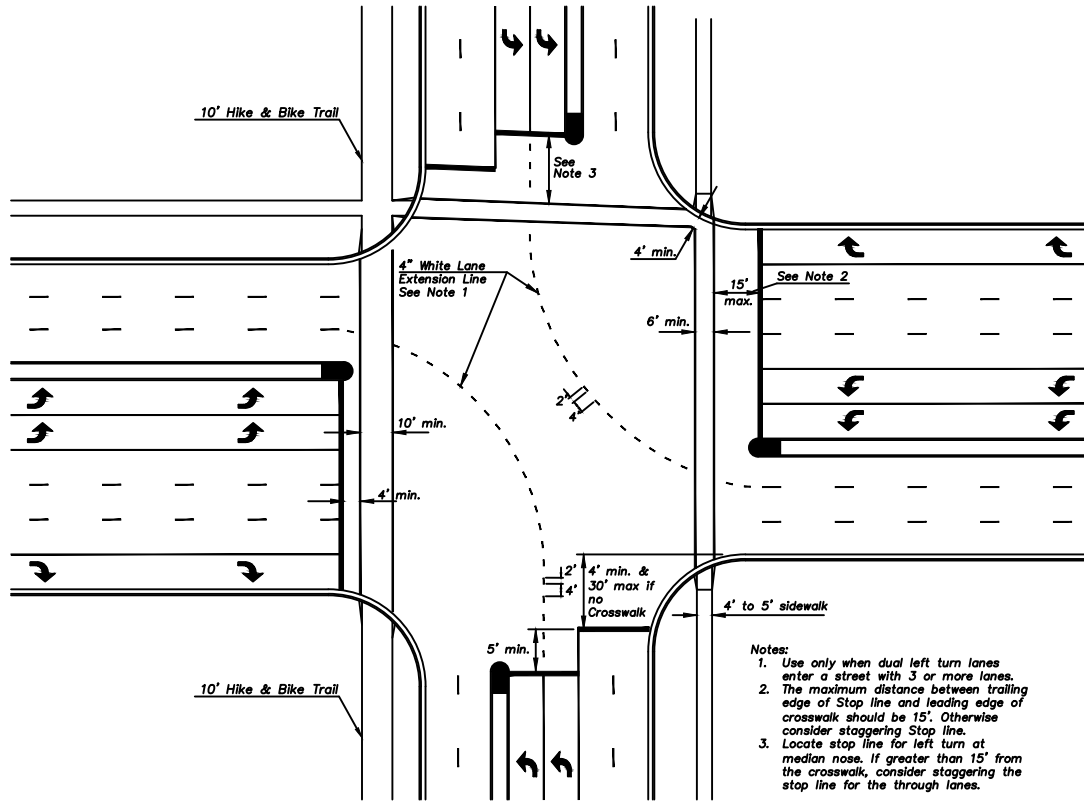
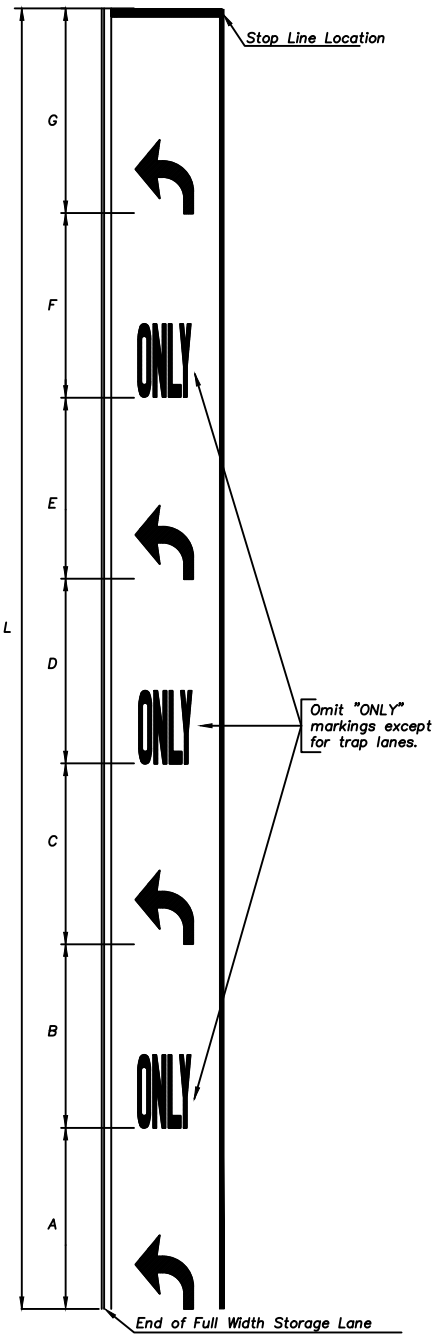
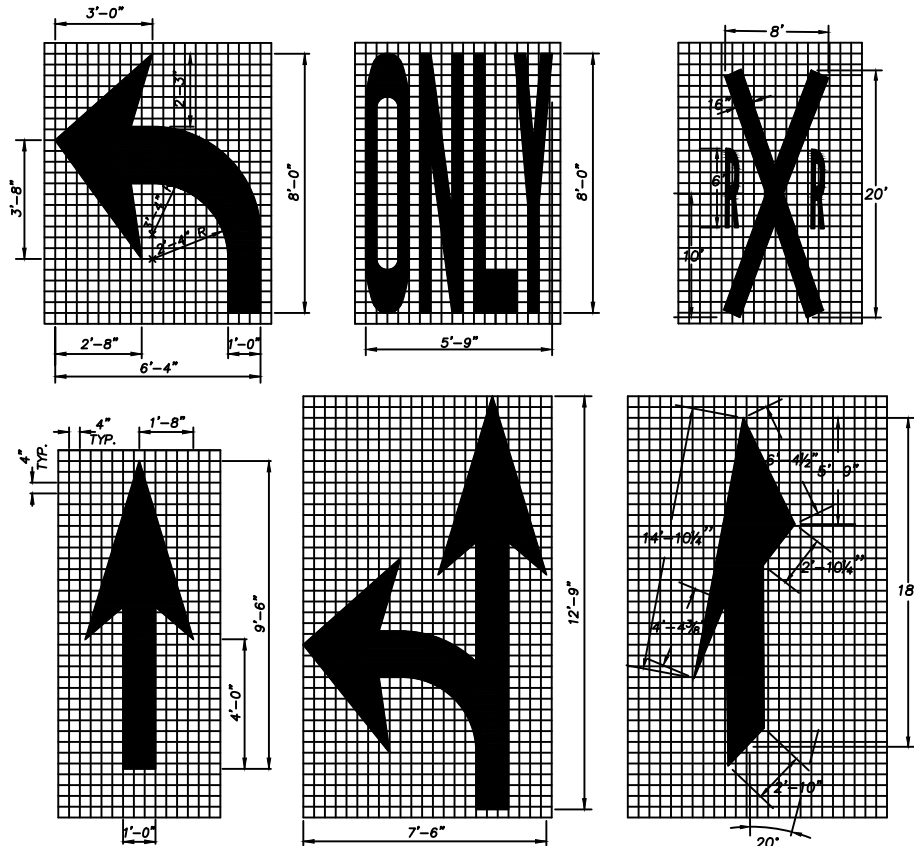


