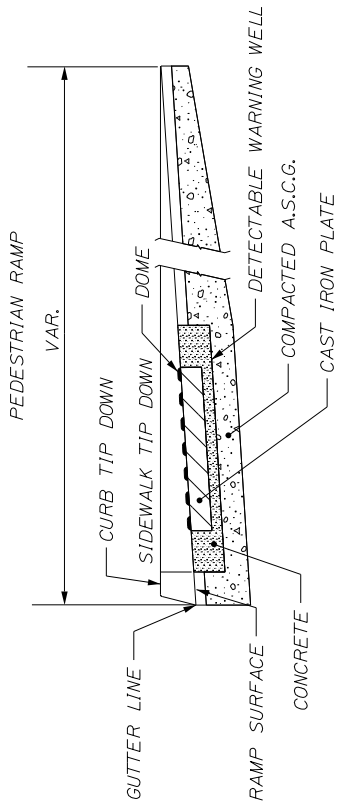
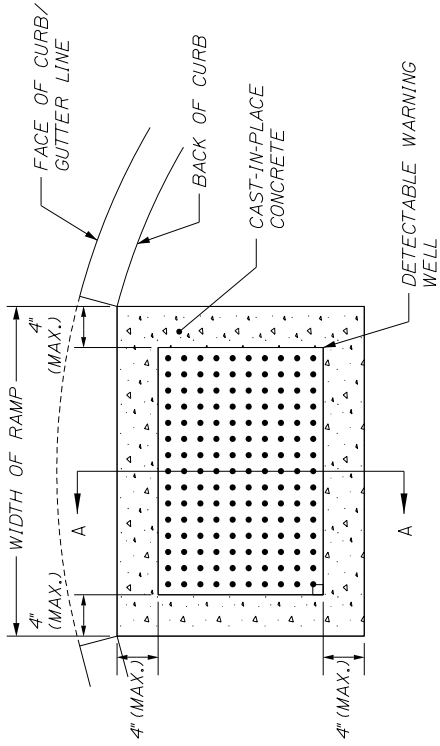


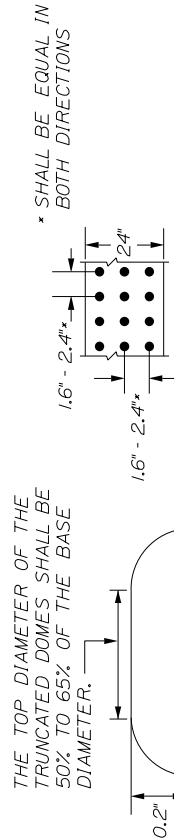
VIEWS AND DETAILS OF THE DETECTABLE WARNING
(NOT TO SCALE)



SIDE SECTION VIEW OF
DETECTABLE WARNING, WELL, CURB AND GUTTER

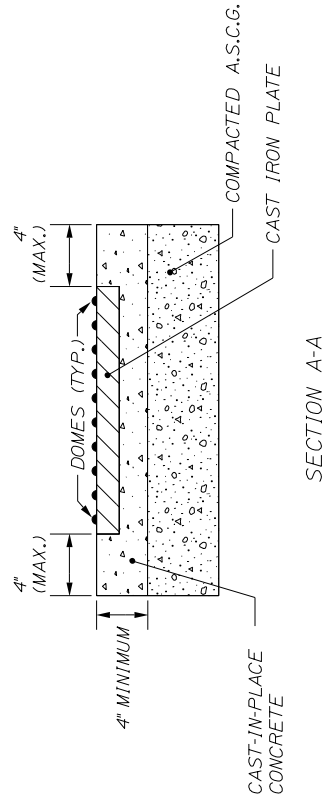


PLAN VIEW OF
DETECTABLE WARNING AND WELL



ELEVATION VIEW

PLAN VIEW



SECTION A-A

DOMES AND DETECTABLE WARNING DETAILS

FOR PEDESTRIAN RAMP LAYOUT, SEE STANDARD DETAILS
801(I) - 801(27)

DETECTABLE WARNINGS
Supersedes 608(02)

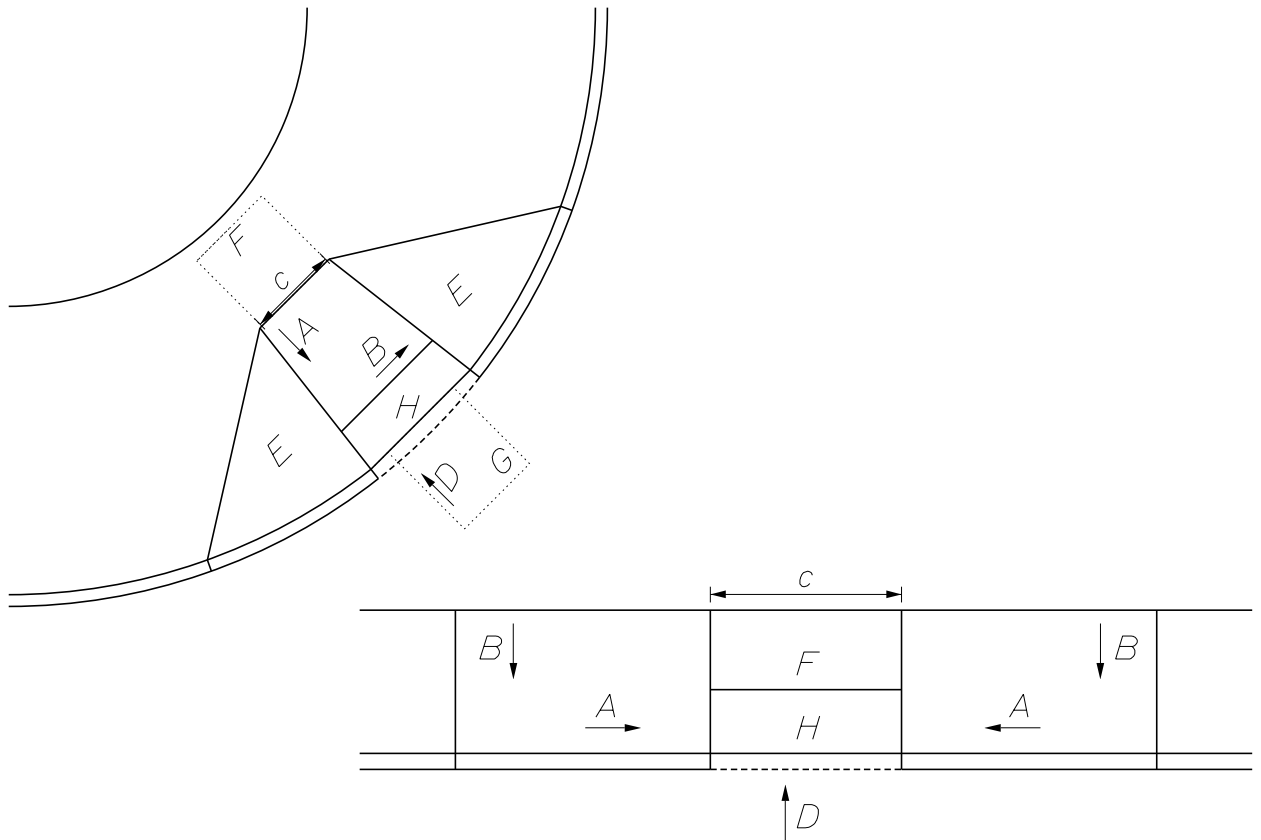


1. *Maximums and minimums do not have tolerances and are not to be exceeded or unmet.*
2. *The standard turning space (level landing) is 4'-0" x 4'-0" sloping no more than 2.0%. Where the turning space is constrained, the turning space shall be 4'-0" minimum by 5'-0" minimum. The 5'-0" dimension shall be provided in the direction of the ramp run.*
3. *Detectable warnings shall be installed at all signed or signalized intersections. They shall have a truncated dome surface. The domes shall be in a square pattern and aligned with pedestrian traffic where possible.*
4. *Detectable warnings shall span the width of the pedestrian ramp. See Standard Detail 608(02).*
5. *All detectable warning fields placed at the same intersection shall be made up of the same uniform material type. Detectable warnings shall be contrasting in color to the adjacent walkway.*
6. *A ramp with a running slope less than 5.0% is defined as a "Blended Transition". Blended transitions do not require a level landing at the top of the ramp. See 80(26) for details.*
7. *The ramp length shall not exceed 15 feet. Adjust ramp length or slope as needed to provide access to the maximum extent feasible. See 80(13) for details.*
8. *All curb ramp joints and grade breaks shall be flush.*
9. *Ramp grade breaks shall be perpendicular to the running slope.*
10. *There shall be a minimum of 12" Aggregate Subbase Course - Gravel under the sidewalk surface on pedestrian ramps.*
11. *Drainage structures, traffic signal equipment, or other obstructions shall not be installed in the curb ramp or turning space areas.*
12. *Before retrofitting ramps, the contractor shall verify removal limits are sufficient to provide positive drainage, maintain existing drainage patterns, and avoid ponding in the final configuration.*
13. *A temporary pedestrian access route shall be provided whenever the existing pedestrian access route in the public right of way is blocked by construction, alteration, maintenance, or other temporary conditions. Refer to MUTCD for guidance.*

PEDESTRIAN RAMP NOTES

CURB RAMP REQUIREMENTS

Running Slope	A	Max. 8.33% (1:12)
Cross Slope	B	Max. 2% (1:50) <i>Ramp cross slope at street crossings without stop or signal control may match roadway profile.</i>
Clear Width	C	Min. 5 feet <i>For existing ramps only, ramp width may remain 4 feet.</i>
Counter Slope	D	Max. 5% (1:20) <i>Adjacent surface must be flush with the ramp.</i>
Flared Sides	E	Max. 10% (1:10)
Turning Space	F	4 feet by 4 feet <i>Maximum slope of 2% in any direction. May include Detectable Warnings</i>
Clear Space	G	4 feet by 4 feet <i>Located at the bottom of the ramp outside active travel lanes.</i>
Detectable Warnings	H	<i>Required at traffic controlled intersections and mid-block crossings, full ramp width.</i>

