to provide bicycle access from a roadway to a sidewalk, the curb ramp opening will be \geq 8' wide.
10. When 2 curb ramps are immediately adjacent, the curb exposure (E) between the adjacent side flares may range between 3" and full design exposure.
11. On or along state highways, curb and gutter is required at curb ramps.
12. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.

LEGEND:

- Marked or intended crossing location
- Sidewalk
- Detectable warning surface
- Level area (Turning space/landing)
Unobstructed 4.5' x 4.5'
With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- Cross slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
- Running slope 7.5% max. (Max. 8.3% finished surface slope)
- Counter slope 4.0% max. ascending or descending, (Max. 5.0% finished surface slope) Slope as required for drainage
- Flare slope (Max. 10% finished surface slope)

CALC. BOOK NO. N/A

SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

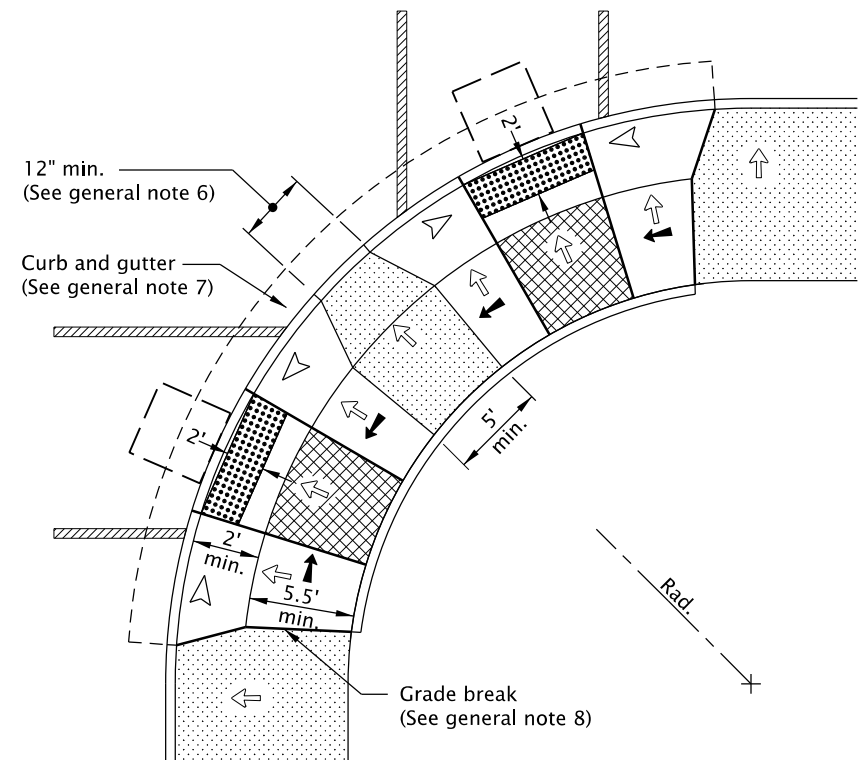
COMBINATION CURB RAMP

2021

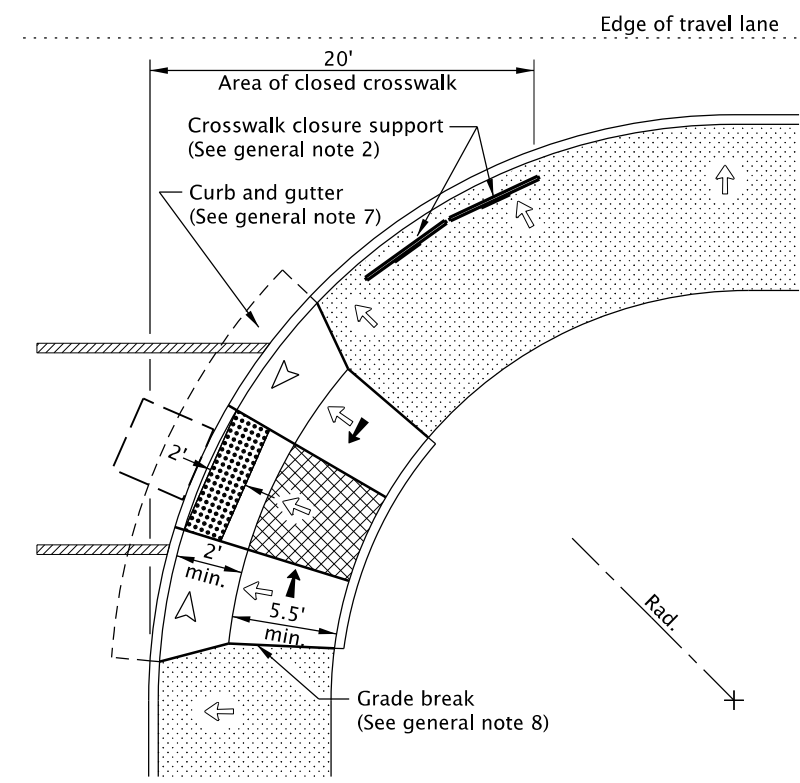
DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

rd932.dgn 20-JUL-2020



**COMBINATION CURB RAMPS
OPTION "CC-1"**



**COMBINATION CURB RAMP WITH CROSSWALK CLOSURE
OPTION "CC-2"**

RD932

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT Standards.
2. See project plans for details not shown.
See Std. Dwgs. RD700 & RD701 for curbs.
See Std. Dwgs. RD720 & RD721 for sidewalks.
See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details.
See Std. Dwg. RD930 for combination curb ramp details.
See Std. Dwg. TM240 for crosswalk closure detail.
3. Site conditions normally require a project specific design. See project plans for details not shown.
4. Tooled dummy joints are required at all curb ramp slope break lines, (see Std. Dwg. RD722).
5. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
6. When 2 curb ramps are immediately adjacent, the curb exposure (E) between the adjacent side flares may range between 3" and full design exposure.
7. On or along state highways, curb and gutter is required at curb ramps.
8. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.

