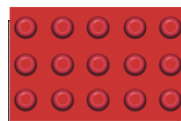


REVISED STANDARD DRAWING #H-1011

Construction Advisory Council Meeting

© NYC DOT

January 27, 2021



Ped
Ramp
Program

<https://www.nycpedramps.info>

PRESENTATION CONTENTS

- Highlights
- General Notes
- Case Side Treatments
- Corner Cases
- Midblock Cases
- Island Cases
- Temporary Cases
- Miscellaneous Details & Examples
- D.W.S.



H-1011: PEDESTRIAN RAMP OVERVIEW

- In compliance with ADA 2010 and PROWAG 2011
- New standard cases:
 - Five corner cases: C1, C2, C3, C4, and C5
 - Two midblock cases: M1, M2
 - Two island/median cases: IM1, IM2
 - Three temporary cases: T1, T2, T3
- Detectable Warning Surface (D.W.S.) requirements
- Curb type varies
- Steel faced curb at ramps – now in new standard detail H-1060
- Sidewalk Curb also in new standard detail H-1060
- New side treatment options

4

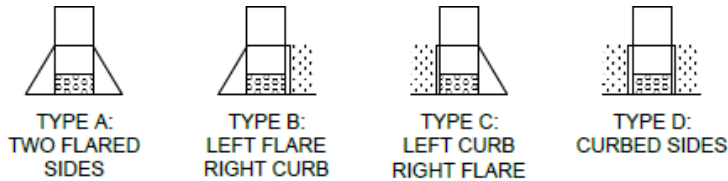
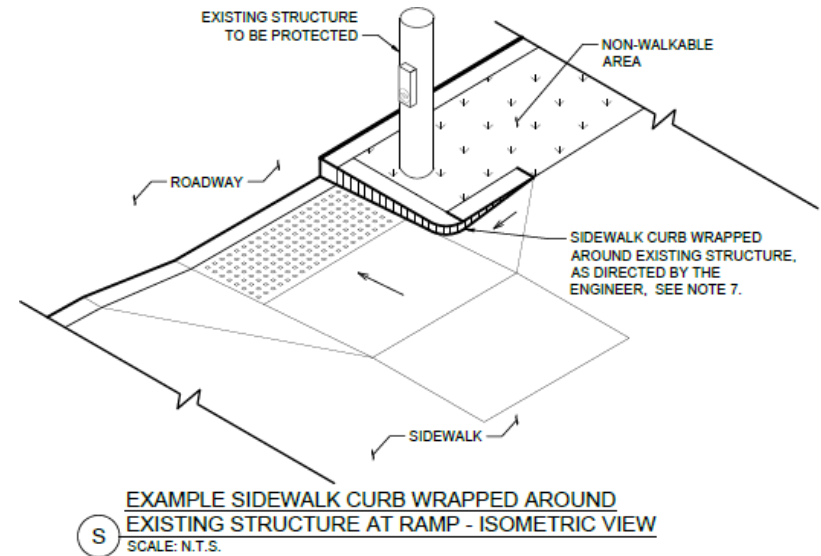
H-1011 GENERAL NOTES

- Slope Limits
- Glossary
- General Notes
 - Construction Notes
 - Design and Field Layout Notes
 - Case Selection Notes
 - *Including: technical infeasibilities, construction inspection*

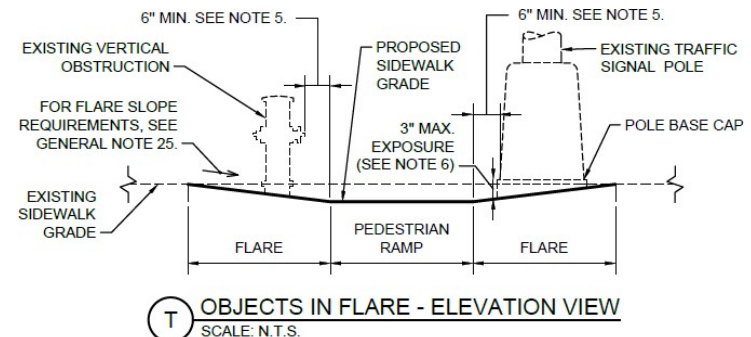
TABLE 1: DESIGN, LAYOUT AND WORK ACCEPTANCE SLOPE LIMITS		
ELEMENTS	SLOPE LIMITS FOR DESIGN AND FIELD LAYOUT	SLOPE LIMITS FOR WORK ACCEPTANCE
<ul style="list-style-type: none"> • PEDESTRIAN ACCESS ROUTE CROSS SLOPE • RAMP CROSS SLOPE • LANDING (TURNING SPACE) RUNNING SLOPE AND CROSS SLOPE • ROADWAY GUTTER FLOW SLOPE (SEE GENERAL NOTE 26) 	0.5% (1:200) MIN. (SEE GENERAL NOTE 22.) 4.5% (1:67) MAX.	2.0% (1:50) MAX.
<ul style="list-style-type: none"> • PEDESTRIAN ACCESS ROUTE RUNNING SLOPE (SEE GENERAL NOTE 23) • BLENDED TRANSITION RUNNING SLOPE • ROADWAY COUNTER SLOPE 	0.5% (1:200) MIN. (SEE GENERAL NOTE 22.) 4.5% (1:22) MAX.	5.0% (1:20) MAX.
<ul style="list-style-type: none"> • PEDESTRIAN RAMP RUNNING SLOPE 	5.0% (1:20) MIN. 7.5% (1:13.5) MAX.	8.3% (1:12) MAX.
<ul style="list-style-type: none"> • SIDE FLARE INSIDE PEDESTRIAN CIRCULATION PATH (SEE GENERAL NOTE 25) 	5.0% (1:20) MIN. 9.5% (1:10.5) MAX.	10.0% (1:10) MAX.
<ul style="list-style-type: none"> • SIDE FLARE OUTSIDE PEDESTRIAN CIRCULATION PATH (SEE GENERAL NOTE 25) 	5.0% (1:20) MIN. 25% (1:4) MAX.	

SIDE TREATMENT OPTIONS

- Shown for most cases
- Where side adjoins pedestrian circulation path - 9.5% Max side flare
- Where side adjoins non-walkable area – 25% max side flare or sidewalk curb
- As directed by the engineer



CASE C1 AND C2 SIDE TREATMENT OPTIONS
SCALE: N.T.S.