L	A	B	C	D	E	F	G
<80'	One Arrow						
81'-100'	30'	30'	21'-40'				
101'-120'	40'	40'	21'-40'				
121'-140'	45'	45'	31'-50'				
141'-160'	55'	55'	31'-50'				
161'-180'	65'	65'	31'-50'				
181'-200'	75'	75'	31'-50'				
201'-220'	80'	80'	41'-60'				
221'-240'	45'	45'	45'	45'	41'-60'		
241'-260'	50'	50'	50'	50'	41'-60'		
261'-280'	55'	55'	55'	55'	41'-60'		
281'-300'	60'	60'	60'	60'	41'-60'		
301'-320'	65'	65'	65'	65'	41'-60'		
321'-340'	70'	70'	70'	70'	41'-60'		
341'-360'	75'	75'	75'	75'	41'-60'		
361'-380'	80'	80'	80'	80'	41'-60'		
381'-400'	55'	55'	55'	55'	55'	51'-70'	
401'-420'	60'	60'	60'	60'	60'	41'-60'	
421'-440'	65'	65'	65'	65'	65'	31'-50'	
441'-460'	65'	65'	65'	65'	65'	51'-70'	
461'-480'	70'	70'	70'	70'	70'	41'-60'	
481'-500'	75'	75'	75'	75'	75'	31'-50'	
>500'	80'	80'					Varies