LEGEND:

- Marked or intended crossing location
- Sidewalk
- Detectable warning surface
- Level area (Turning space/landing)
Unobstructed 4.5' x 4.5'
With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
- Running slope 7.5% max.
(Max. 8.3% finished surface slope)
- Flare slope
(Max. 10% finished surface slope)
- 4'x4' clear space

CALC. BOOK NO. N/A

SDR DATE 20-JULY-2020

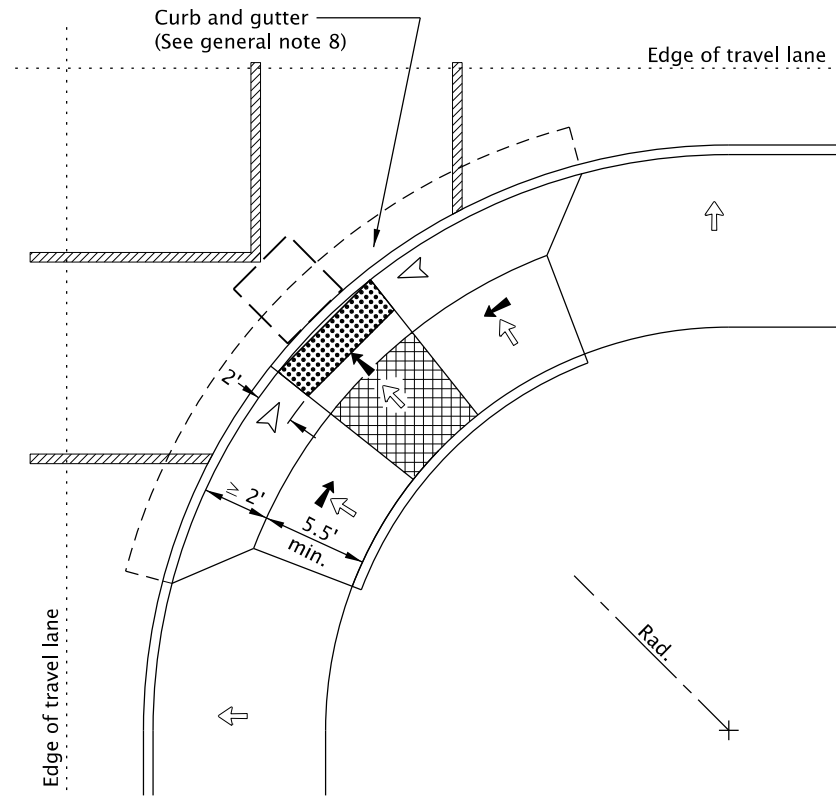
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS	
COMBINATION CURB RAMP	
2021	
DATE	REVISION DESCRIPTION
07-2020	DRAWING CREATED

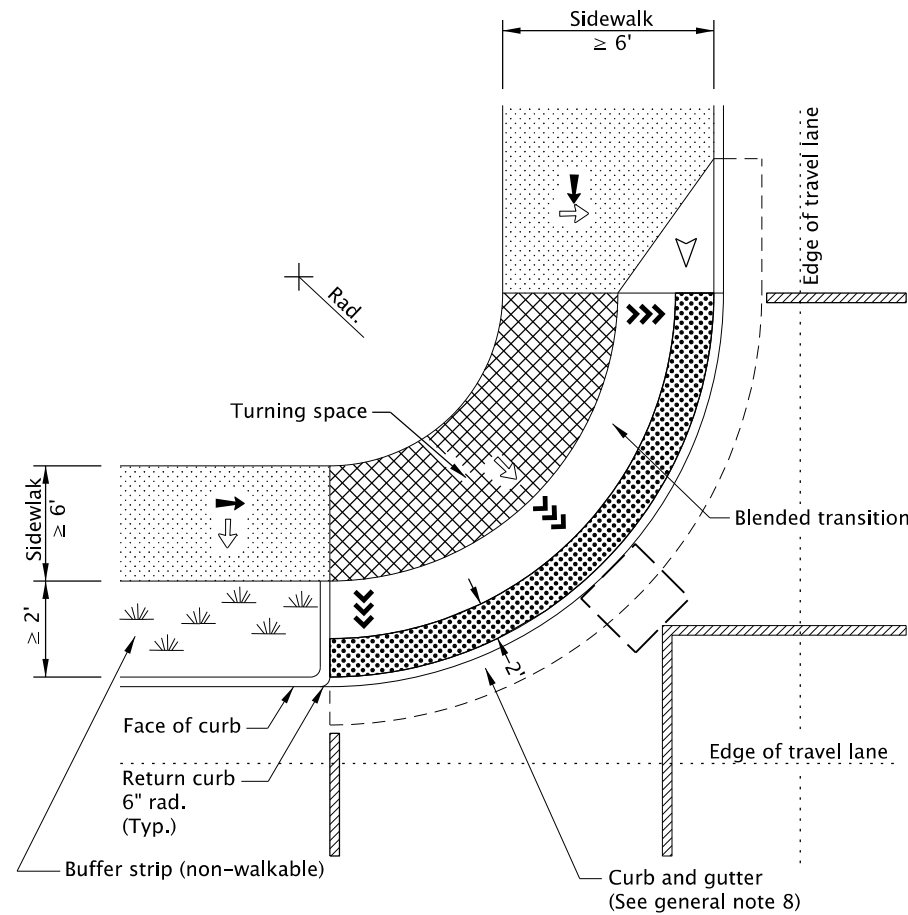
rd938.dgn 15-JAN-2021

RD938



**DIAGONAL COMBINATION CURB RAMP
OPTION "CC-10"**

(Use only when site constraints prohibit installing two curb ramps)



**BLENDED TRANSITION COMBINATION CURB RAMP
OPTION "CC-11"**

(Use only when site constraints prohibit installing two curb ramps)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT Standards.
2. See project plans for details not shown.
See Std. Dwgs. RD700 & RD701 for curbs.
See Std. Dwgs. RD720 & RD721 for sidewalks.
See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details.
See Std. Dwg. RD930 for combination curb ramp details.
3. Site conditions normally require a project specific design. See project plans for details not shown.
4. Tooled dummy joints are required at all curb ramp slope break lines, (see Std. Dwg. RD722).
5. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
6. Return curb may be provided in lieu of flared slope only if protected from traverse travel by landscaping. Return curb shall not reduce width of approaching sidewalk.
7. Only use curb ramp options allowed by jurisdiction. Single ramps require design exceptions on or along state highways.
8. On or along state highways, curb and gutter is required at curb ramps.
9. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.