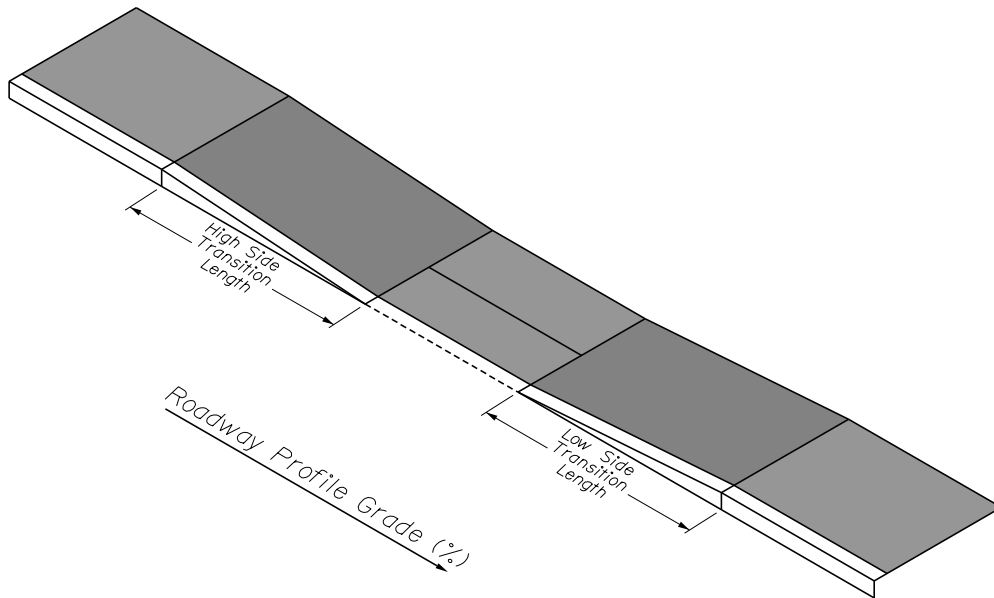


PEDESTRIAN RAMP REQUIREMENTS

Supplemental
Standard Detail

Supersedes 801(12)

△ Jun. 9, 2021

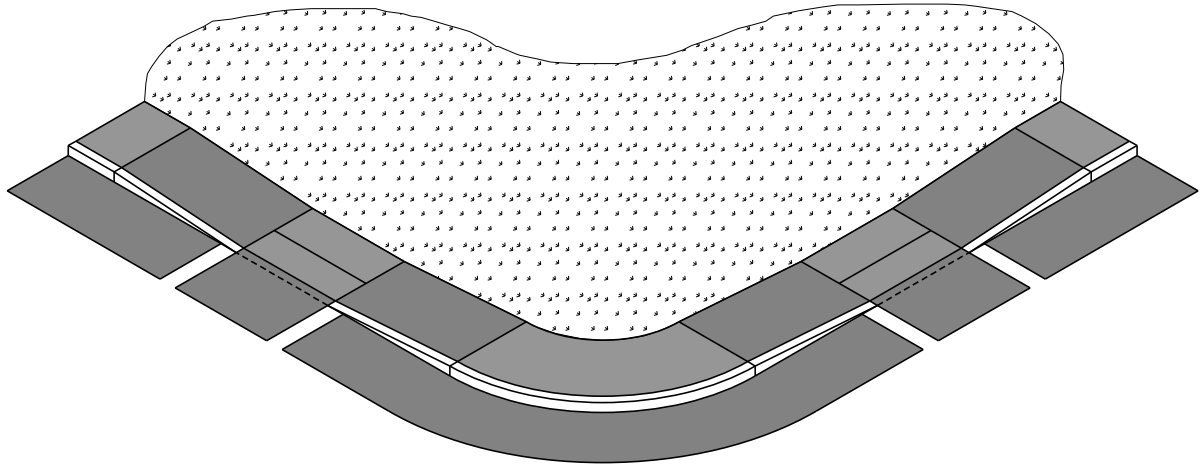


Pedestrian Ramp Length Table						
Curb Reveal (Inches)		7	6	5	4	3
	Roadway Profile Grade	Minimum Transition Length Required (Feet)				
Low Side Transition Length	-7% and Lower	4.0	4.0	4.0	4.0	4.0
	-6%	8.0	4.0	4.0	4.0	4.0
	-5%	8.0	4.0	4.0	4.0	4.0
	-4%	8.0	8.0	4.0	4.0	4.0
	-3%	8.0	8.0	4.0	4.0	4.0
	-2%	8.0	8.0	8.0	4.0	4.0
	-1%	8.0	8.0	8.0	4.0	4.0
	0%	8.0	8.0	8.0	8.0	4.0
High Side Transition Length	1%	8.0	8.0	8.0	8.0	4.0
	2%	10.0	8.0	8.0	8.0	4.0
	3%	12.0	10.0	8.0	8.0	8.0
	4%	14.0	12.0	10.0	8.0	8.0
	5%	15.0	15.0	14.0	10.0	8.0
	6%	15.0	15.0	15.0	15.0	12.0
	7% and Higher	15.0	15.0	15.0	15.0	15.0

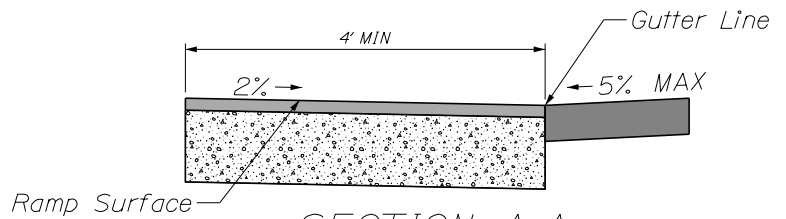
Choose roadway profile grade by rounding up for positive grades and down for negative grades. Round to the nearest whole integer. If constraints prevent placement of the ramp length required by the table, place the maximum length possible and check the slope. If above the maximum allowable slope, consider design modifications before considering technical infeasibility.

RAMP LENGTH TABLE

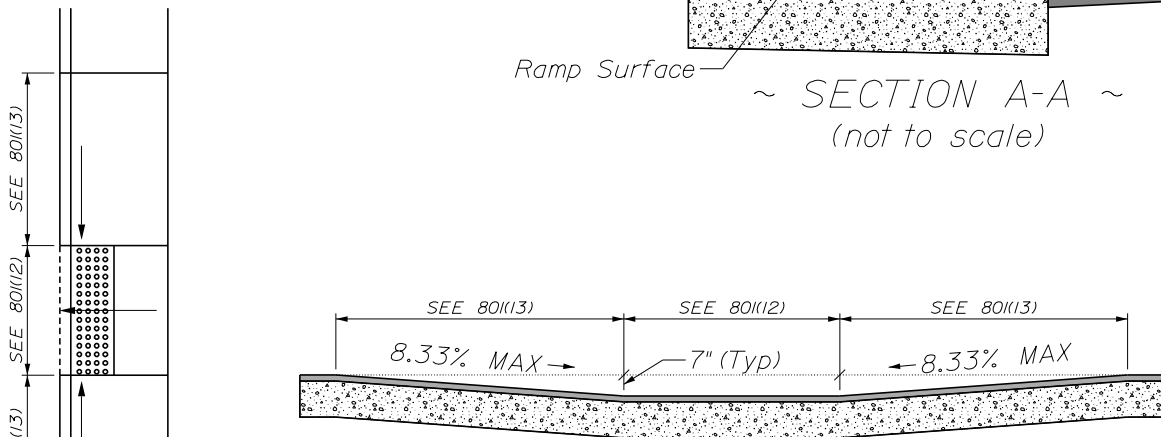
Supersedes 80I(13)



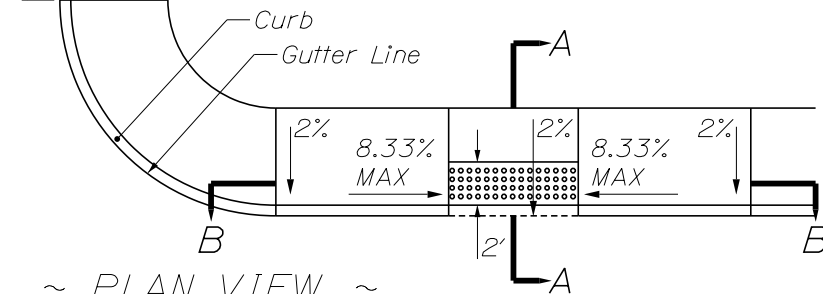
~ ISOMETRIC VIEW ~
(not to scale)



~ SECTION A-A ~
(not to scale)



~ SECTION B-B ~
(not to scale)



~ PLAN VIEW ~
(not to scale)

Note:

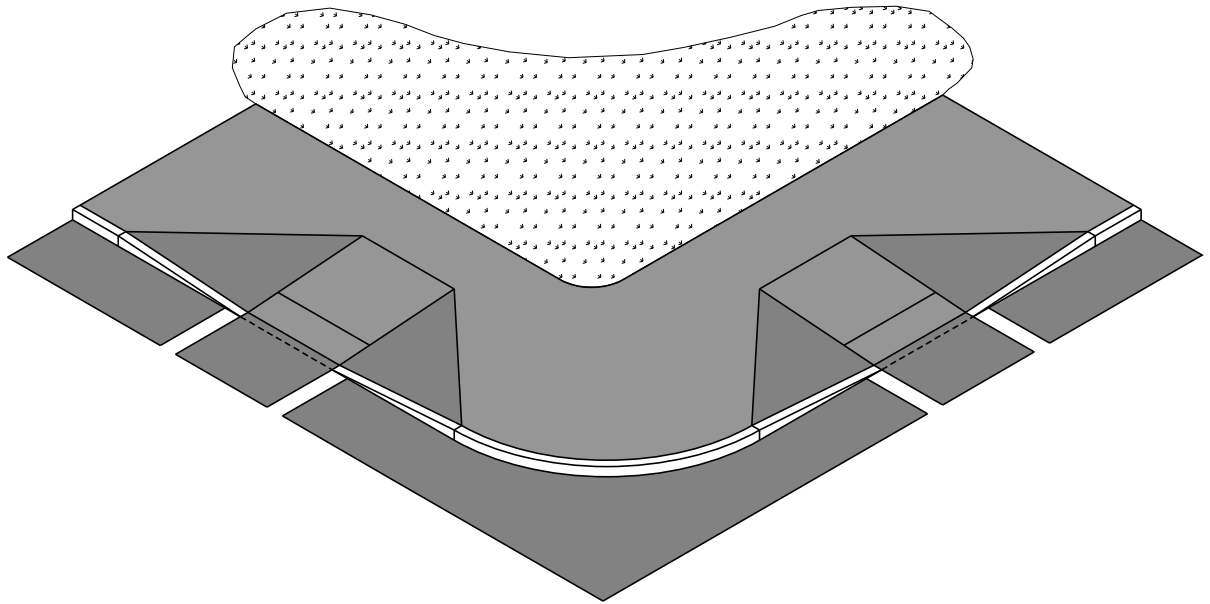
- This desirable design is the preferred option. Use other options only when required by design constraints.