Turn Lane Word and Symbol
Spacing Schedule



Typical Crosswalk and Left Turn
Extension Line Markings

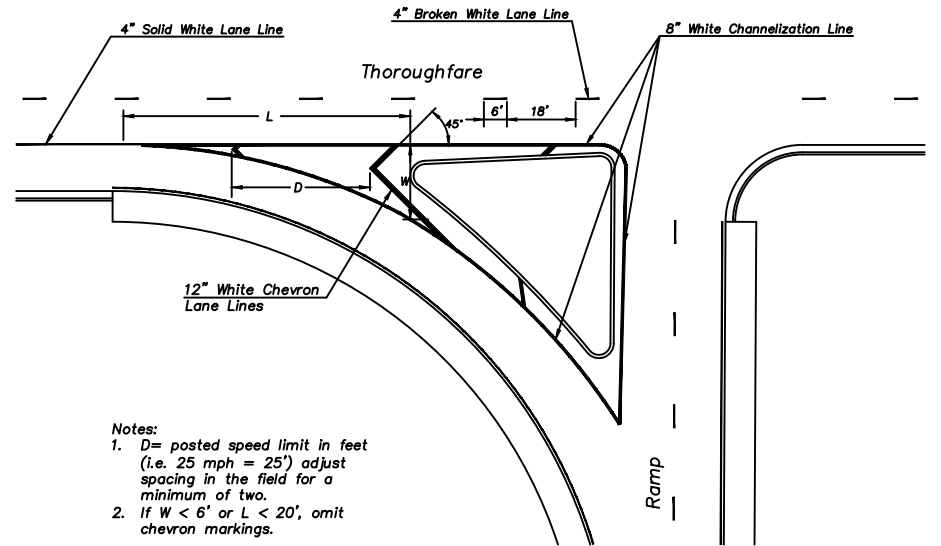


Word and Symbol Details

- Notes:
- Word & symbol markings shall be white.
 - Right Turn and Combination Right Turn/Straight arrows are reverse of arrows shown.

Pavement Marking General Notes

- All permanent pavement markings shall be provided and installed by the contractor as indicated in the plans or as directed by the City Inspector. See the Pavement Marking Material Matrix and the Bill of Materials for the type of material required for this specific project.
- Pavement markings on concrete, asphalt, chip seal or UBAS shall be per the specifications, unless otherwise indicated on the plans or directed by the City Inspector.
- Crosswalk lines shall be installed such that the minimum distance between the inside edges of the line is 6' for standard crosswalks or 10' for bike trail crossings.
- Stop lines shall be installed such that the minimum distance between the trailing edge of the stop line and the leading edge of the first crosswalk line is 4 feet.
- The proposed permanent markings shall be laid out by the contractor in advance of the marking installation. Markings shall not be applied until the layout and conditions of the surface have been approved by the City Inspector.
- Continental crosswalk lines, may be installed at locations that require higher visibility for pedestrians, as indicated in the plans. See details for guidelines.