LEGEND:

- Marked or intended crossing location
- Sidewalk
- Detectable warning surface
- Level area (Turning space/landing)
Unobstructed 4.5' x 4.5'
With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
- Running slope 7.5% max.
(Max. 8.3% finished surface slope)
- Running slope
(Max. 4.9% finished surface slope)
- Flare slope
(Max. 10% finished surface slope)
- 4'x4' clear space

CALC. BOOK NO. N/A

SDR DATE 15-JAN-2021

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

**OREGON STANDARD DRAWINGS
COMBINATION CURB RAMP
SINGLE RAMP**

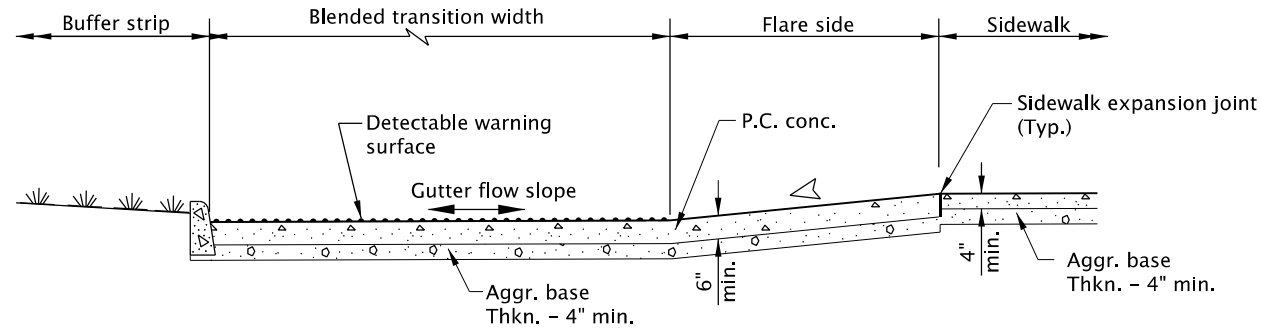
2021

DATE	REVISION DESCRIPTION
07-2020	DRAWING CREATED
01-2021	REVISED DETAIL & NOTES

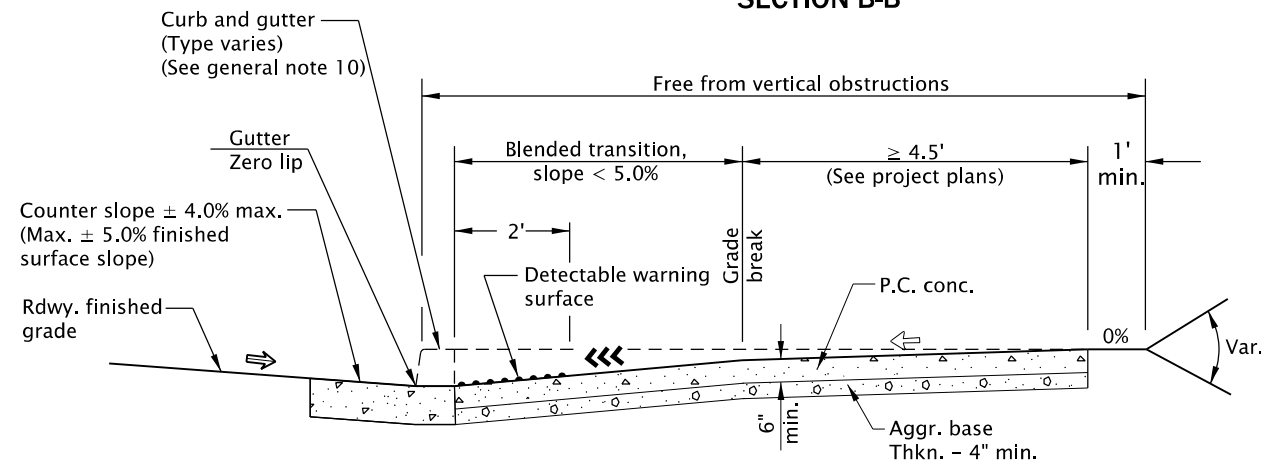
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