PARALLEL PEDESTRIAN RAMP - OPTION 1

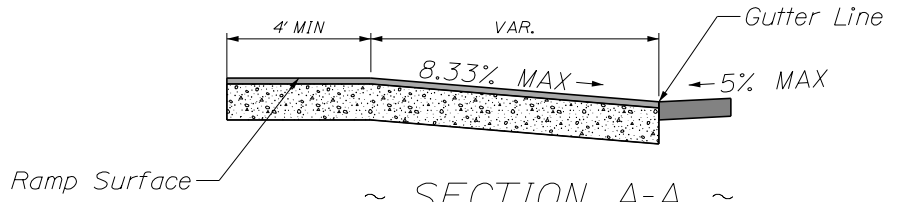
Supplemental
Standard Detail

Supersedes 80I(14)

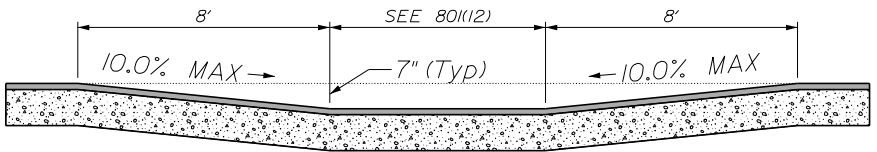
▲ Jun. 9, 2021



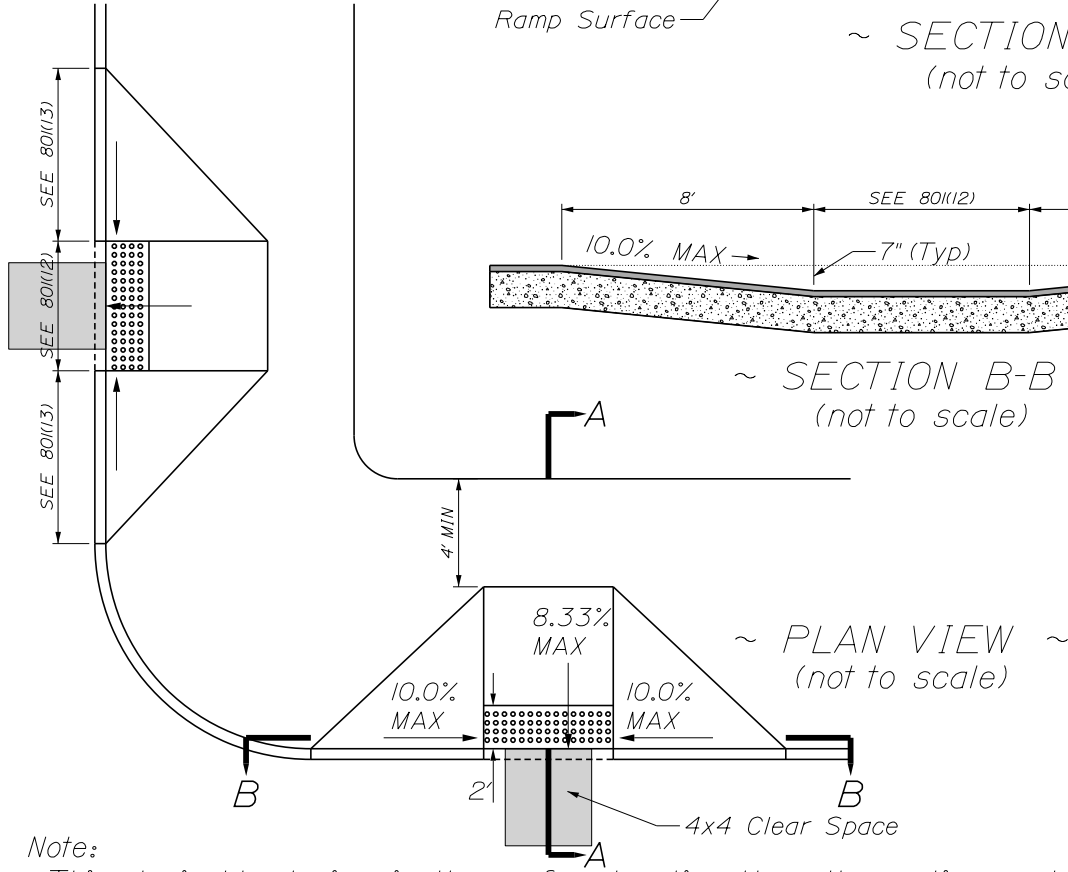
~ ISOMETRIC VIEW ~
(not to scale)



~ SECTION A-A ~
(not to scale)

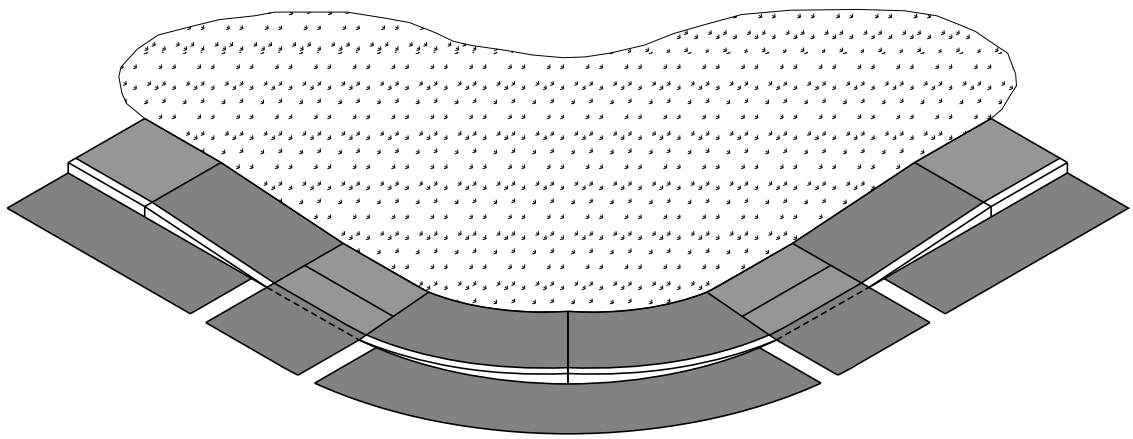


~ SECTION B-B ~
(not to scale)

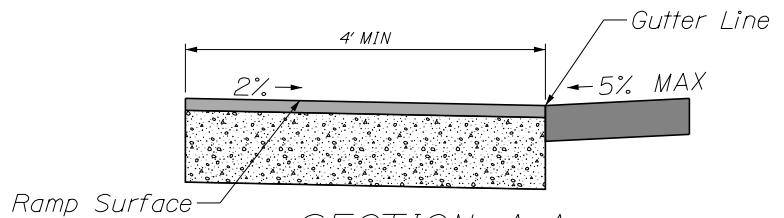


~ PLAN VIEW ~
(not to scale)

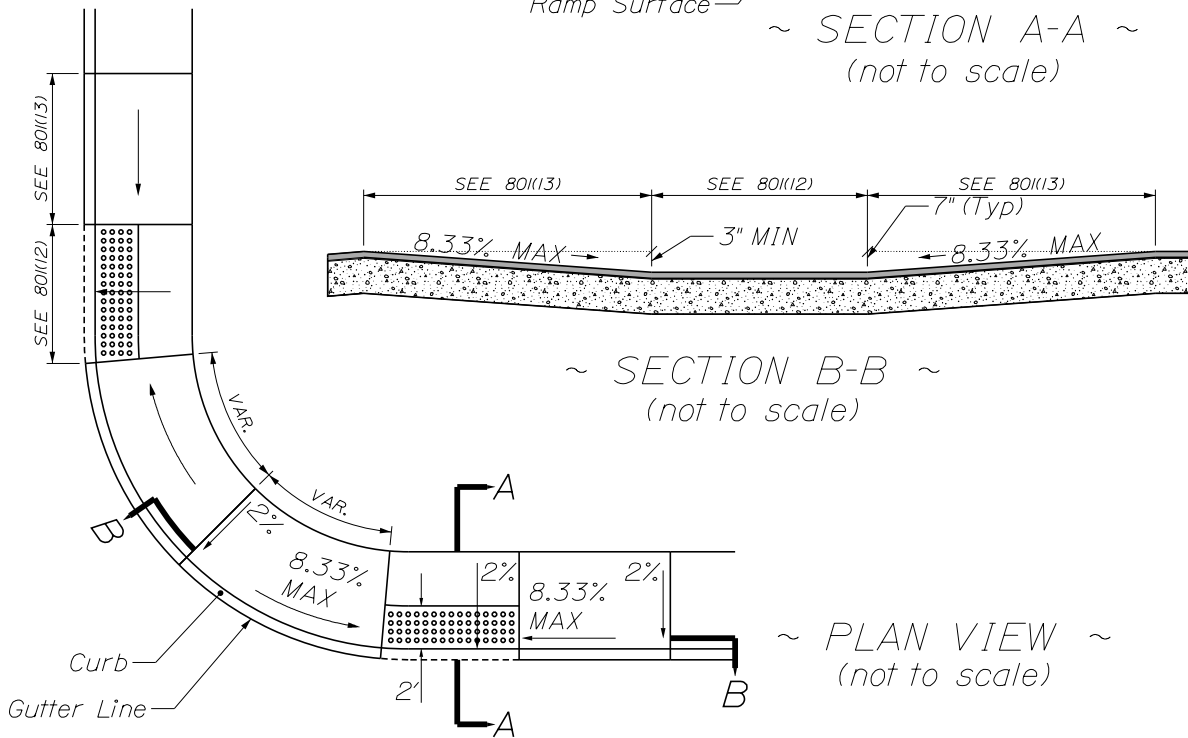
Note:
- This desirable design is the preferred option. Use other options only when required by design constraints.



~ ISOMETRIC VIEW ~
(not to scale)



~ SECTION A-A ~
(not to scale)



~ SECTION B-B ~
(not to scale)

~ PLAN VIEW ~
(not to scale)

Notes:

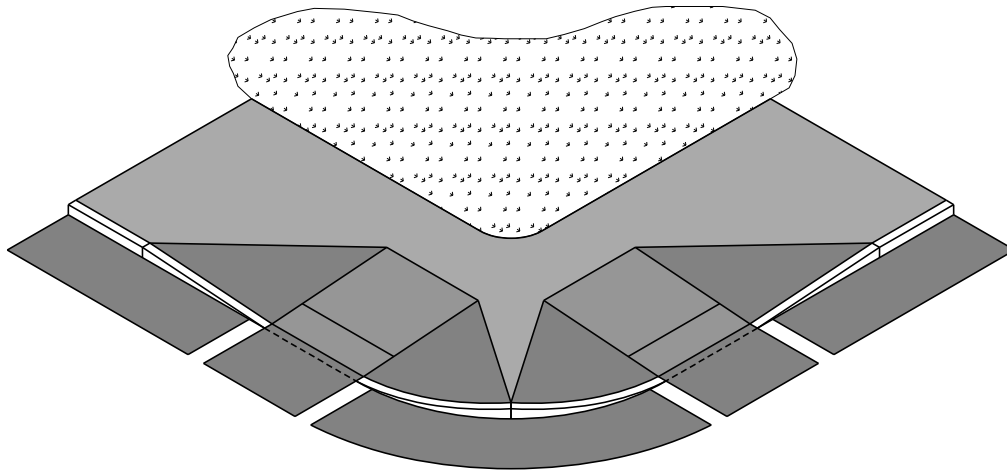
- This less desirable design should not be used unless required by design constraints. It may not provide adequate curb reveal. Use Option 1 when possible.
- No vehicular access shall be permitted through the radius curb.
- A minimum curb reveal of 3" is required at the apex of the curb radius.
- Minimum terminal curb length shall be 4ft.