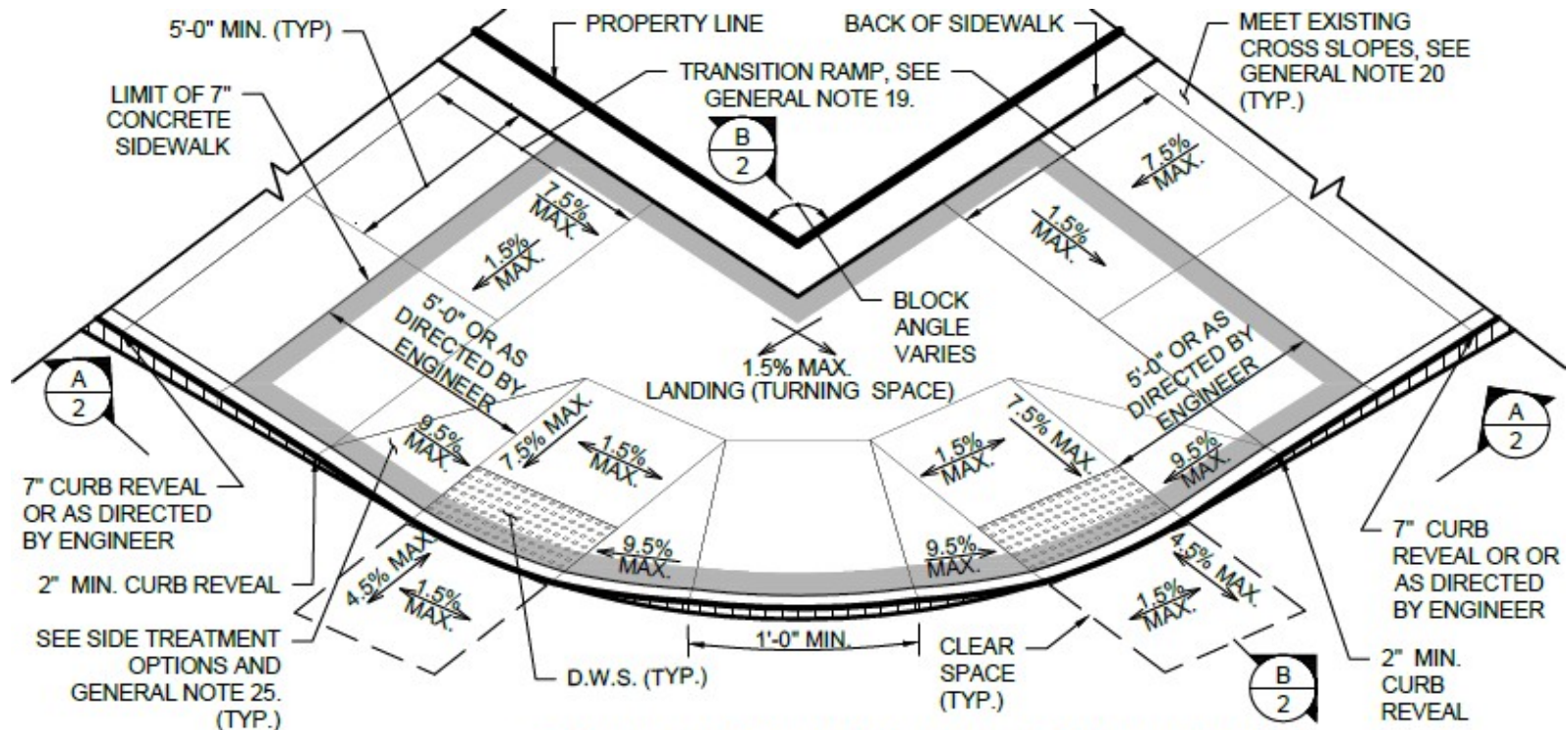
DRAFT

SIDE TREATMENT OPTIONS - EXAMPLES



CASE C1 - PERPENDICULAR

- Evolved from previous Case I and Case III
- Pedestrian circulation path (PCP) 8 feet wide or greater
- Transition ramps as directed by engineer



C1 CASE C1 - PERPENDICULAR - ISOMETRIC VIEW
SCALE: N.T.S.

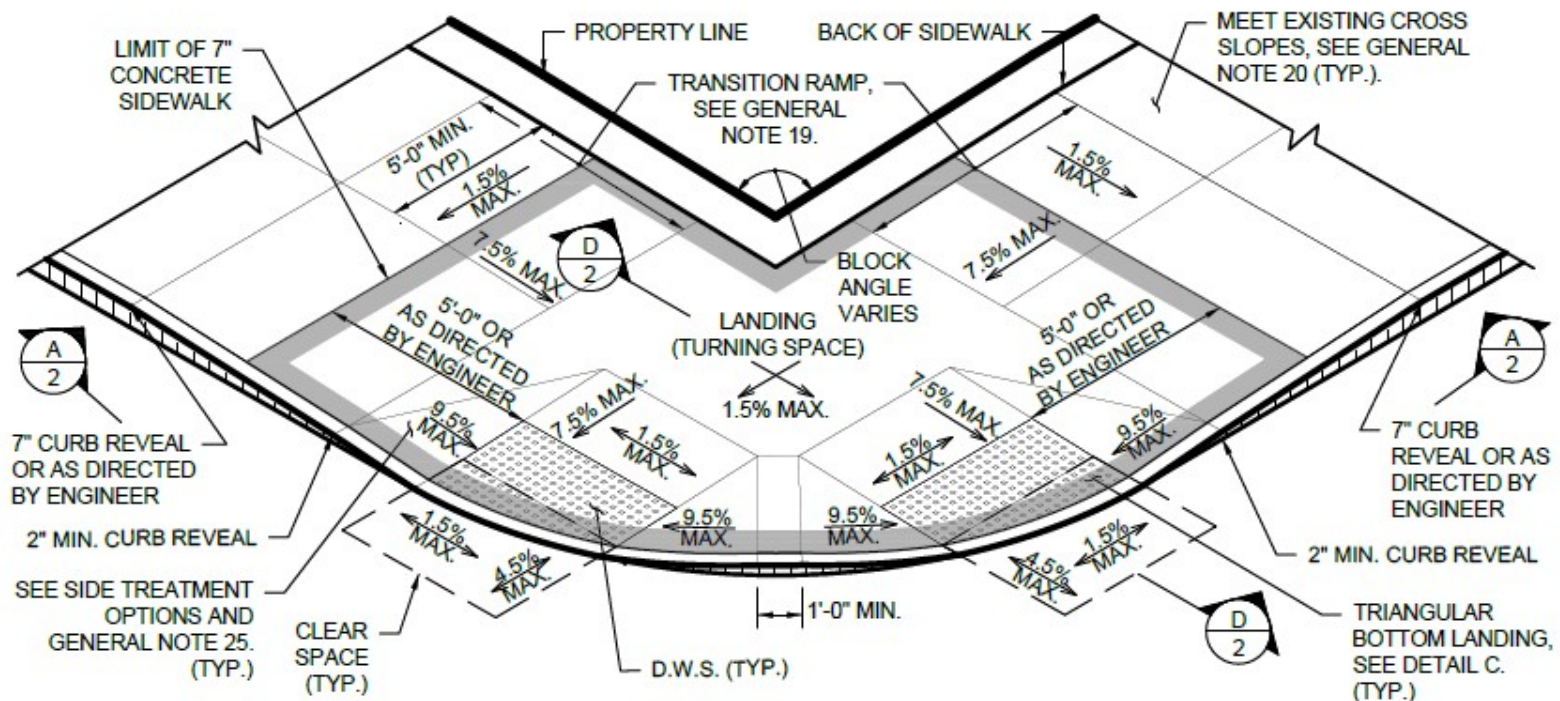
DRAFT

CASE C1 – PERPENDICULAR - EXAMPLES



CASE C2 – DIRECTIONAL

- Similar to case C1, ramp alignment skewed from curb
- Bottom grade break must be perpendicular to ramp run
- Pedestrian circulation path 8'-0" wide or greater
- Transition ramps where directed by engineer