Typical Interstate Ramp Entrance Markings

Pavement Marking Material Matrix

Permanent Markings	Pavement Type			
	Asphalt	UBAS	Chip Seal	Concrete
Words & Symbols	PTP	PTP	PCP ³	PCP ²
Int'l Symbol of Accessibility	PTP	PTP	—	PTP ³
Transverse Lines	TP ¹	TP ¹	PCP ³	IMP ¹ MMA ⁵
Longitudinal Lines	TP	TP	UA	IMP MMA ⁵
Temporary Markings	Pavement Type			
	Asphalt	UBAS	Chip Seal	Concrete
Words & Symbols	CP P ⁴	CP P ⁴	—	CP P
Int'l Symbol of Accessibility	CP P ⁴	CP P ⁴	—	CP P
Transverse Lines	CP P ⁴	CP P ⁴	P ⁴	CP P
Longitudinal Lines	CP P ⁴	CP P ⁴	TRPM ⁴ P ⁴	CP P

Pavement Marking Material Matrix Notes

- Applies only to transverse lines that can be installed with one pass of the installation equipment, e.g. 24" stop lines, shall be pre-formed thermoplastic on asphalt or UBAS and inlaid patterned cold plastic on concrete.
- All patterned cold plastic on concrete shall be inlaid with a primer per the specifications.
- Markings so indicated shall be installed with a two-part primer.
- Markings so indicated are acceptable on asphalt surfaces only when installed prior to the application of the final surface material.
- Markings so indicated are acceptable on concrete parking surfaces only.

Legend:

- TP — Thermoplastic
PTP — Pre formed Thermoplastic
PCP — Patterned Cold Plastic
IMP — Integrated Multi polymer
UA — Urethane Acrylate
CP — Cold Plastic
P — Paint
MMA — Methyl Methacrylate
TRPM — Temporary Raised Pavement Marker

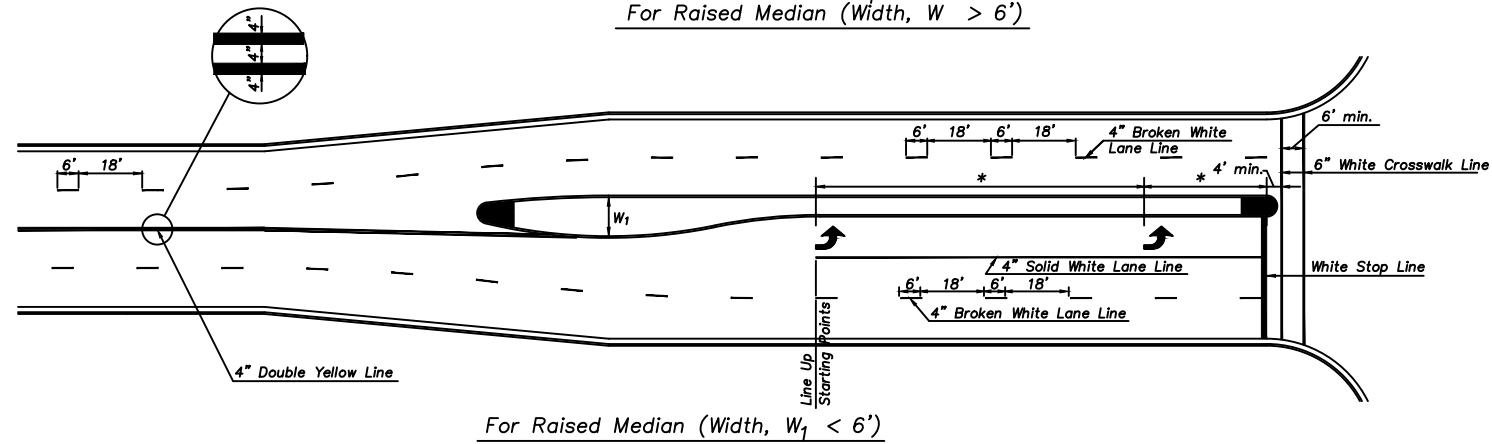
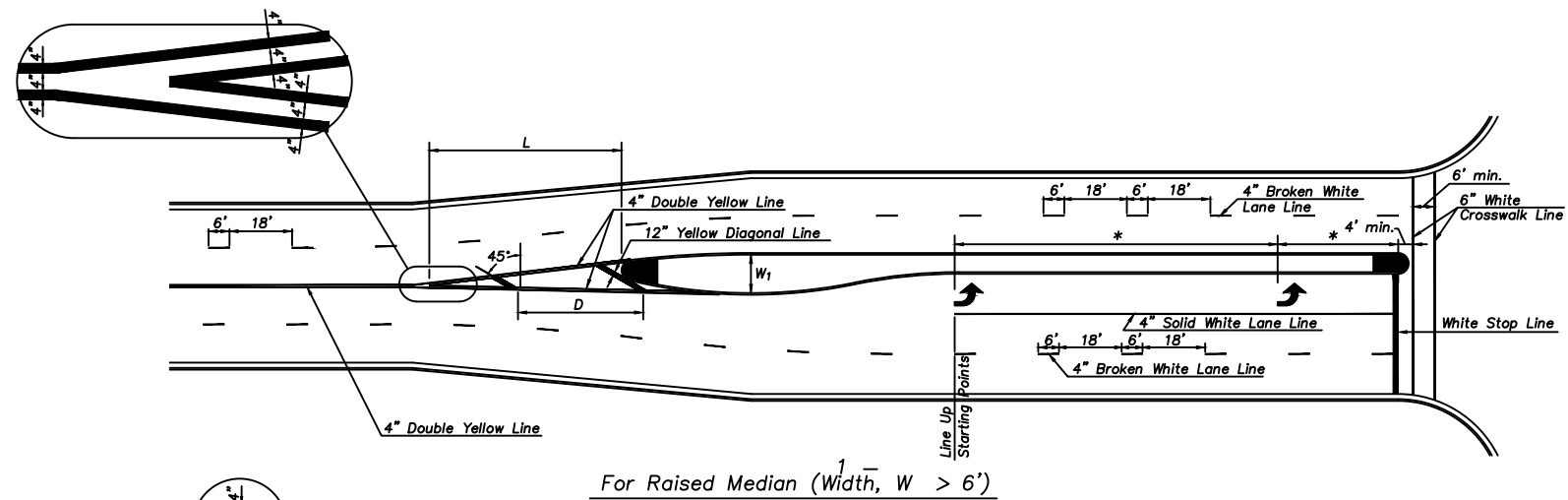
Delete reference to materials
not being used.