PARALLEL PEDESTRIAN RAMP - OPTION 2A

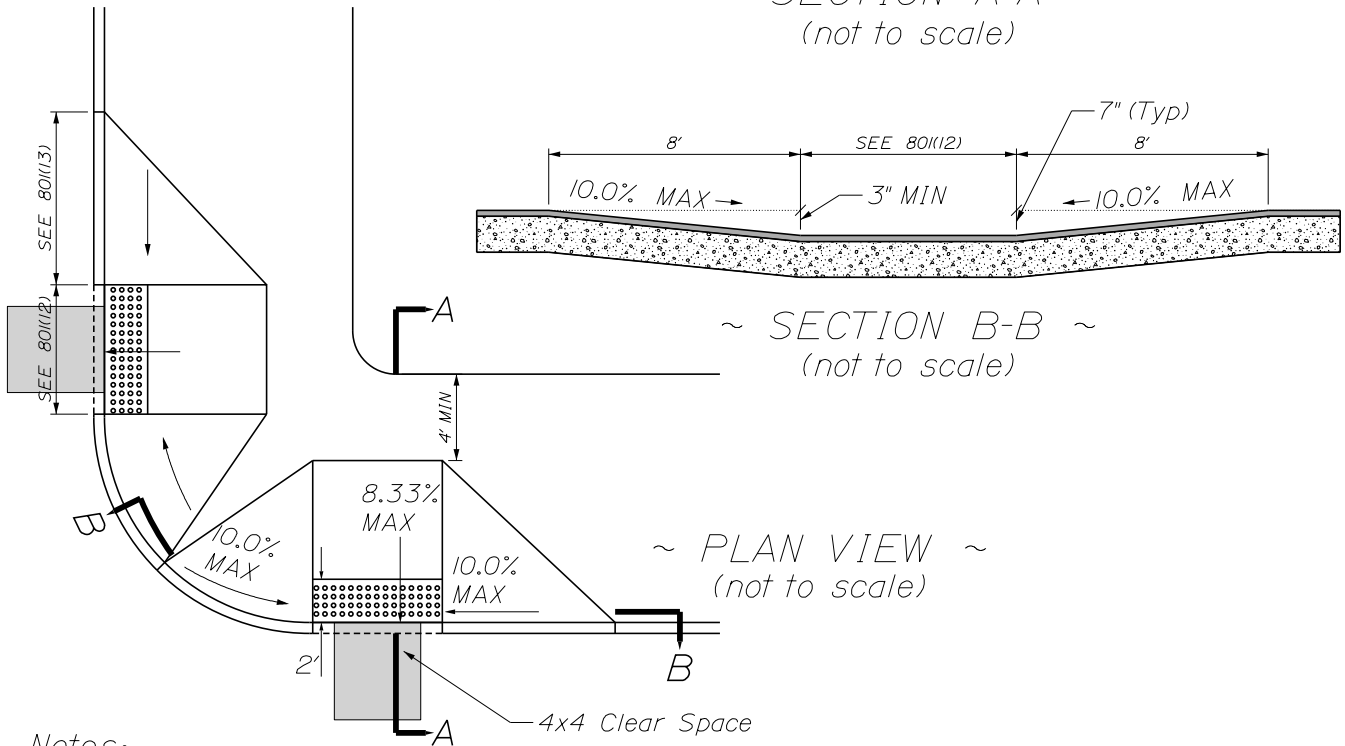
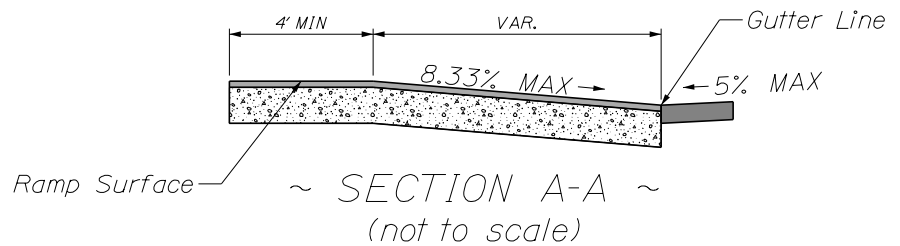
Supplemental
Standard Detail

Supersedes 80I(16)

▲ Jun. 9, 2021

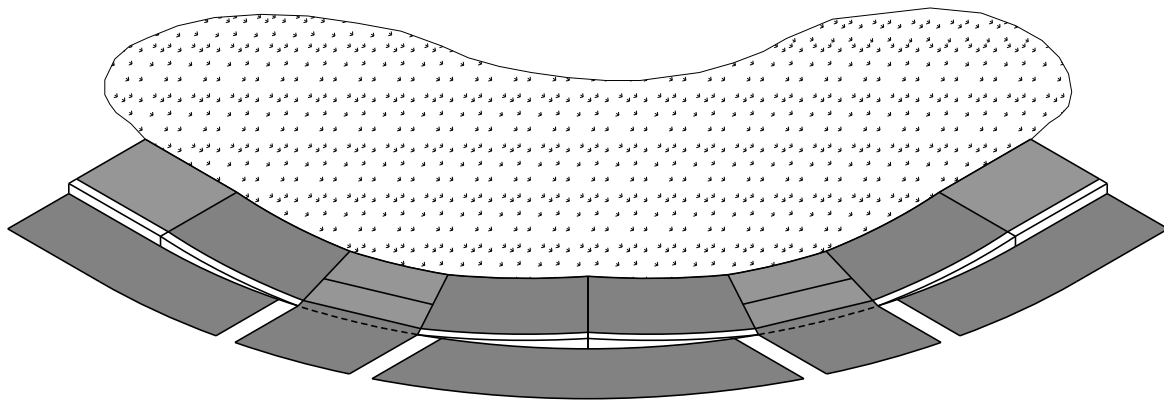


~ ISOMETRIC VIEW ~
(not to scale)

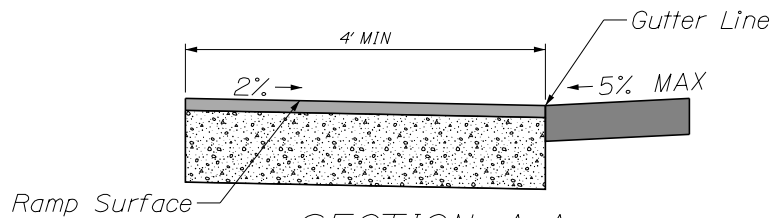


Notes:

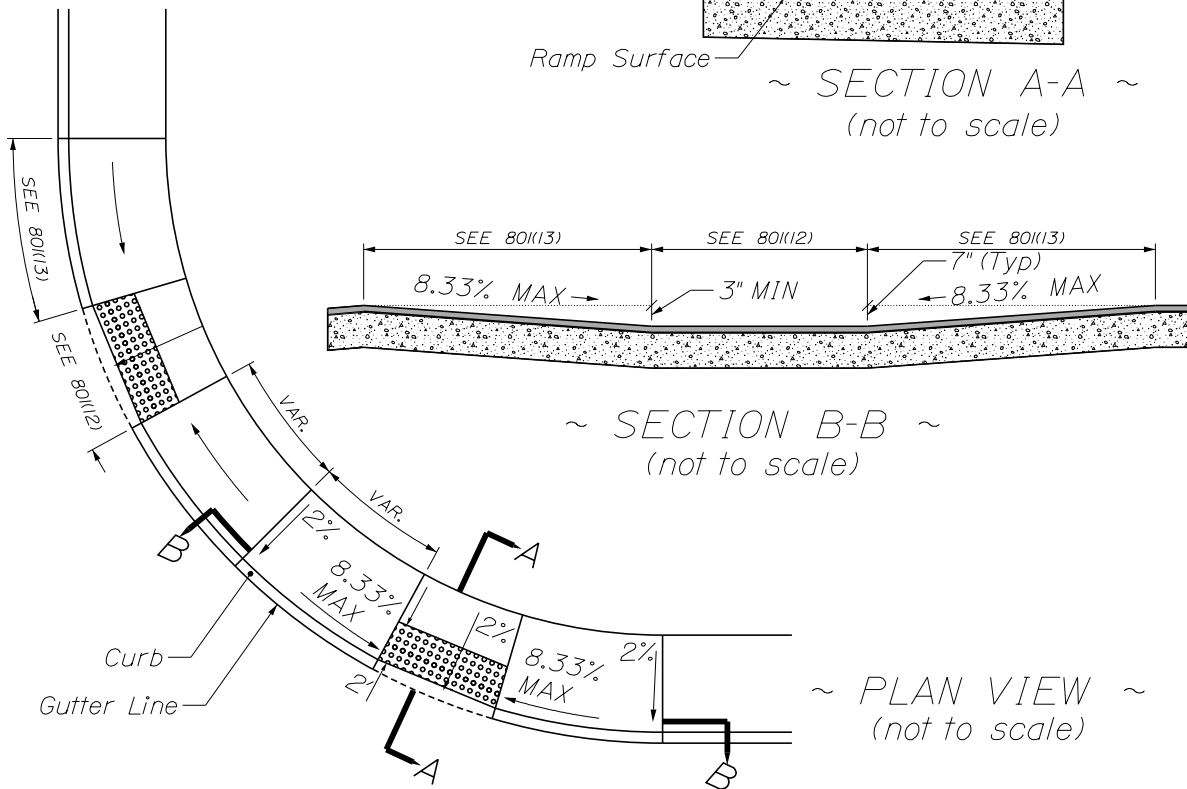
- This less desirable design should not be used unless required by design constraints. It may not provide adequate curb reveal. Use Option 1 when possible.
- No vehicular access shall be permitted through the radius curb.
- A minimum curb reveal of 3" is required at the apex of the curb radius.
- Minimum terminal curb length shall be 4ft.