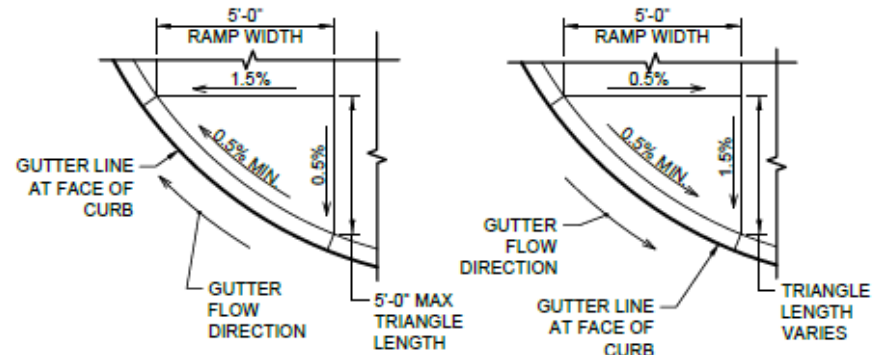


C2 CASE C2 - DIRECTIONAL - ISOMETRIC VIEW
SCALE: N.T.S.

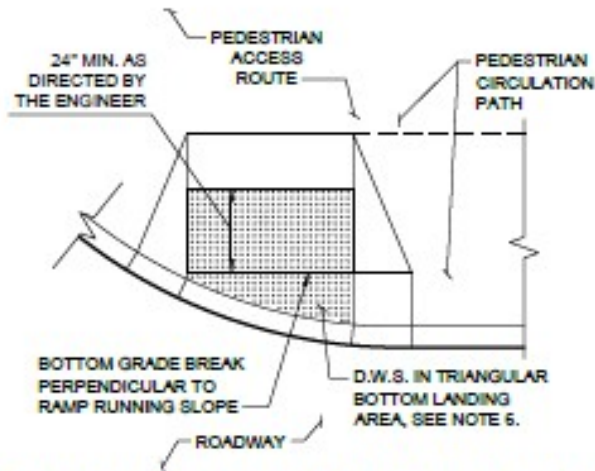
DRAFT

CASE C2 – DIRECTIONAL

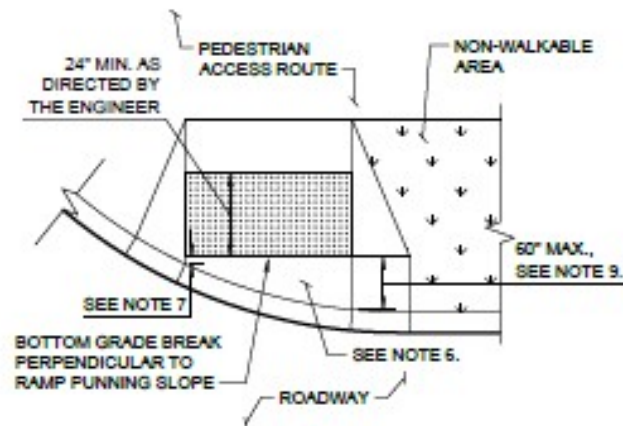
- Standard grading options provided
- D.W.S. as directed by engineer, typically required in triangular bottom landing
- Designer of record responsible for grading detail



C TRIANGULAR BOTTOM LANDING GRADING DETAIL - PLAN
SCALE: N.T.S.



Y D.W.S. PLACEMENT AT DIRECTIONAL RAMP ADJACENT TO PEDESTRIAN CIRCULATION PATH. - PLAN DETAIL
SCALE: N.T.S.



Z D.W.S. PLACEMENT AT DIRECTIONAL RAMP ADJACENT TO NON-WALKABLE AREA - PLAN DETAIL
SCALE: N.T.S.

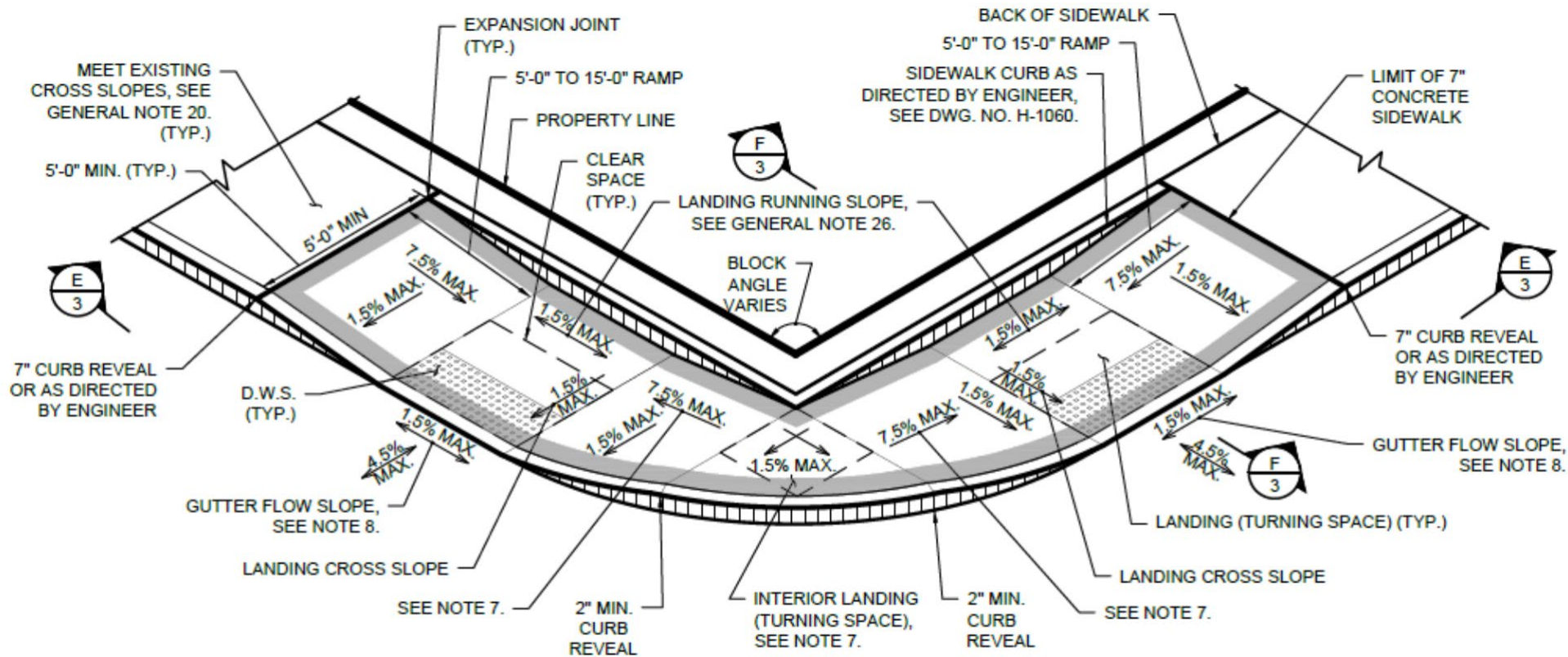
DRAFT

CASE C2 – DIRECTIONAL - EXAMPLES



CASE C3 - PARALLEL

- Pedestrian circulation path less than 8'-0" wide
- Ramps are parallel to curb line, no need to score any flares



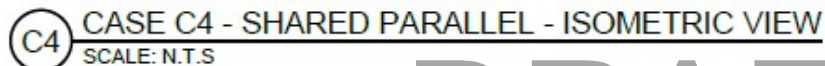
C3 CASE C3 - PARALLEL- ISOMETRIC VIEW
SCALE: N.T.S.