Pavement Marking Bid Items		
Description	Unit	Quantity
4" White (TP)	L.F.	X
4" Yellow (TP)	L.F.	X
6" White (TP)	L.F.	X
8" White (TP)	L.F.	X
12" White (TP)	L.F.	X
12" Yellow (TP)	L.F.	X
4" White (IMP)	L.F.	X
4" Yellow (IMP)	L.F.	X
6" White (IMP)	L.F.	X
8" White (IMP)	L.F.	X
12" White (IMP)	L.F.	X
12" Yellow (IMP)	L.F.	X
24" White (PTP)	L.F.	X
White Turn Arrow (PTP)	Each	X
White Thru Arrow (PTP)	Each	X
White Thru/Turn Arrow (PTP)	Each	X
White Merge Arrow (PTP)	Each	X
White "ONLY" Marking (PTP)	Each	X
White "Railroad Crossing" Symbol (PTP)	Each	X
24" x 36" White Yield Line (PTP)	Each	X
12" x 18" White Yield Line (PTP)	Each	X
White Bike Symbol (PTP)	Each	X
White Bike Sharrows (PTP)	Each	X
White Bike Lane Arrow (PTP)	Each	X
12" White Speed Hump (PTP)	Each	X
Blue & White ISA* Symbol (PTP)	Each	X
4" White (PCP) / (CP)	L.F.	X
4" Yellow (PCP) / (CP)	L.F.	X
6" White (PCP) / (CP)	L.F.	X
8" White (PCP) / (CP)	L.F.	X
12" White (PCP) / (CP)	L.F.	X
12" Yellow (PCP) / (CP)	L.F.	X
24" White (PCP) / (CP)	L.F.	X
White Turn Arrow (PCP) / (CP)	Each	X
White Thru Arrow (PCP) / (CP)	Each	X
White Thru/Turn Arrow (PCP) / (CP)	Each	X
White Merge Arrow (PCP) / (CP)	Each	X
White "ONLY" Marking (PCP) / (CP)	Each	X
White "Railroad Crossing" Symbol (PCP) / (CP)	Each	X
24" x 36" White Yield Line (PCP) / (CP)	Each	X
12" x 18" White Yield Line (PCP) / (CP)	Each	X
White Bike Symbol (PCP) (CP)	Each	X
White Bike Sharrows (PCP) / (CP)	Each	X
White Bike Lane Arrow (PCP) / (CP)	Each	X
4" White (P) / (UA)	L.F.	X
4" Yellow (P) / (UA)	L.F.	X
6" White (P) / (UA)	L.F.	X
8" White (P) / (UA)	L.F.	X
12" White (P) / (UA)	L.F.	X
12" Yellow (P) / (UA)	L.F.	X
24" White (P) / (UA)	L.F.	X
White Turn Arrow (P) / (UA)	Each	X
White Thru Arrow (P) / (UA)	Each	X
White Thru/Turn Arrow (P) / (UA)	Each	X
White Merge Arrow (P) / (UA)	Each	X
White "ONLY" Marking (P) / (UA)	Each	X
White "Railroad Crossing Symbol (P) / (UA)	Each	X
4" White (MMA)	L.F.	X
Blue & White ISA* Symbol (MMA)	Each	X