~ ISOMETRIC VIEW ~
(not to scale)



~ SECTION A-A ~
(not to scale)



~ SECTION B-B ~
(not to scale)

~ PLAN VIEW ~
(not to scale)

Notes:

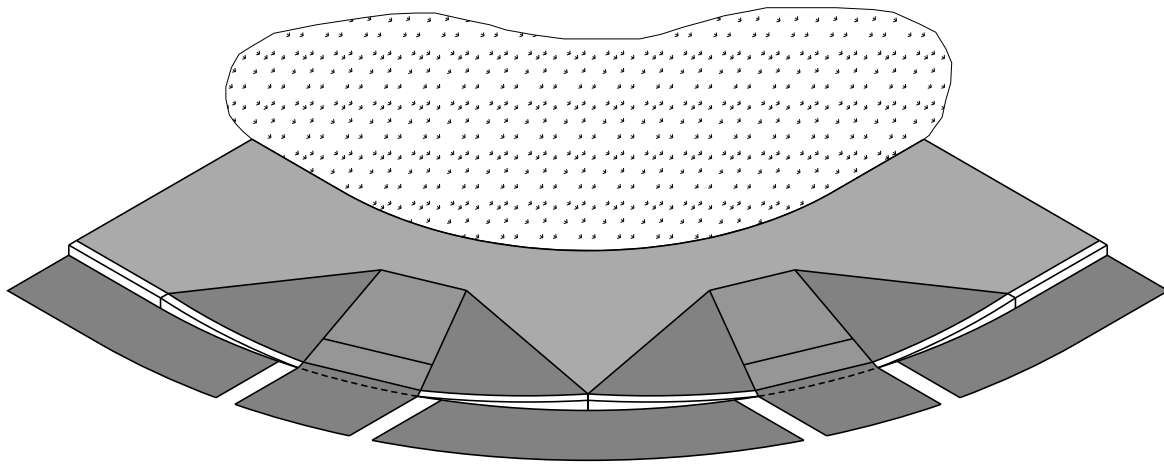
- This less desirable design should not be used unless required by design constraints. It may not provide adequate curb reveal. Use Option 1 when possible.
- No vehicular access shall be permitted through the radius curb.
- A minimum curb reveal of 3" is required at the apex of the curb radius.
- Minimum terminal curb length shall be 4ft.

PARALLEL PEDESTRIAN RAMP - OPTION 2B

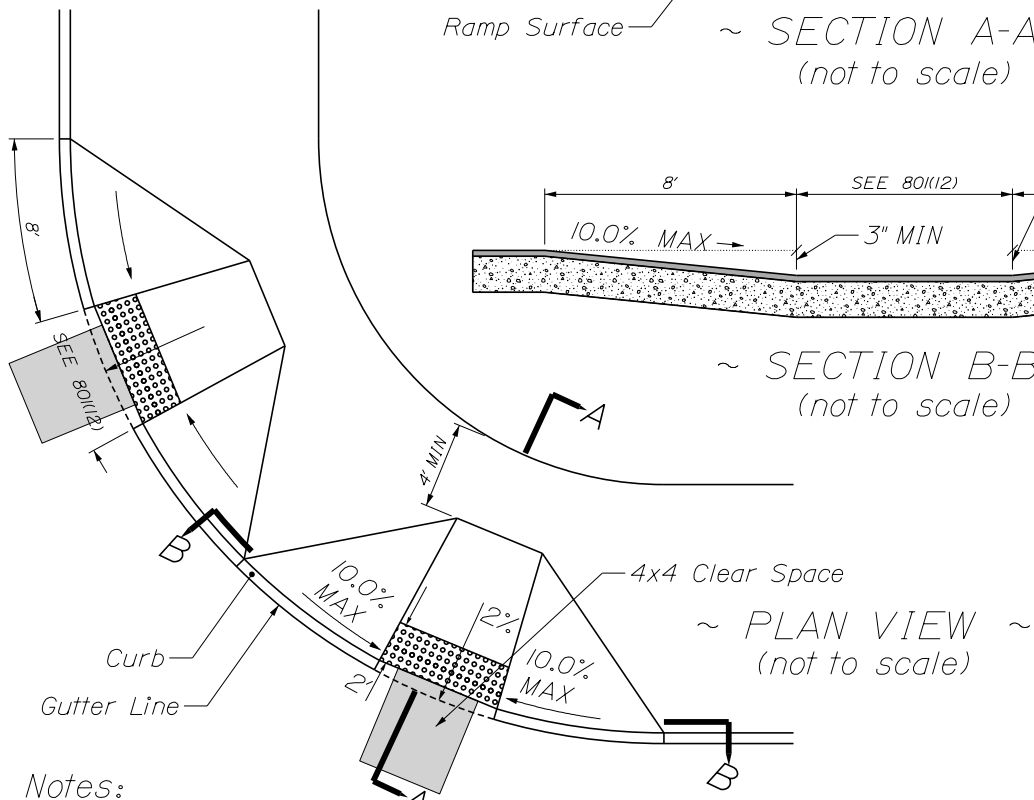
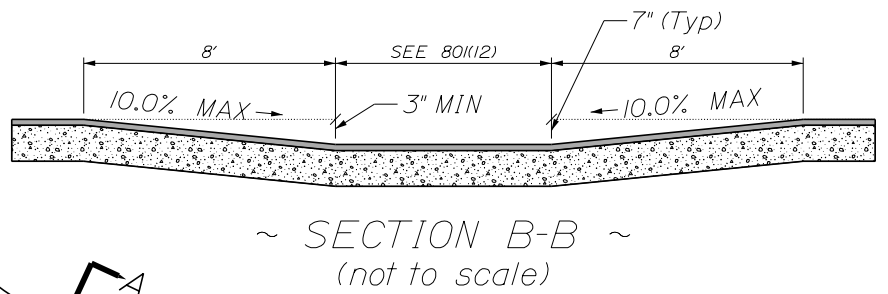
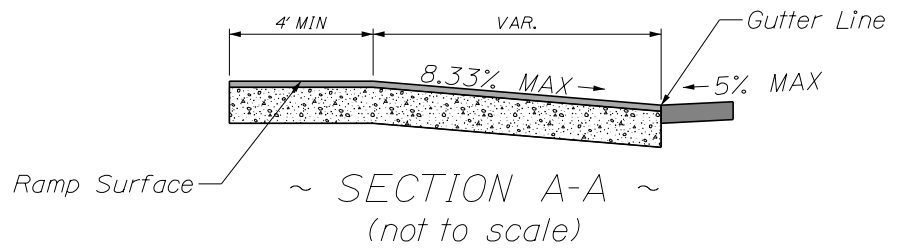
Supplemental
Standard Detail

Supersedes 80I(18)

▲ Jun. 9, 2021

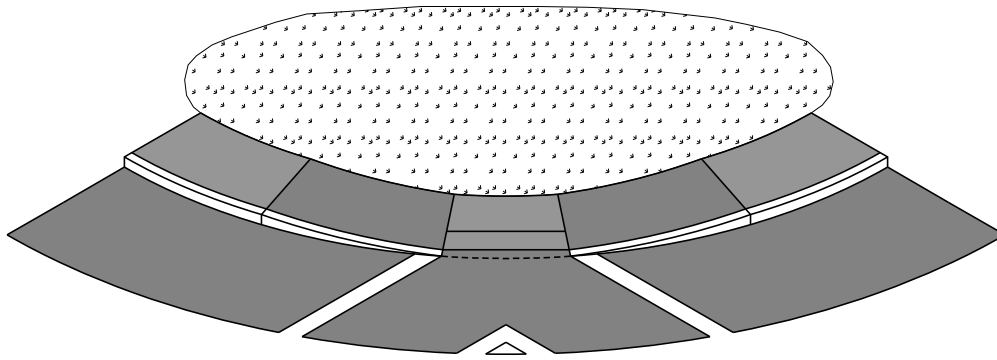


~ ISOMETRIC VIEW ~
(not to scale)

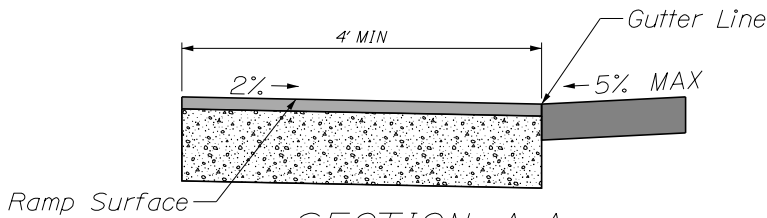


Notes:

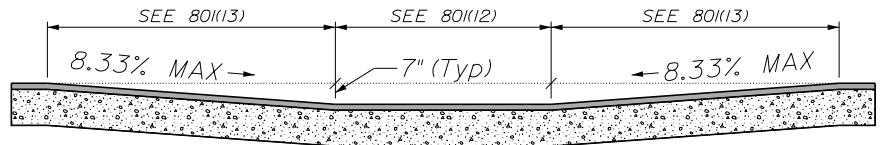
- This less desirable design should not be used unless required by design constraints. It may not provide adequate curb reveal. Use Option 1 when possible.
- No vehicular access shall be permitted through the radius curb.
- A minimum curb reveal of 3" is required at the apex of the curb radius.
- Minimum terminal curb length shall be 4ft.



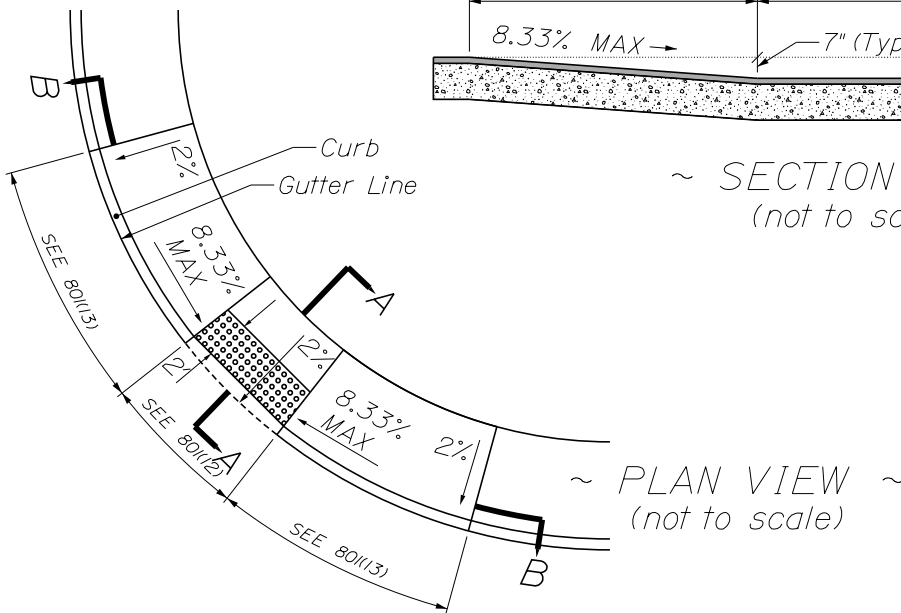
~ ISOMETRIC VIEW ~
(not to scale)