DRAFT

CASE C3 – PARALLEL - EXAMPLES

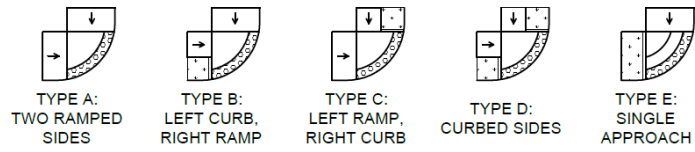


- Two parallel ramps with shared landing.
- Pedestrian circulation paths less than 8'-0" wide
- Requires DOT approval

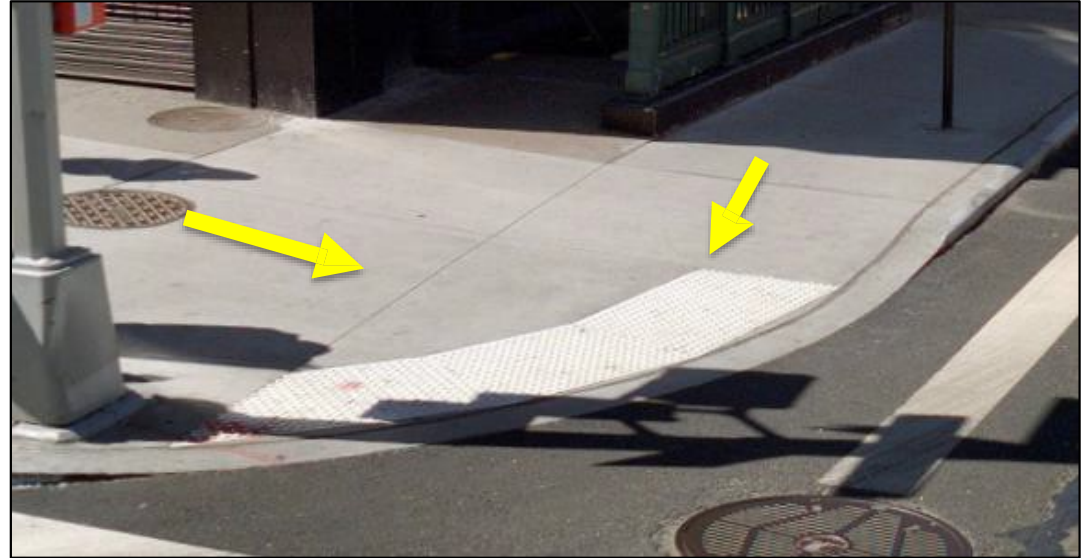


15

CASE C4 – SHARED PARALLEL - EXAMPLES

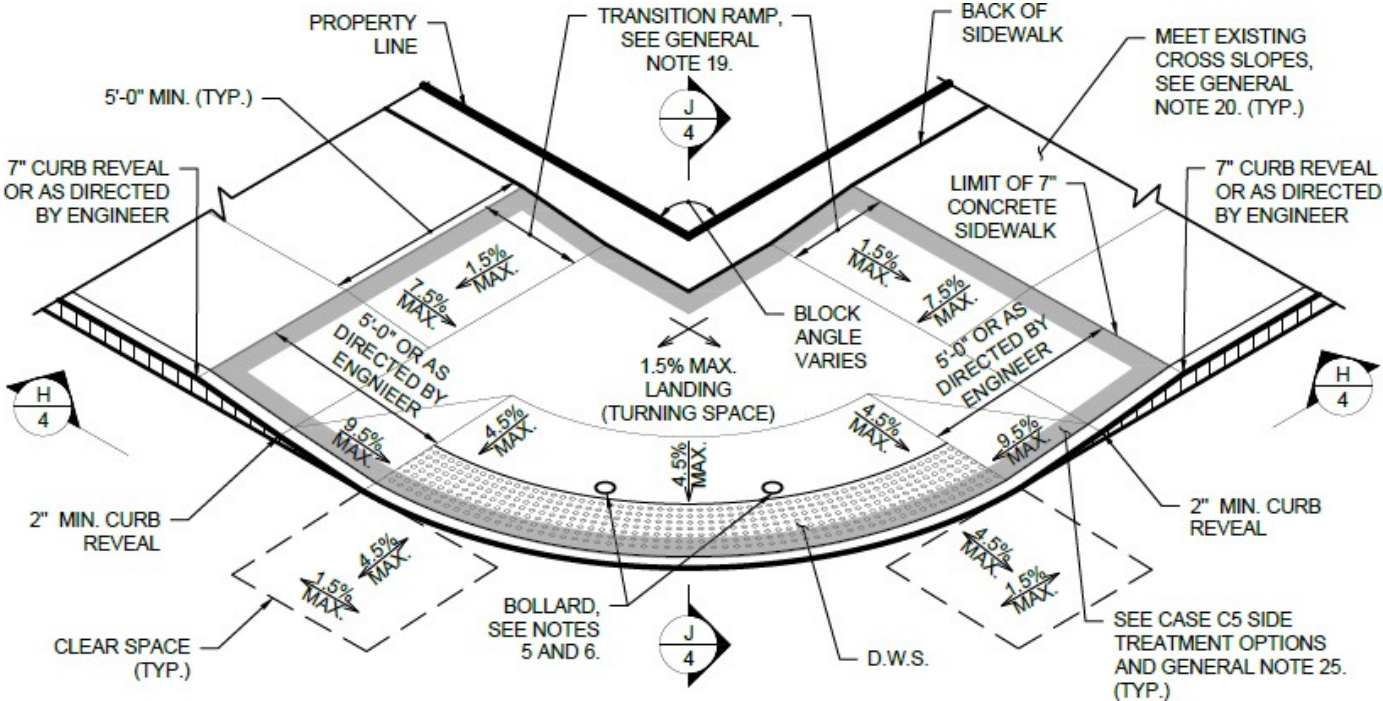


CASE C4 SIDE TREATMENT OPTIONS
SCALE: N.T.S.



DRAFT

- Minimum 8'-0" Wide
- Radial D.W.S.
- Requires DOT approval



C5 CASE C5 - BLENDED TRANSITION - ISOMETRIC VIEW
SCALE: N.T.S.