* *ISA = International Symbol of Accessibility*

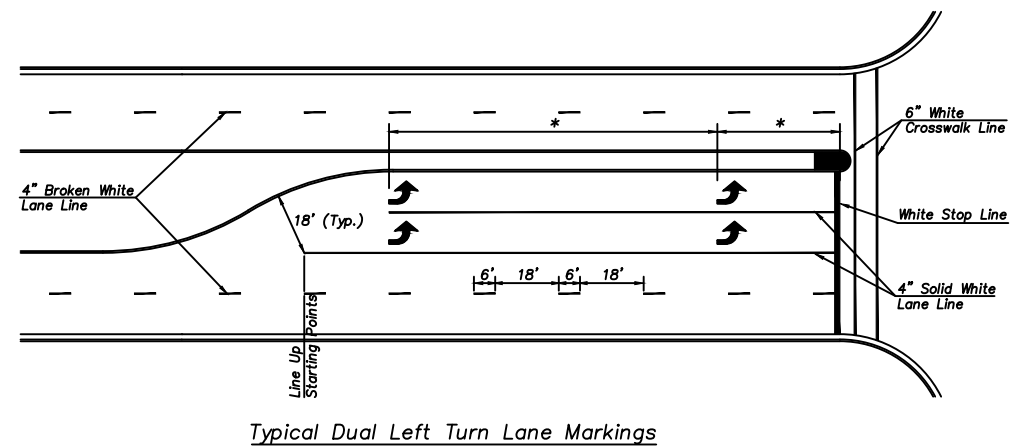
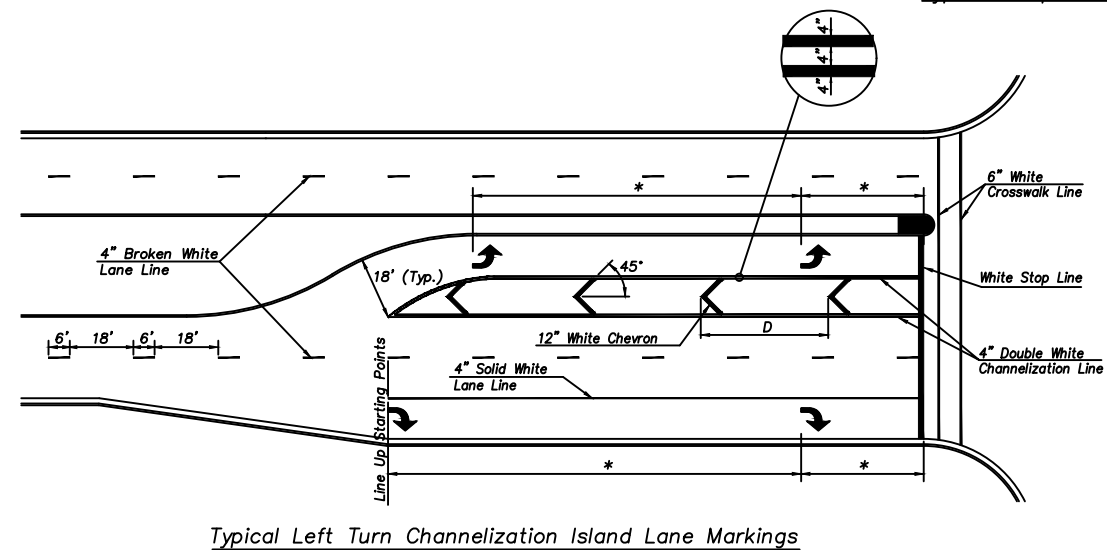
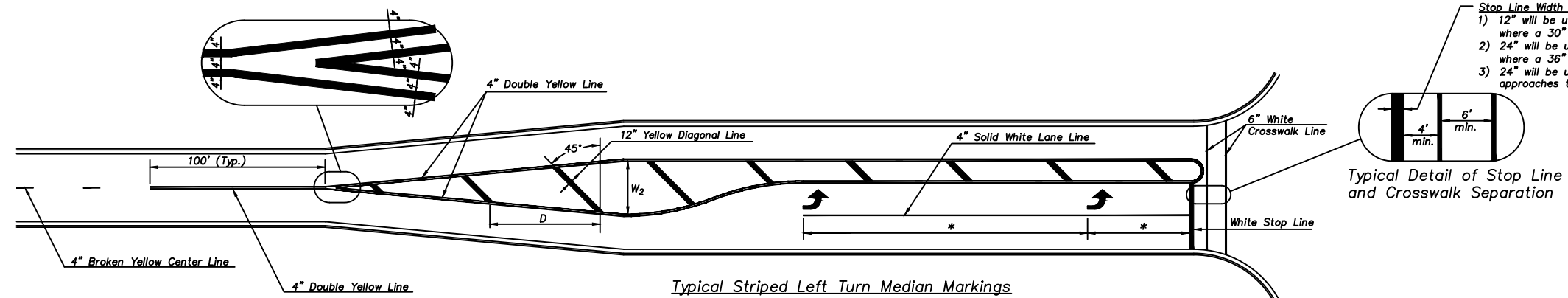
TP	-	Thermoplastic
PTP	-	Pre-formed Thermoplastic
PCP	-	Patterned Cold Plastic
UA	-	Urethane Acrylate
P	-	Paint
CP	-	Cold Plastic
IMP	-	Integrated Multi-polymer
MMA	-	Methyl Methacrylate