rd940.dgn 20-JUL-2020

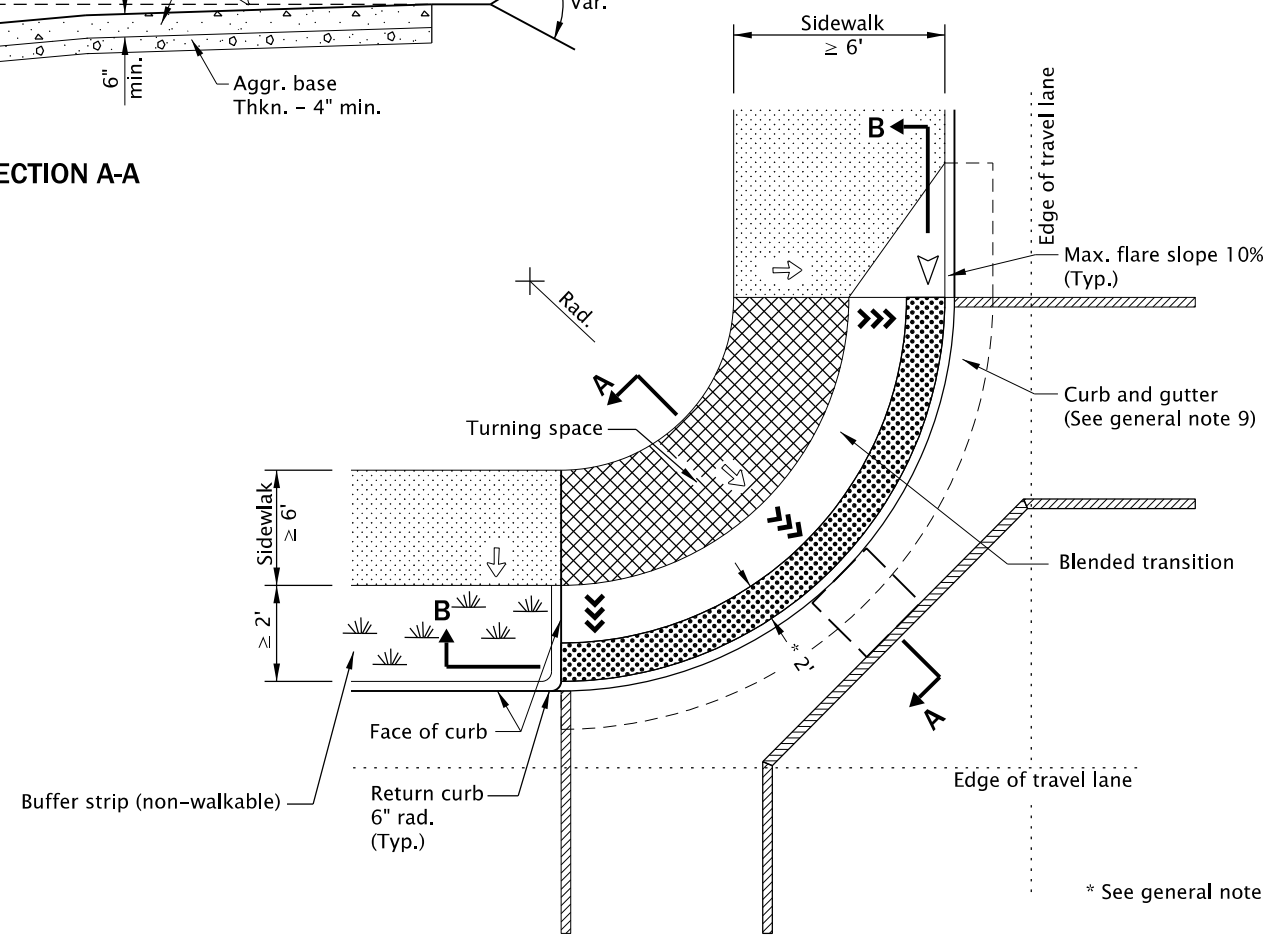
RD940



SECTION B-B



SECTION A-A



DIAGONAL BLENDED TRANSITION CURB RAMP

* See general note 6

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT Standards.
2. See project plans for details not shown.
See Std. Dwgs. RD700 & RD701 for curbs.
See Std. Dwgs. RD720 & RD721 for sidewalks.
See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details.
3. Site conditions normally require a project specific design. See project plans for details not shown.
4. Tooled dummy joints are required at all curb ramp slope break lines, (see Std. Dwg. RD722).
5. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
6. Place detectable warning surface at the back of curb for a minimum depth of 2' in the direction of pedestrian travel full width of curb ramp opening that is adjacent to traffic.
7. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
8. Return curb may be provided in lieu of flared slope only if protected from traverse by landscaping. Return curb shall not reduce width of approaching sidewalk.
9. Curb ramps for shared use paths intersecting a roadway shall be full width of path, excluding flares. When a curb ramp is used to provide bicycle access from a roadway to a sidewalk, the curb ramp opening will be ≥ 8' wide.
10. Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
11. On or along state highways, curb and gutter is required at curb ramps.
12. Only use curb ramp options allowed by jurisdiction. Single ramp requires design exceptions on or along state highways.

LEGEND:

- Marked or intended crossing location
- Sidewalk
- Detectable warning surface
- Level area (Turning space/landing)
Unobstructed 4.5' x 4.5'
With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
- Counter slope 4.0% max. ascending or descending
(Max. 5.0% finished surface slope)
Slope as required for drainage
- Running slope
(Max. 4.9% finished surface slope)
- Flare slope
(Max. 10% finished surface slope)
- 4'x4' clear space

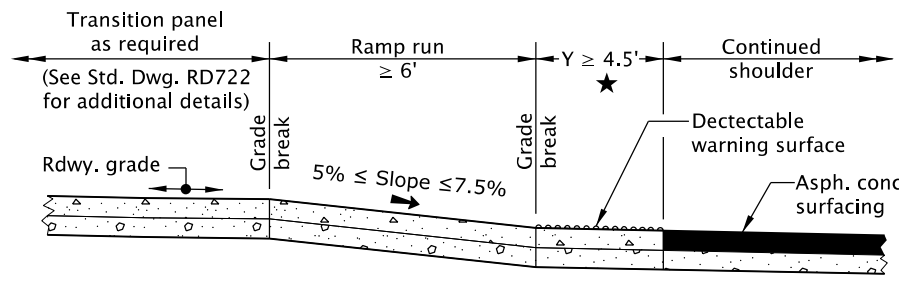
CALC. BOOK NO. N/A	SDR DATE 20-JULY-2020
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NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS	
BLENDED TRANSITION CURB RAMP SINGLE RAMP	
2021	
DATE	REVISION DESCRIPTION
07-2020	DRAWING CREATED