DRAFT

PERPENDICULAR CASES: C5 - EXAMPLE



- New case, same concept as Case C1 - Perpendicular
- Pedestrian circulation paths 8'-0" wide or greater

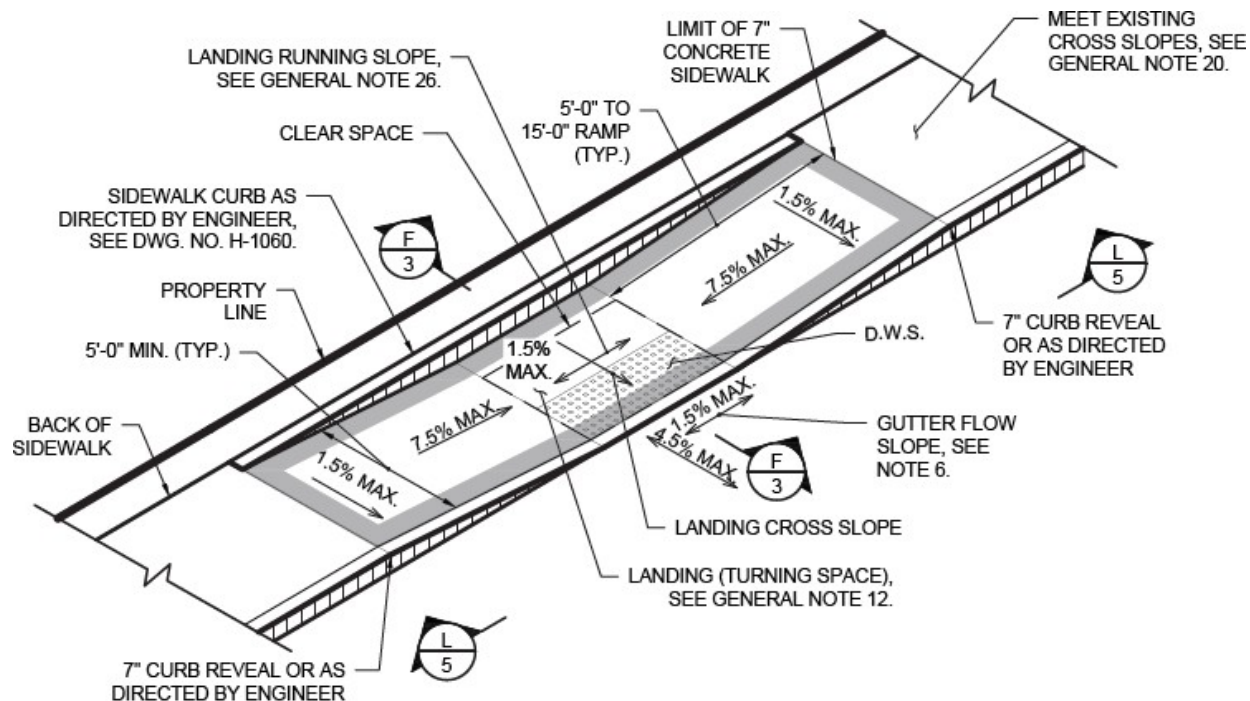


CASE M1 – MIDBLOCK PERPENDICULAR - EXAMPLES



CASE M2 – MIDBLOCK PARALLEL

- New case, same concept as Case C3 - Parallel
- Pedestrian circulation paths less than 8'-0" wide



M2 CASE M2 - MIDBLOCK PARALLEL - ISOMETRIC VIEW
SCALE: N.T.S.

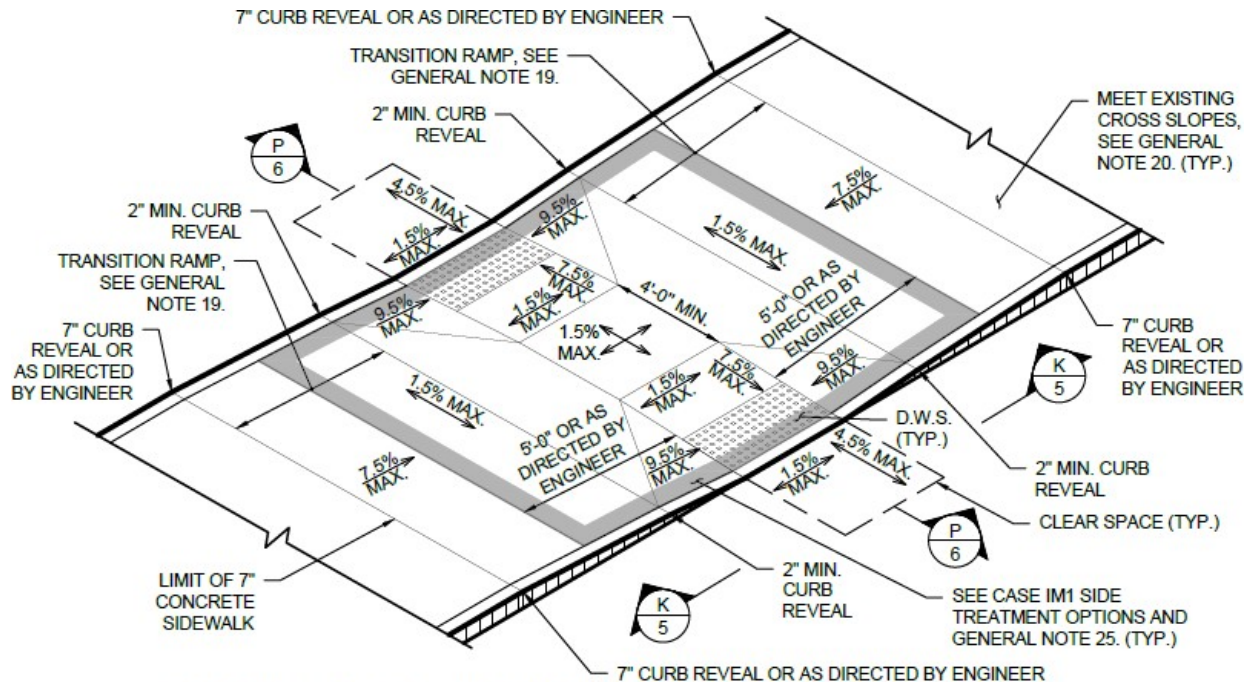
DRAFT

CASE M2 – MIDBLOCK PARALLEL - EXAMPLES



CASE IM1 – ISLAND WITH PERPENDICULAR RAMPS

- Island widths less than 16'-0" require DOT Approval



IM1 CASE IM1 - ISLAND WITH PERPENDICULAR RAMPS - ISOMETRIC VIEW
SCALE: N.T.S.