~ SECTION A-A ~
(not to scale)



~ SECTION B-B ~
(not to scale)



~ PLAN VIEW ~
(not to scale)

Notes:

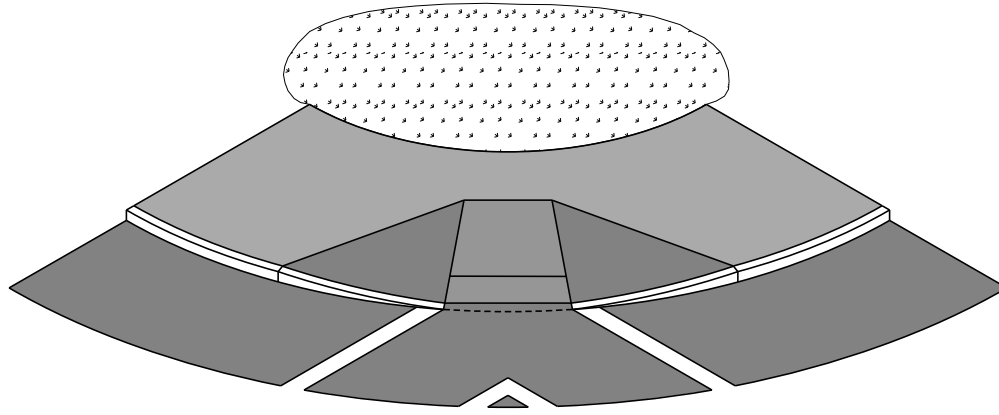
- This less desirable design should not be used unless required by design constraints. It does not provide directional cues. Use Option 1 or Option 2 when possible.
- No vehicular access shall be permitted through the curb radius.

PARALLEL PEDESTRIAN RAMP - OPTION 3

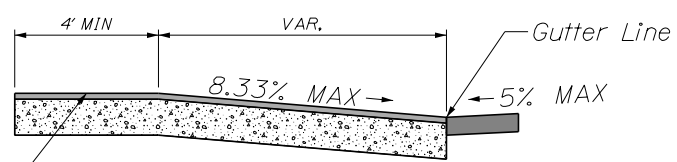
Supplemental
Standard Detail

Supersedes 80I(20)

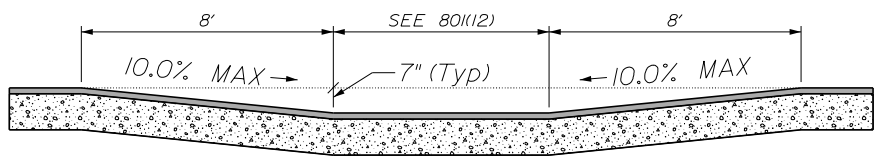
▲ Jun. 9, 2021



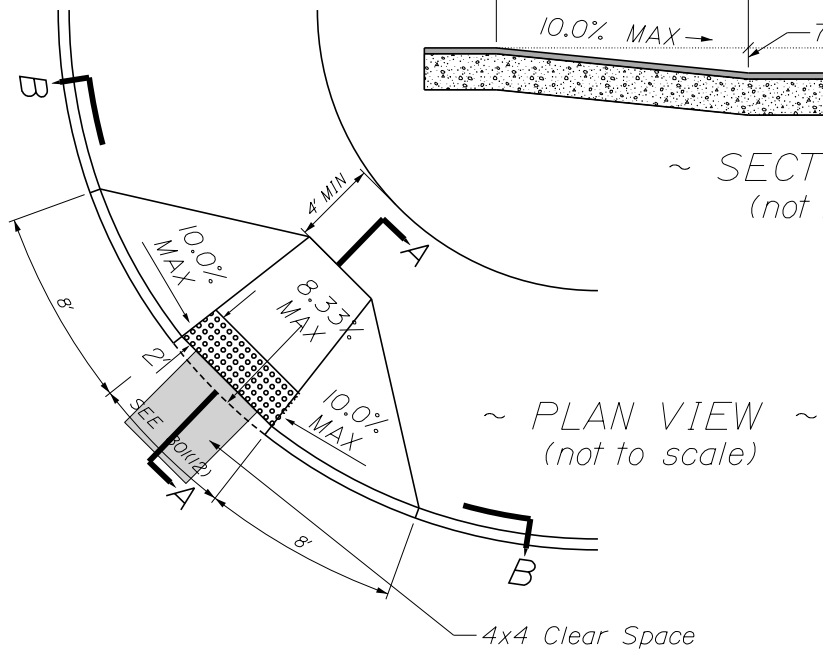
~ ISOMETRIC VIEW ~
(not to scale)



Ramp Surface ~ SECTION A-A ~
(not to scale)



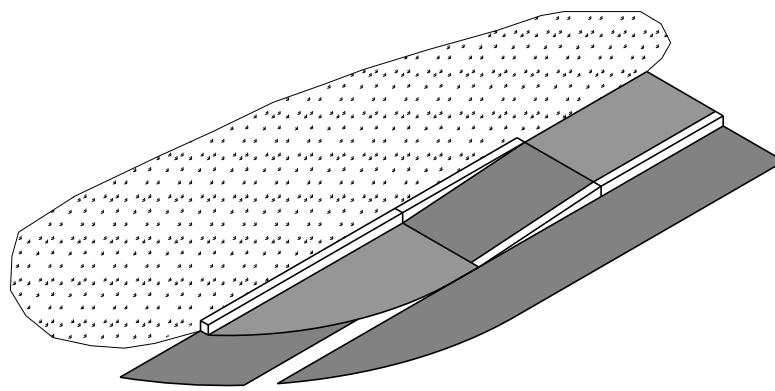
~ SECTION B-B ~
(not to scale)



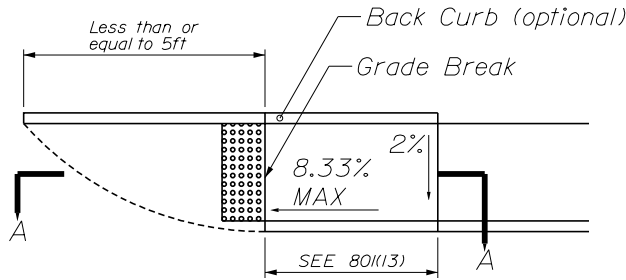
~ PLAN VIEW ~
(not to scale)

Notes:

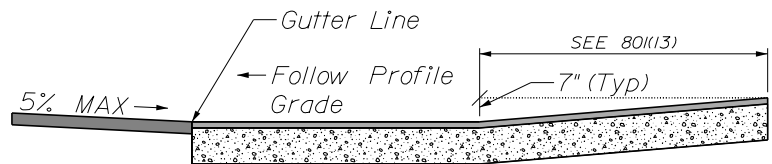
- This less desirable design should not be used unless required by design constraints. It does not provide directional cues. Use Option 1 or Option 2 when possible.
- No vehicular access shall be permitted through the curb radius.



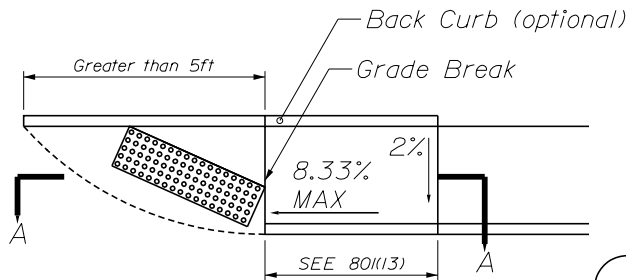
~ PERSPECTIVE VIEW ~
(not to scale)



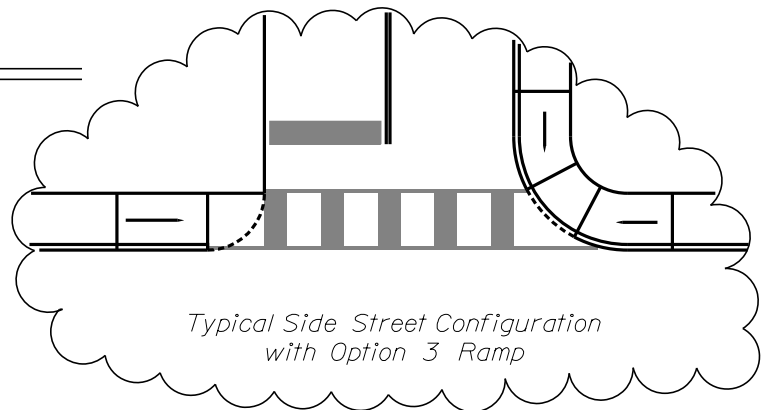
~ *PLAN VIEW* ~
(not to scale)



~ SECTION A-A ~
(not to scale)



~ **PLAN VIEW** ~
(not to scale)



Typical Side Street Configuration
with Option 3 Ramp

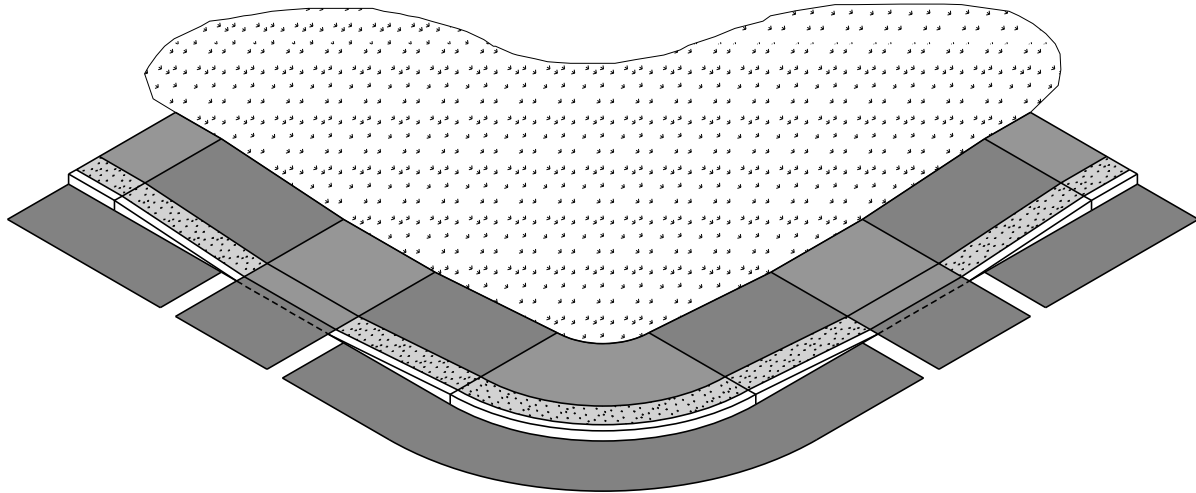
Note:

- No vehicular access shall be permitted through the curb radius.
- For use only when no sidewalk is present on the side road.
- * Use this detectable placement if the distance from the grade break to the gutterline is less than or equal to 5ft.
- ** Use this detectable placement if the distance from the grade break to the gutterline is greater than 5ft.