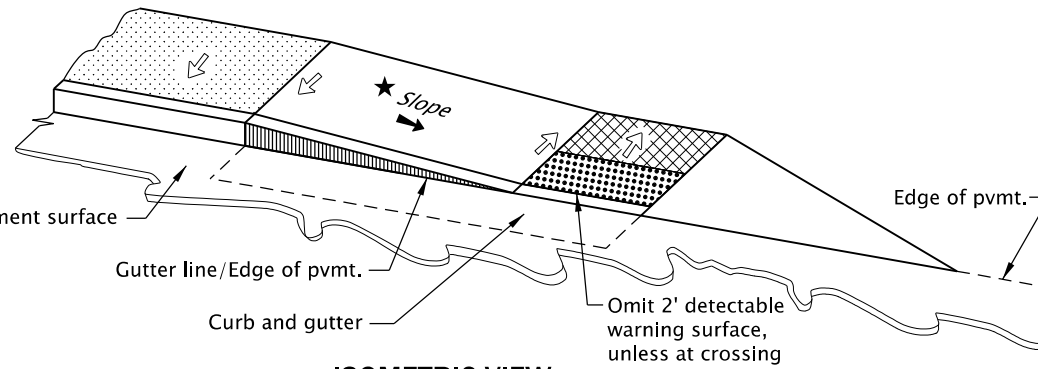
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

rd950.dgn 20-JUL-2020

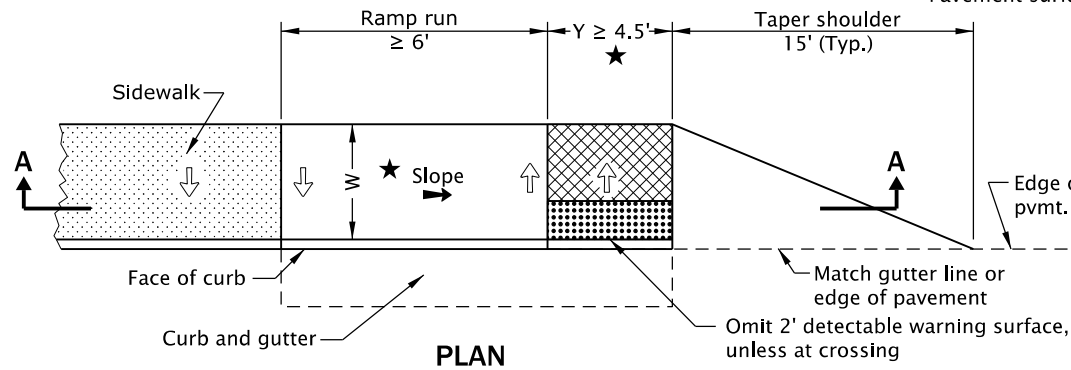


SECTION A-A

★ See general note 12



ISOMETRIC VIEW



PLAN

TAPER OPTION "EW-1"

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT Standards.
2. See project plans for details not shown. See Std. Dwgs. RD700 & RD701 for curbs. See Std. Dwgs. RD720 & RD721 for sidewalks. See Std. Dwg. RD722 for transition panel details. See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details.
3. Site conditions normally require a project special design. See project plans for details not shown.
4. Tooled dummy joints are required at all curb ramp grade break lines, (see Std. Dwg. RD722).
5. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
6. Place detectable warning surface at the back of curb for a minimum depth of 2' at curb ramp that is adjacent to traffic.
7. Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
8. When a shared use path terminates, the curb ramp shall be the full width of the path, the turning space Y-dimension should be minimum 8' wide to enable bicycles to ride from ramp to shoulder.
9. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
10. On or along state highways, curb and gutter is required at curb ramps.
11. All end of sidewalk options can be used for curved or tangent roadway sections. Superrelated roadways require site specific details.
12. When the slope of the ramp run is greater than 5.0%, a min. landing space of 4.5' x 4.5' with a 1.5% max. slope (2.0% finished surface) is required at the bottom of the curb ramp. See section A-A & section B-B.

LEGEND:

- Sidewalk
- Transition panel
- Detectable warning surface
- Level area (Turning space/landing)
Unobstructed 4.5' x 4.5'
With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
- Running slope 7.5% max.
(Max. 8.3% finished surface slope)
- W New construction sidewalk width.
See contract plans for dimension.

CALC. BOOK NO. N/A

SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

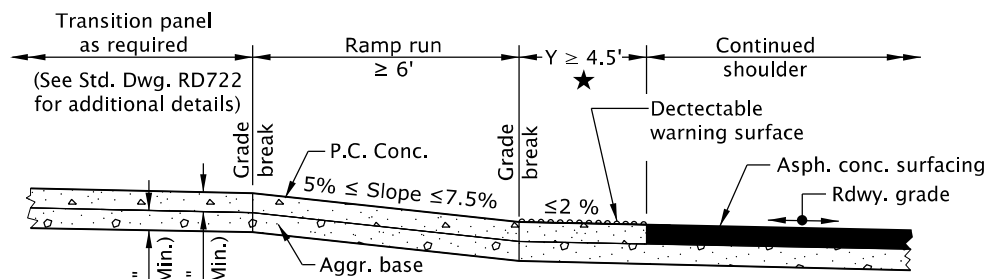
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS
END OF WALK CURB RAMP

2021

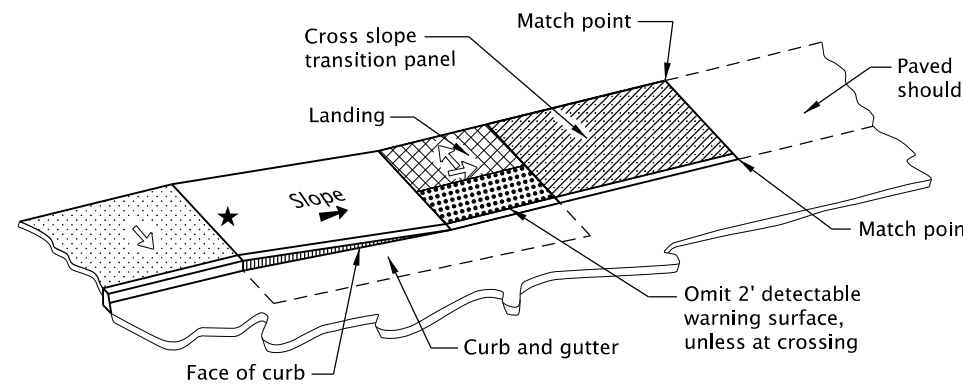
DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