DRAFT

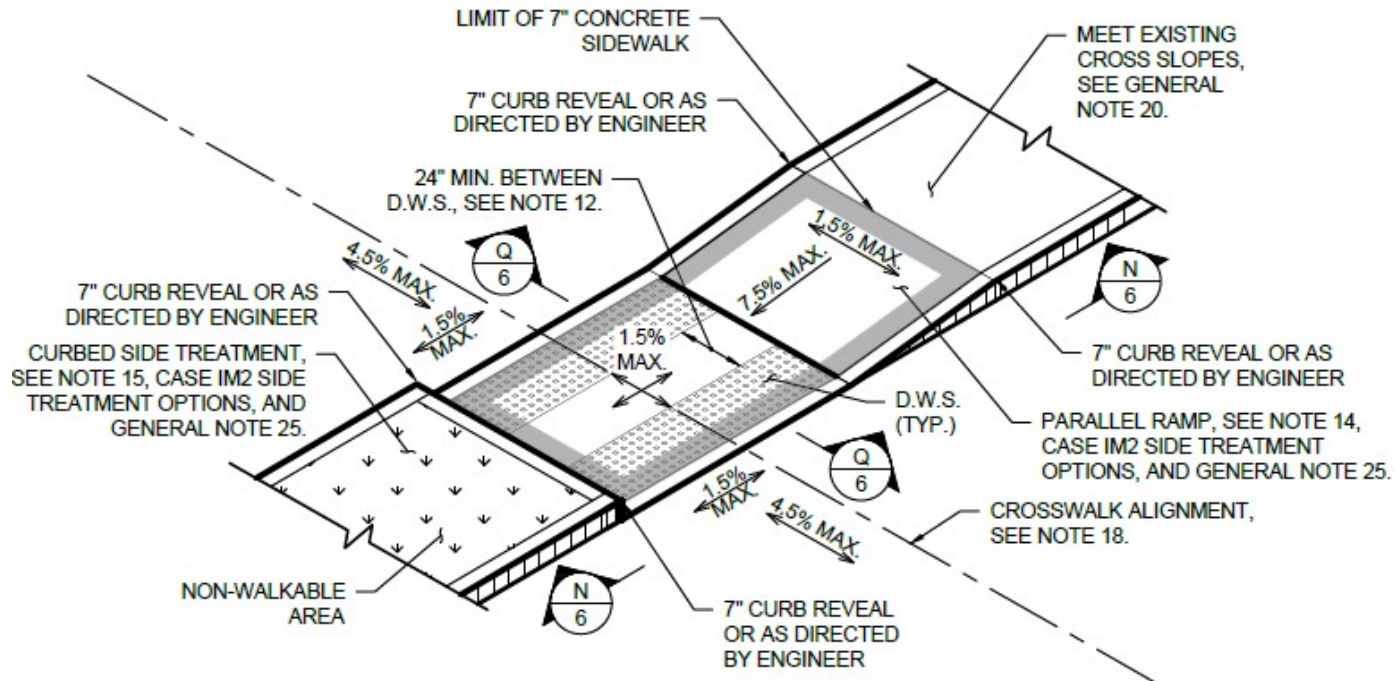
CASE IM1 – ISLAND WITH PERPENDICULAR RAMPS - EXAMPLE



CASE IM2 – ISLAND CUT THROUGH

- Supersedes grading and geometry in H-1003
- Standardizes cut through width from TRF-02
- DWS must have 24" separation, as directed by engineer

TABLE 2: CUT THROUGH WIDTHS		
CROSSWALK WIDTH	LESS THAN 14 FEET	14 FEET OR GREATER
CUT THROUGH WIDTH	8 FEET	10 FEET



IM2 CASE IM2 - ISLAND CUT THROUGH - ISOMETRIC VIEW
SCALE: N.T.S.

DRAFT

CASE IM2 – ISLAND CUT THROUGH - EXAMPLES



TYPE A:
TWO PARALLEL
RAMPS



TYPE B:
CURBED SIDES



TYPE C:
ONE PARALLEL
RAMP, ONE CURB

CASE IM2 SIDE TREATMENT OPTIONS
SCALE: N.T.S.



TYPE C

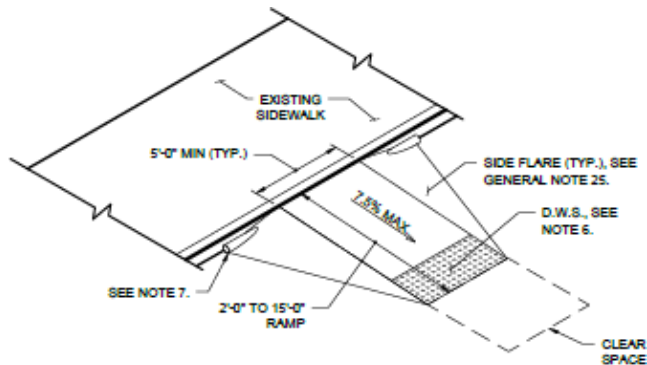


TYPE B

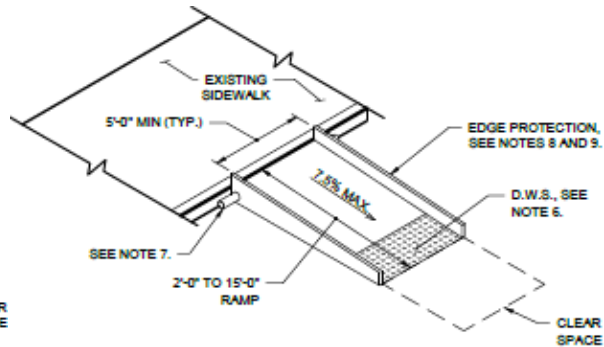
DRAFT

CASE T1, T2, T3 – TEMPORARY RAMPS

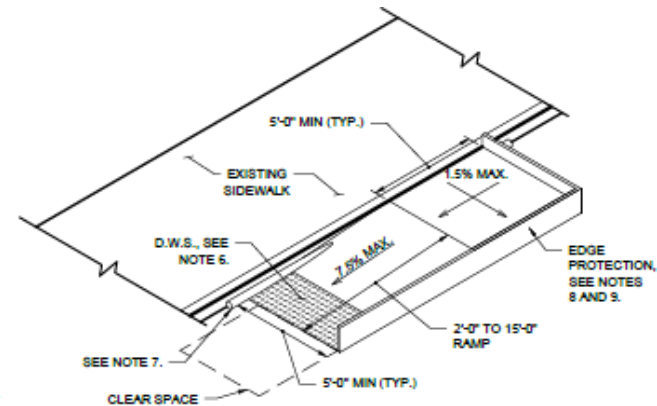
- Not a substitute for M.P.T. plans
- Drainage flow must be maintained, may require drainage pipe
- Material not specified; must be firm, stable, slip resistant, and fixed to ground



T1 CASE T1 - TEMPORARY PERPENDICULAR -
FLARED SIDES - ISOMETRIC VIEW
SCALE: N.T.S.



T2 CASE T2 - TEMPORARY PERPENDICULAR -
WITHOUT FLARED SIDES - ISOMETRIC VIEW
SCALE: N.T.S.



T3 CASE T3 - TEMPORARY PARALLEL - ISOMETRIC VIEW
SCALE: N.T.S.