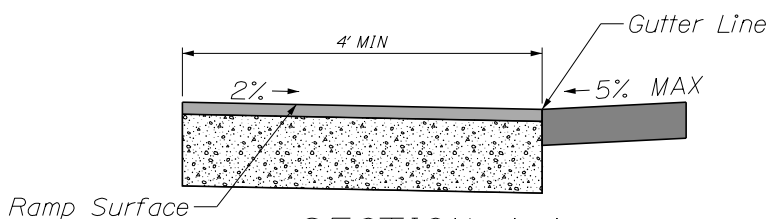
SIDE STREET PEDESTRIAN RAMP

Supplemental
Standard Detail

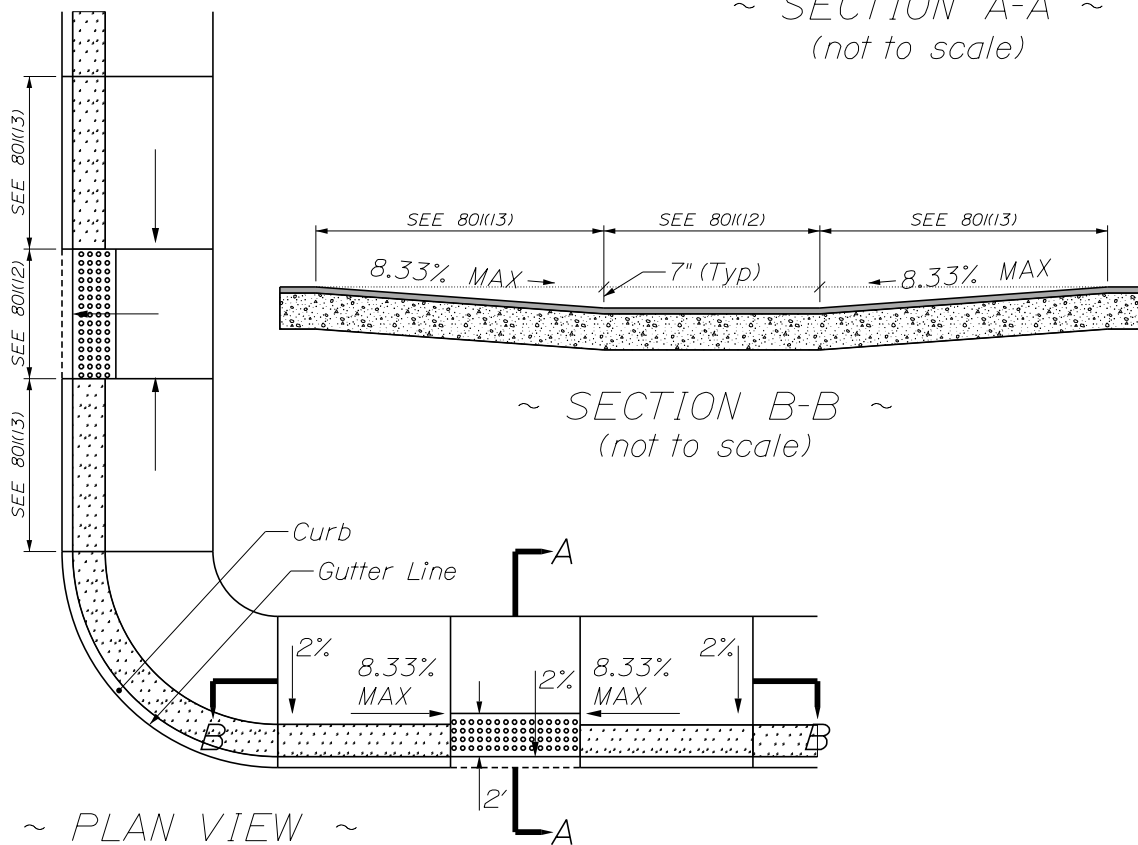
Supersedes 80(22)



~ ISOMETRIC VIEW ~
(not to scale)



~ SECTION A-A ~
(not to scale)



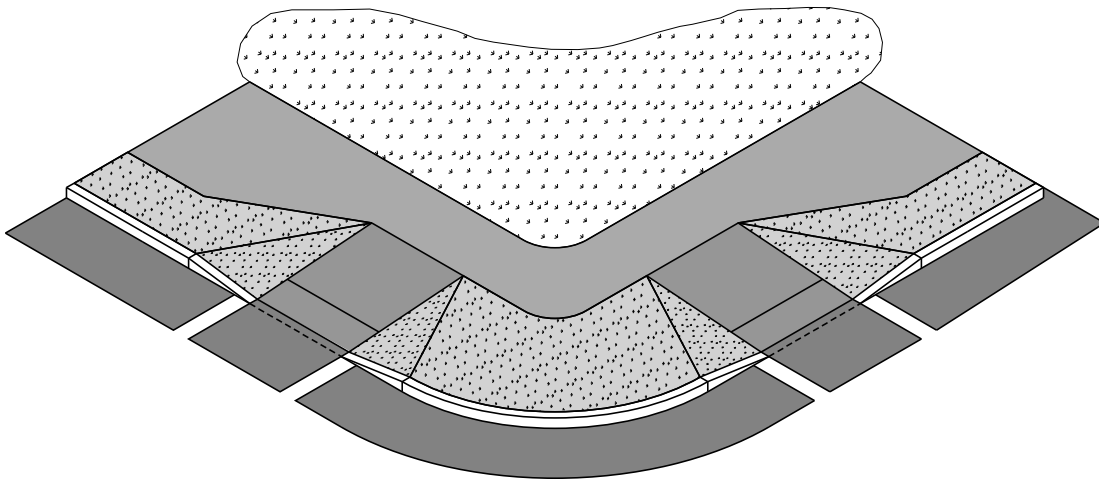
~ PLAN VIEW ~
(not to scale)

PARALLEL PEDESTRIAN RAMP - ESPLANADE

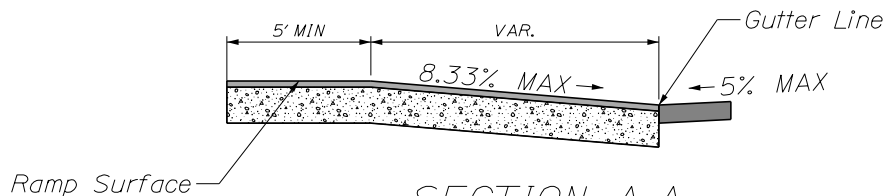
Supplemental
Standard Detail

Supersedes 80(23)

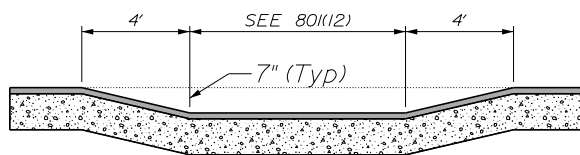
▲ Jun. 9, 2021



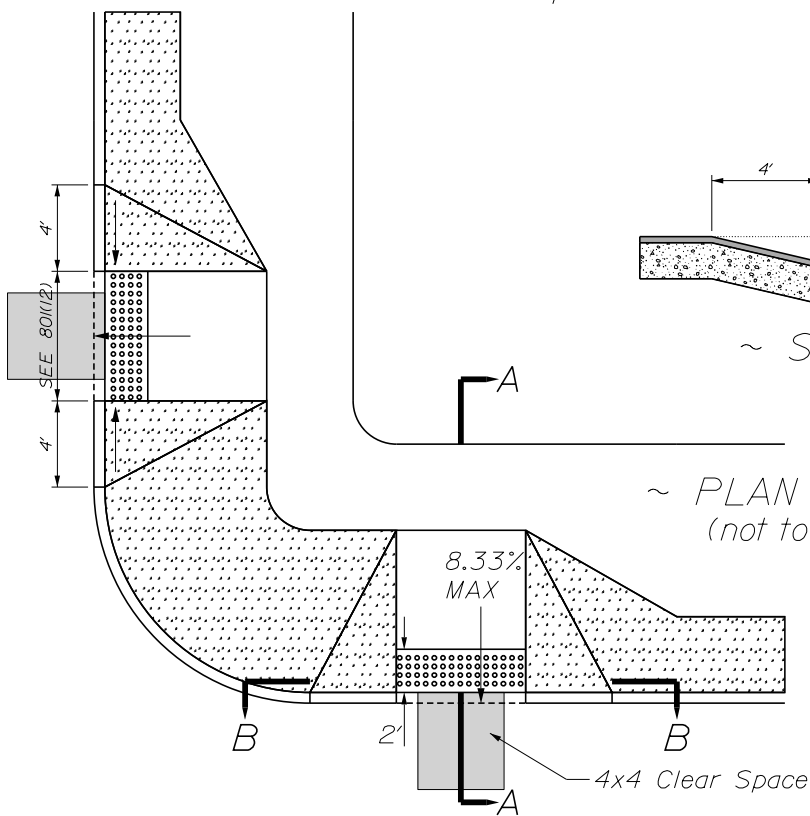
~ ISOMETRIC VIEW ~
(not to scale)