RD950

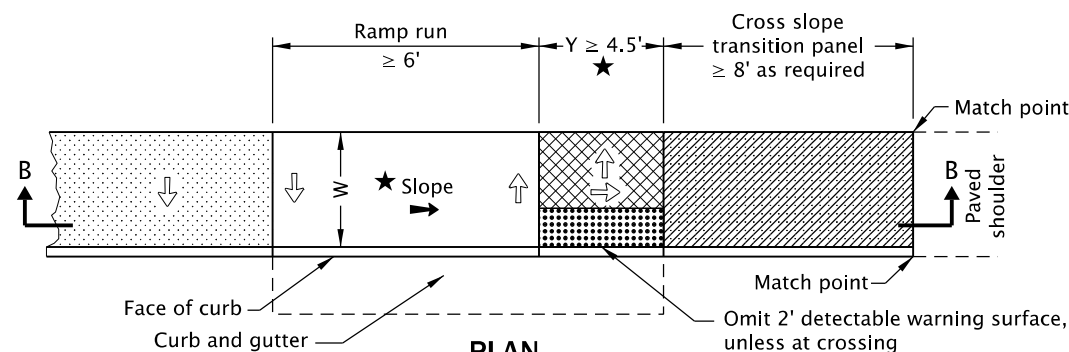


SECTION B-B

★ See general note 12



ISOMETRIC VIEW

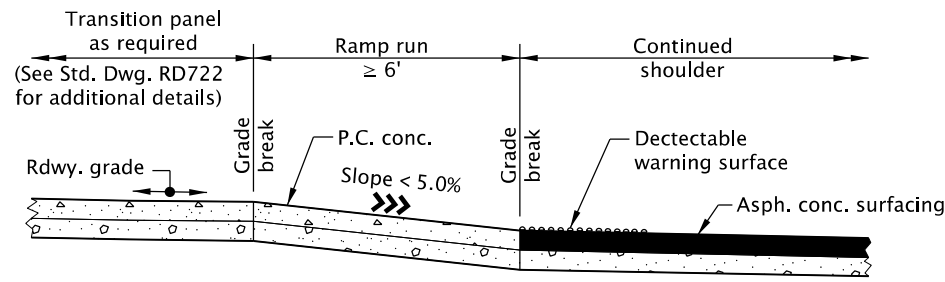


PLAN

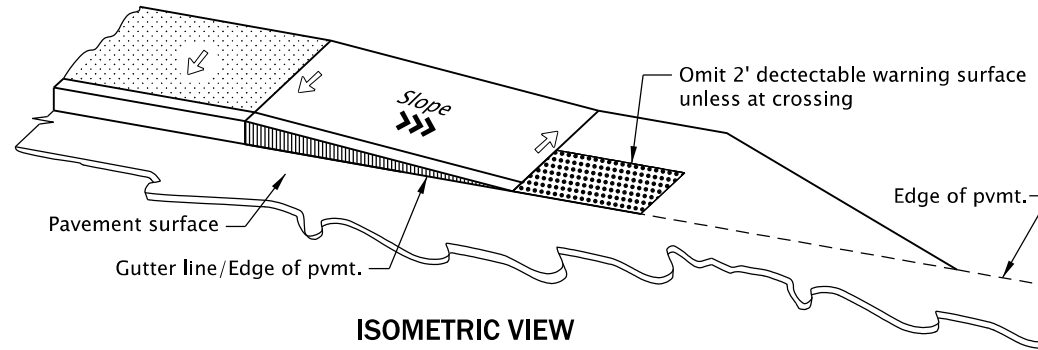
(Curb ramp > 5.0% shown)

SHOULDER OPTION "EW-2"