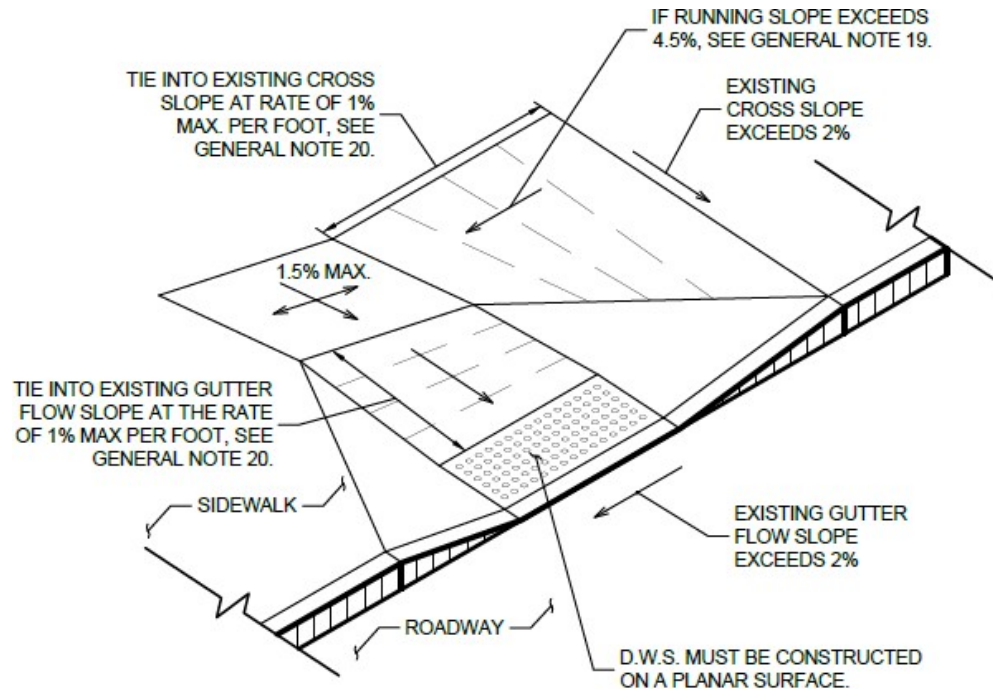
DRAFT

CASE T1, T2, T3 – TEMPORARY RAMPS - EXAMPLES



MEETING NON-COMPLIANT SLOPES

- Guidance detail provided on sheet 8

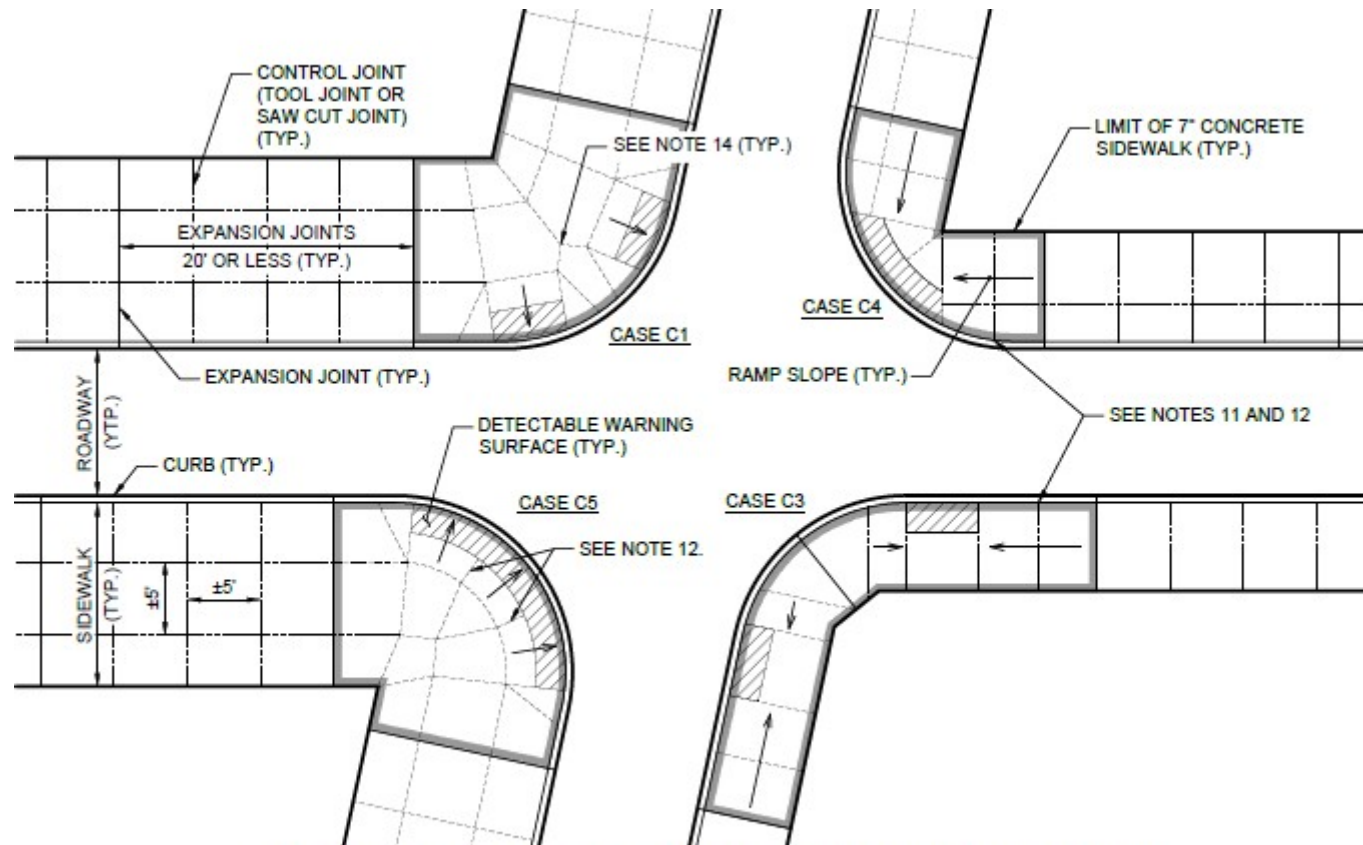


(R) MEETING NON-COMPLIANT SLOPES - ISOMETRIC VIEW
SCALE: N.T.S.

DRAFT

SAMPLE SCORING PATTERNS

- Additional guidance provided on sheet 8

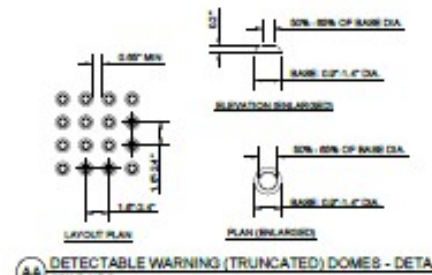
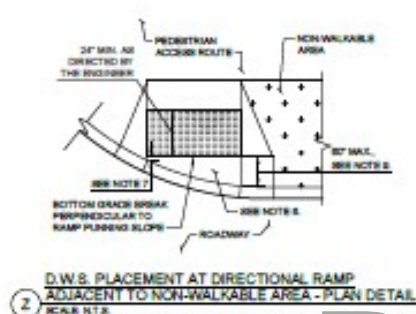
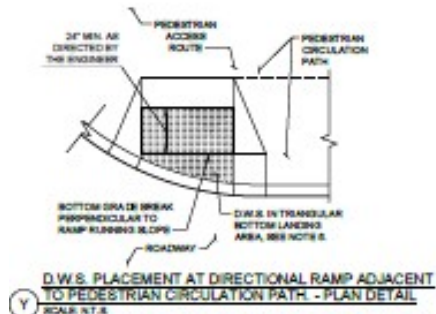
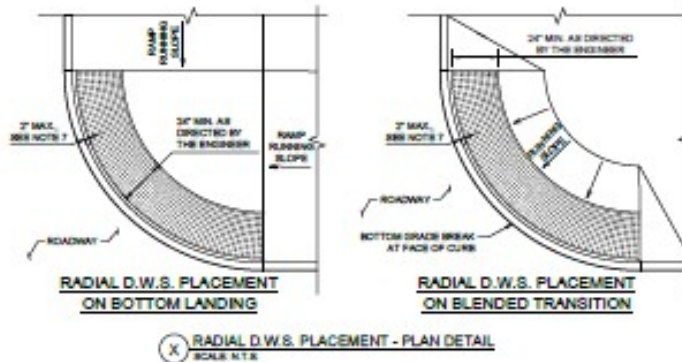
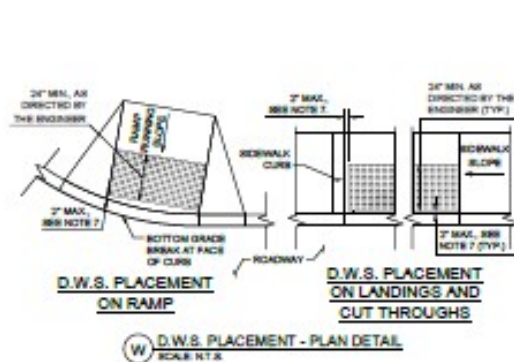


V EXAMPLE CONCRETE SIDEWALK SCORING PATTERN - PLAN VIEW
SCALE: N.T.S.