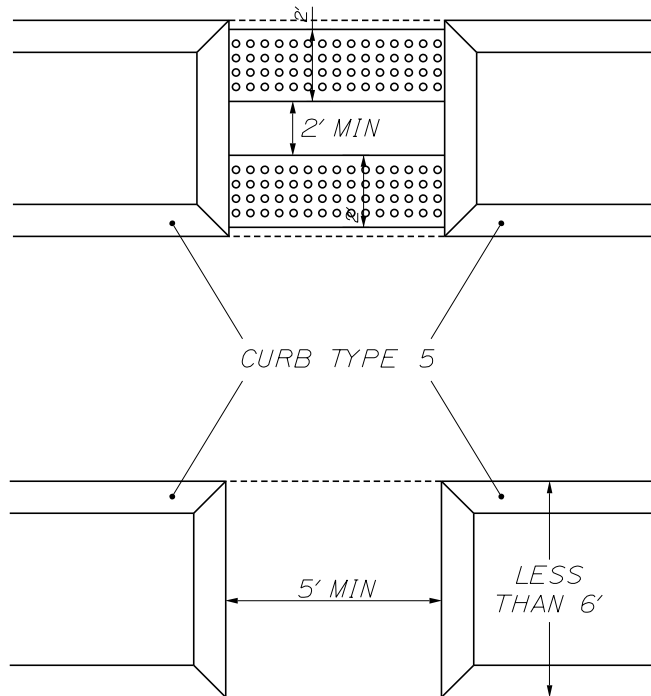
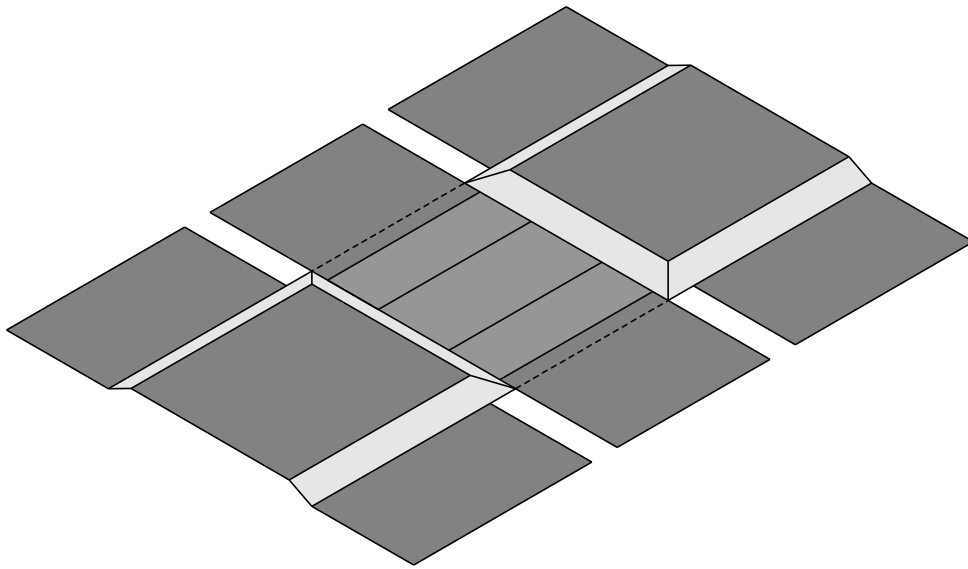
~ SECTION A-A ~
(not to scale)



~ SECTION B-B ~
(not to scale)



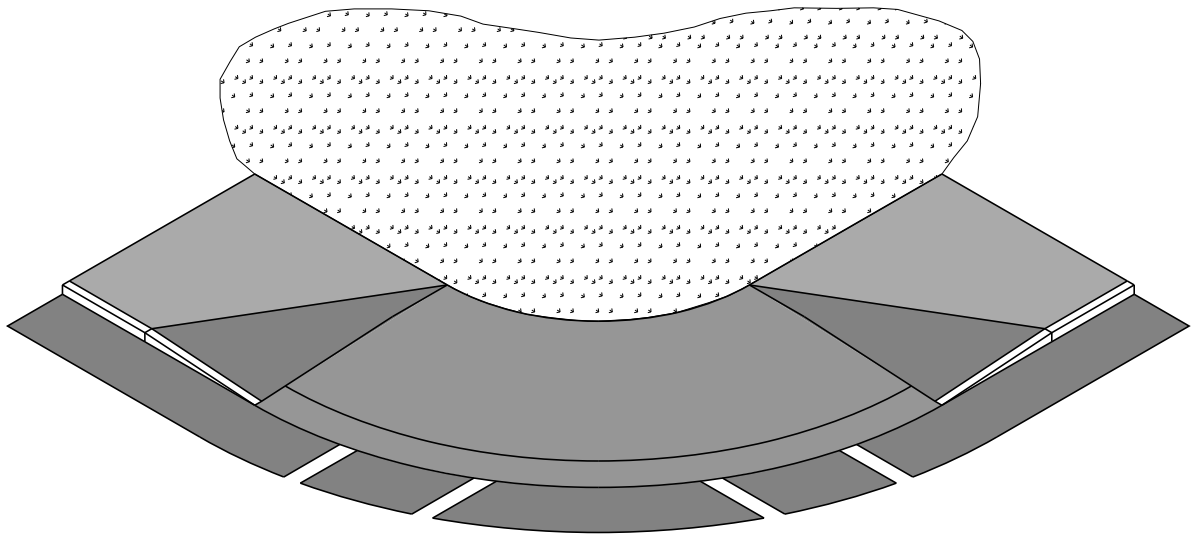
~ PLAN VIEW ~
(not to scale)



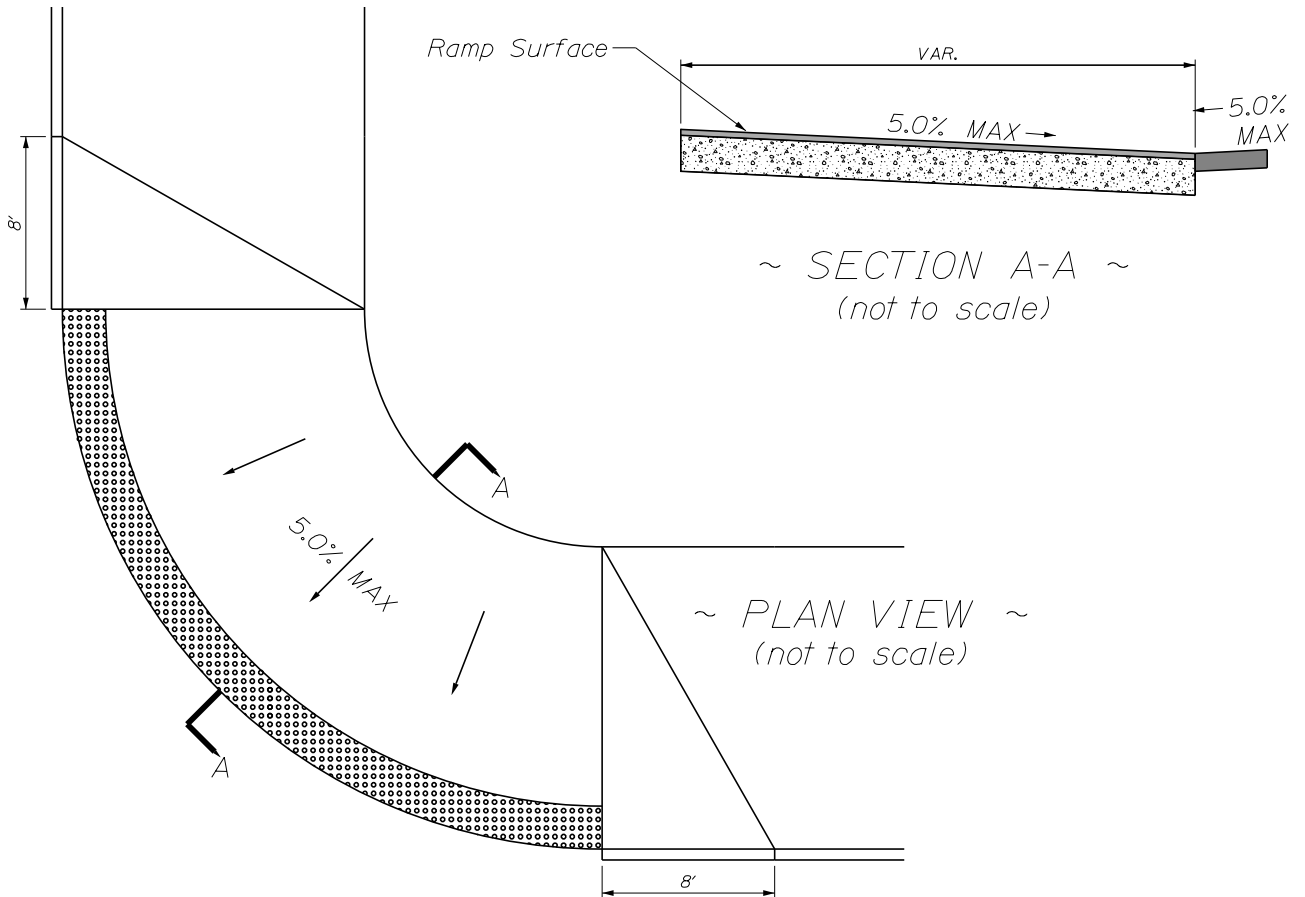
Note:

- Omit Detectable Warnings if minimum of 2'-0" between Detectable Warnings cannot be met.

ISLAND CROSSINGS
Supersedes 80(25)



~ ISOMETRIC VIEW ~
(not to scale)



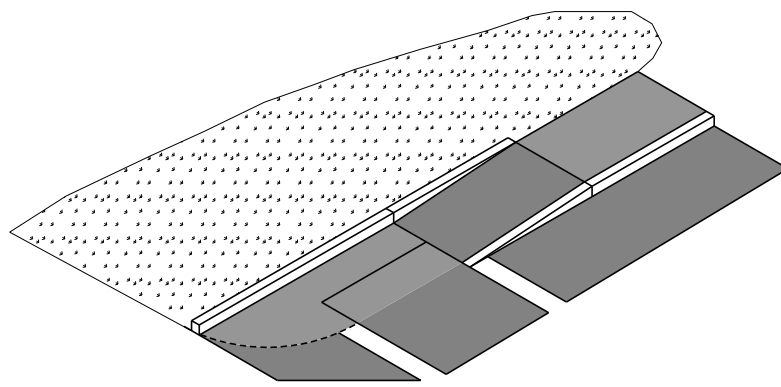
~ SECTION A-A ~
(not to scale)

~ PLAN VIEW ~
(not to scale)

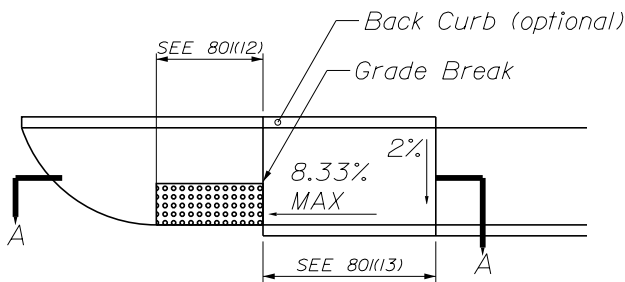
Note:

This option should only be used after all other options have been considered and deemed infeasible.

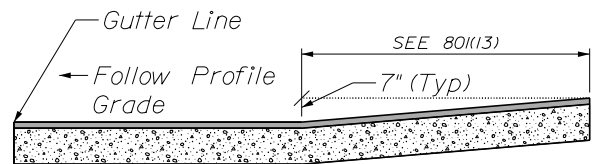
BLENDED TRANSITION
Supersedes 80I(26)



~ PERSPECTIVE VIEW ~
(not to scale)



~ PLAN VIEW* ~
(not to scale)



~ SECTION A-A ~
(not to scale)

Note:

- This less desirable design should be used only when all other options have been considered and exhausted.

- For use only when no sidewalk is present at driveway/non-signalized intersection.

PEDESTRIAN RAMP ADJACENT TO
DRIVEWAY OR ENTRANCE

80(27)