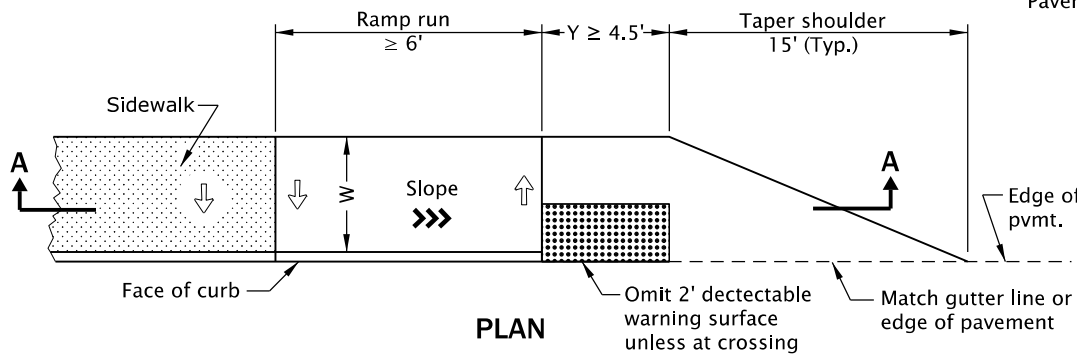
rd952.dgn 20-JUL-2020



SECTION A-A



ISOMETRIC VIEW



PLAN

**BLENDED TRANSITION
TAPER OPTION "EW-3"**

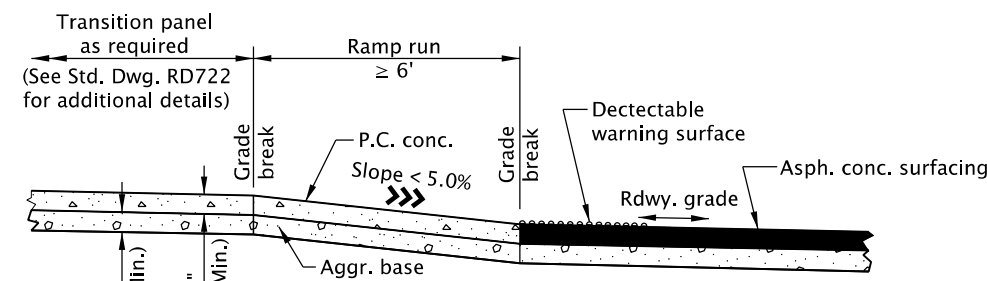
GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT Standards.
2. See project plans for details not shown. See Std. Dwgs. RD700 & RD701 for curbs. See Std. Dwgs. RD720 & RD721 for sidewalks. See Std. Dwg. RD722 for transition panel details. See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details.
3. Site conditions normally require a project special design. See project plans for details not shown.
4. Tooled dummy joints are required at all curb ramp grade break lines, (see Std. Dwg. RD722).
5. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
6. Place detectable warning surface at the back of curb for a minimum depth of 2' at curb ramp that is adjacent to traffic. When there is no curb, the detectable warning surface shall be placed at the edge of roadway.
7. Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
8. When a shared use path terminates, the curb ramp shall be the full width of the path, the turning space Y-dimension should be minimum 8' wide to enable bicycles to ride from ramp to shoulder.
9. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
10. All end of sidewalk options can be used for curved or tangent roadway sections. Superrelated roadways require site specific details.

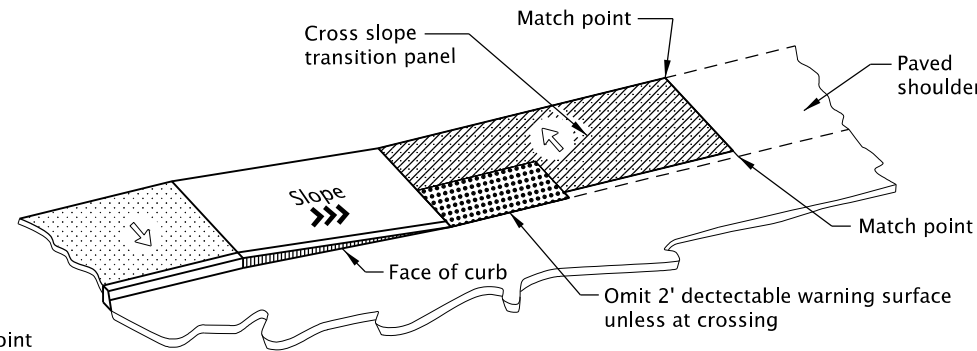
LEGEND:

- Sidewalk
- Transition panel
- Detectable warning surface
- Cross slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
- Running slope (Max. 4.9% finished surface slope)
- W New construction sidewalk width. See contract plans for dimension.