DRAFT

DETECTABLE WARNING SURFACES

- Must meet requirements of sheet 9
- Radial D.W.S. is introduced
- Requirements for D.W.S. adjacent to curb, 2" max offset
- D.W.S. must be installed per manufacturer's recommendations.



- NOTES**
1. FOR INDEX OF DRAWINGS, SYMBOLS, LEGEND, GLOSSARY, GENERAL NOTES, SEE DWG. NO. 10101.1.
 2. D.W.S. MUST BE INSTALLED AT ALL FLUSH CURB LOCATIONS, WHERE THE PEDESTRIAN CIRCULATION PATH CROSSES A ROADWAY, RAILWAY, OR TRAFFIC CONTROLLED DRIVEWAY.
 3. D.W.S. MUST BE INSTALLED ACROSS THE FULL WIDTH OF FLUSH CURB, INCLUDING FULL RAMP WIDTH, FULL BOTTOM LANDING WIDTH, FULL BLURRED TRANSITION WIDTH, AND FULL CUT-THROUGH WIDTH (WHERE APPLICABLE).
 4. D.W.S. MUST BE INSTALLED ACROSS THE FULL WIDTH OF THE PEDESTRIAN CIRCULATION PATH, AT ANY STOP YIELD CONTROLLED, OR SIGNALIZED DRIVEWAY. D.W.S. MUST NOT BE INSTALLED AT UNCONTROLLED DRIVEWAYS.
 5. D.W.S. MUST BE INSTALLED FOR A MINIMUM LENGTH OF 24 INCHES IN THE DIRECTION OF PEDESTRIAN TRAVEL. D.W.S. MUST BE INSTALLED OR OMITTED AT ISLAND AND MEDIAN CUT THROUGHS IN ACCORDANCE WITH NOTE 12 ON DWG. NO. 10101.1, AS DIRECTED BY THE ENGINEER.
 6. TO MAINTAIN DETECTABILITY AT DIRECTIONAL RAMPS, D.W.S. GAPE MUST NOT BE LOCATED BETWEEN PEDESTRIAN CIRCULATION PATHS AND FLUSH CURBS. WHEN THE SIDE FLANK ADJACENT A PEDESTRIAN CIRCULATION PATH, D.W.S. MUST BE INSTALLED IN THE TRIANGULAR BOTTOM LANDING AREA OF DIRECTIONAL RAMPS. WHEN THE SIDE FLANK ADJACENT A NON-WALKABLE AREA, D.W.S. MAY BE OMITTED IN THE TRIANGULAR BOTTOM LANDING AREA OF DIRECTIONAL RAMPS.
 7. WHEN PROPOSED AT THE BACK OF CURB, D.W.S. MUST BE INSTALLED WITH A TWO INCH (2") MAXIMUM OFFSET FROM THE REVISION JUNT OR TOLDED RADIUS.
 8. D.W.S. MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES AS DIRECTED BY THE ENGINEER. D.W.S. MAY BE CUT OR TRIMMED TO MEET THE REQUIREMENTS OF THIS DETAIL, AS DIRECTED AND APPROVED BY THE ENGINEER.
 9. IF THE TRIANGULAR BOTTOM LANDING OF A DIRECTIONAL RAMP IS LONGER THAN 60 INCHES, THE D.W.S. MUST BE INSTALLED IN THE BOTTOM LANDING AREA.
 10. THE DETAILS PROVIDED ARE NOT DRAWN TO SCALE. THE QUANTITY OF TRUNCATED DOMES DIRECTED ON THE D.W.S. IS FOR ILLUSTRATION ONLY.
 11. D.W.S. MUST PROVIDE COLOR CONTRAST WITH THE ADJACENT SIDEWALK, FOR D.W.S. REQUIREMENTS INCLUDING COLOR CONTRAST, SEE NYC DOT STANDARD HIGHWAY SPECIFICATION ITEM NO. 4.13.06.
 12. ON SLOPES OF FIVE PERCENT (5%) OR GREATER, TRUNCATED DOMES MUST BE ALIGNED WITH THE LOWER GRADE BREAK OF THE RAMP. ON SLOPES LESS THAN FIVE PERCENT (5%), TRUNCATED DOMES DO NOT NEED TO BE ALIGNED WITH THE LOWER GRADE BREAK OF THE RAMP.
 13. D.W.S. MUST BE PROVIDED AT RAILROAD CROSSINGS IN ACCORDANCE WITH NEW YORK STATE AND FEDERAL RAILROAD ADMINISTRATION REQUIREMENTS. D.W.S. LAYOUT AT RAILROAD CROSSINGS MUST BE SUBMITTED TO NYSDOT FOR REVIEW AND APPROVAL PRIOR TO ITS CONSTRUCTION.
 14. IMBEDDED D.W.S. MUST BE INSTALLED ON A PLAIN SURFACE TO PREVENT WARPING. ANY CROSS SLOPE TRANSITIONS (WARPED) WITHIN A RAMP OR TURNING SPACE MUST BE 500 LINES OF THE D.W.S., AT A MAXIMUM RATE OF ONE PERCENT (1.0%) PER LINEAR FOOT.
 15. PRE-FABRICATED RADIAL D.W.S. MAY BE USED FOR RADIAL D.W.S. PLACEMENT, WHERE PROCUREMENT OF PRE-FABRICATED RADIAL D.W.S. IS NOT FEASIBLE. RECTANGULAR TILE ARRAYS MAY BE USED TO PROVIDE RADIAL D.W.S. PLACEMENT, AS DIRECTED BY THE ENGINEER. WHERE USED, RADIAL D.W.S. OF ANY TYPE MUST MEET ALL APPLICABLE REQUIREMENTS ON THIS SHEET, INCLUDING COLOR SPACING.
 16. DETECTABLE WARNING (TRUNCATED) DOMES MUST MEET THE REQUIREMENTS OF DETAIL AA.
 17. WHERE AN EXISTING UTILITY CARTING IS LOCATED WITHIN THE PROPOSED LOCATION OF A D.W.S., THE CONTRACTOR MAY CUT THE D.W.S. TO ACCOMMODATE THE UTILITY CARTING, SEE NOTE 5.

DRAFT

THANK YOU

Questions?



NYC DOT



NYC DOT



nyc_dot



NYC DOT