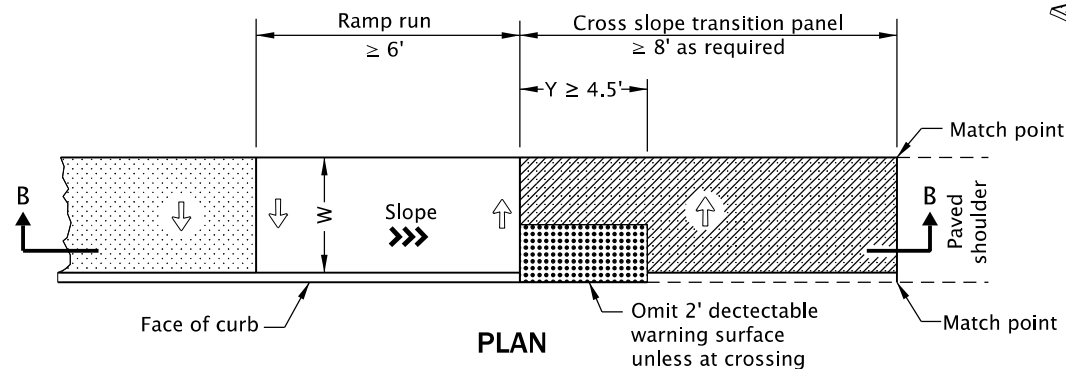
RD952



SECTION B-B



ISOMETRIC VIEW



PLAN

**BLENDED TRANSITION
SHOULDER OPTION "EW-4"**

CALC. BOOK NO. N/A

SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS
END OF WALK CURB RAMP

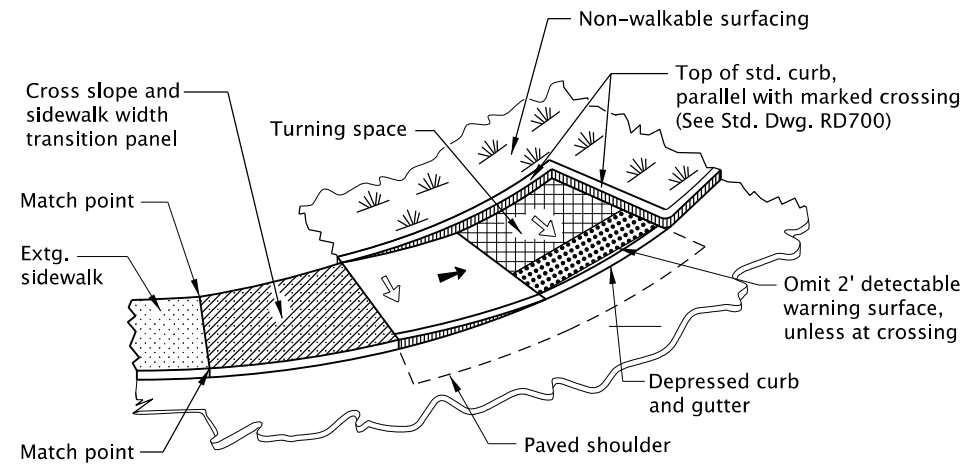
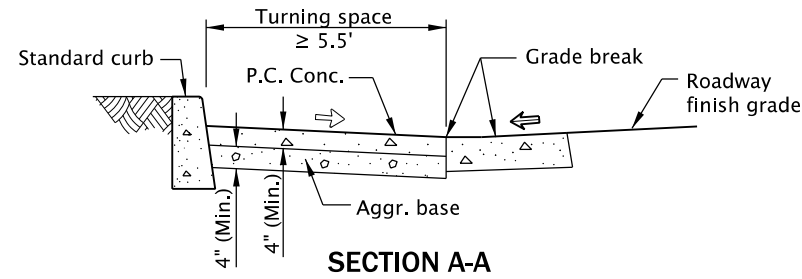
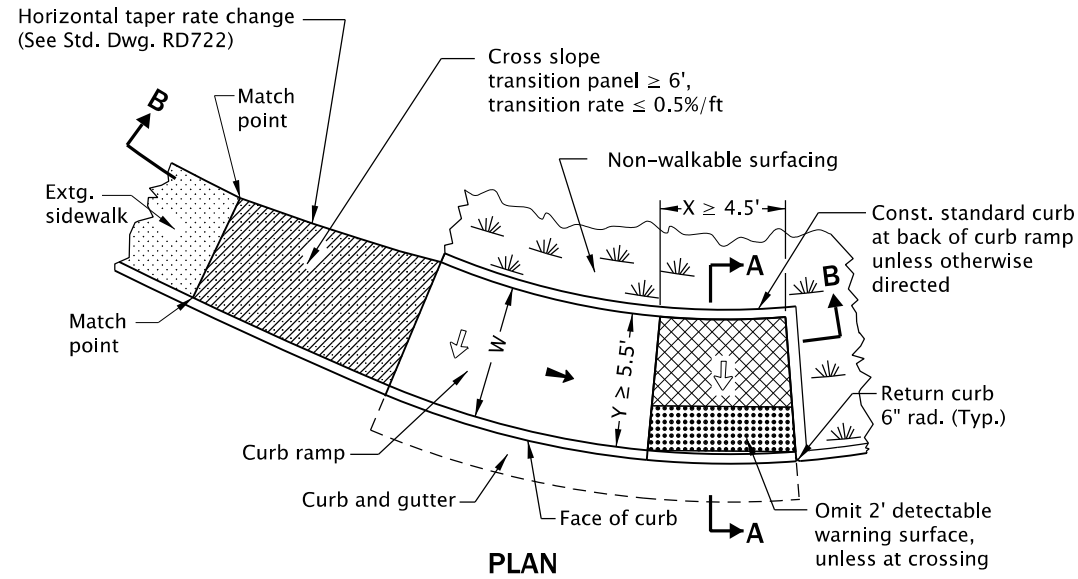
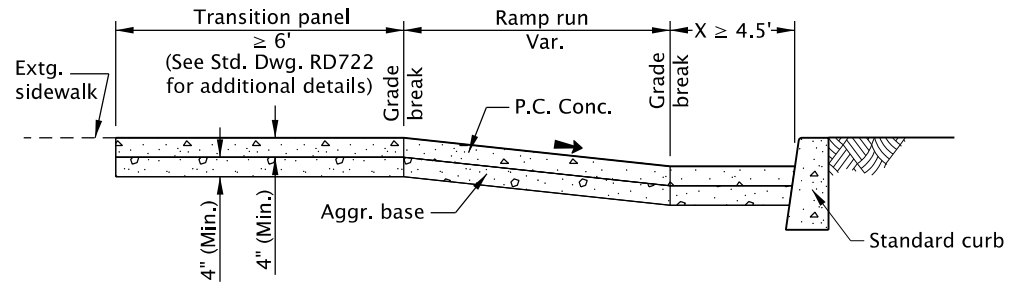
2021

DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

rd960.dgn 20-JUL-2020

RD960











CURBED OPTION

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT applicable Standards.
2. See project plans for details not shown. See Std. Dwgs. RD700 & RD701 for curbs. See Std. Dwgs. RD720 & RD721 for sidewalks. See Std. Dwg. RD722 for transition panel details. See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details. See Std. Dwg. RD920 for parallel curb ramp details.
3. Site conditions normally require a project special design. See project plans for details not shown.
4. Tooled dummy joints are required at all curb ramp grade break lines, (see Std. Dwg. RD722).
5. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
6. Place detectable warning surface at the back of curb for a minimum depth of 2' in the direction of pedestrian travel full width of curb ramp opening that is adjacent to traffic.
7. Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
8. When a shared use path terminates, the curb ramp shall be the full width of the path, the turning space Y-dimension should be minimum 8' wide to enable bicycles to ride from ramp to shoulder.
9. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
10. On or along state highways, curb and gutter is required at curb ramps.
11. Unique curb ramp option can be used for curved or tangent roadway sections. Superelevated roadways require a site specific detail.

LEGEND:

-  Sidewalk
-  Transition panel
-  Detectable warning surface
-  Level area (Turning space/landing)
Unobstructed 4.5' x 4.5'
With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
-  Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)
-  Running slope 7.5% max.
(Max. 8.3% finished surface slope)
-  Counter slope 4.0% max. ascending or descending,
(Max. 5.0% finished surface slope)
Slope as required for drainage
-  W New construction sidewalk width. See contract plans for dimension

CALC. BOOK NO. N/A SDR DATE 20-JULY-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

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OREGON STANDARD DRAWINGS

UNIQUE CURB RAMP

2021

DATE	REVISION	DESCRIPTION
07-2020	DRAWING CREATED	