[illegible][illegible][illegible]



Notes:

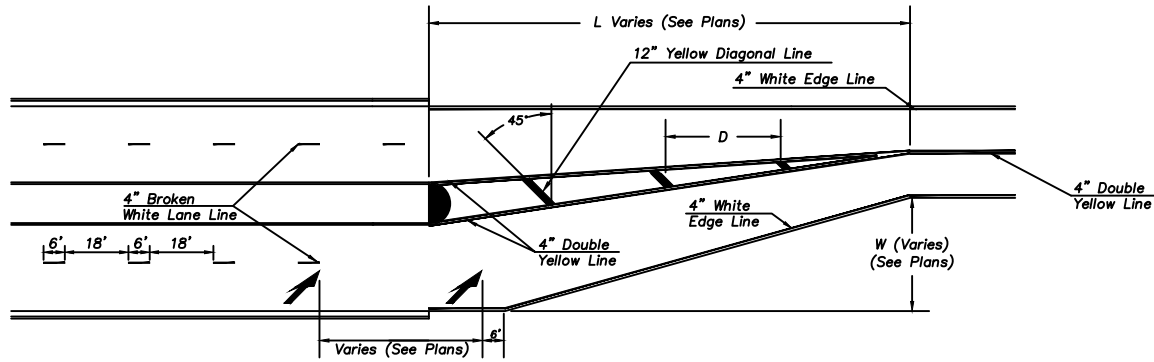
- 1) * Variable, see spacing schedule and/or plans for location.
- 2) D = posted speed limit in feet (i.e. 25mph = 25' spacing) adjust in the field for a minimum of two.
- 3) If $W_2 < 4'$ or $L < 20'$, omit diagonal lines.



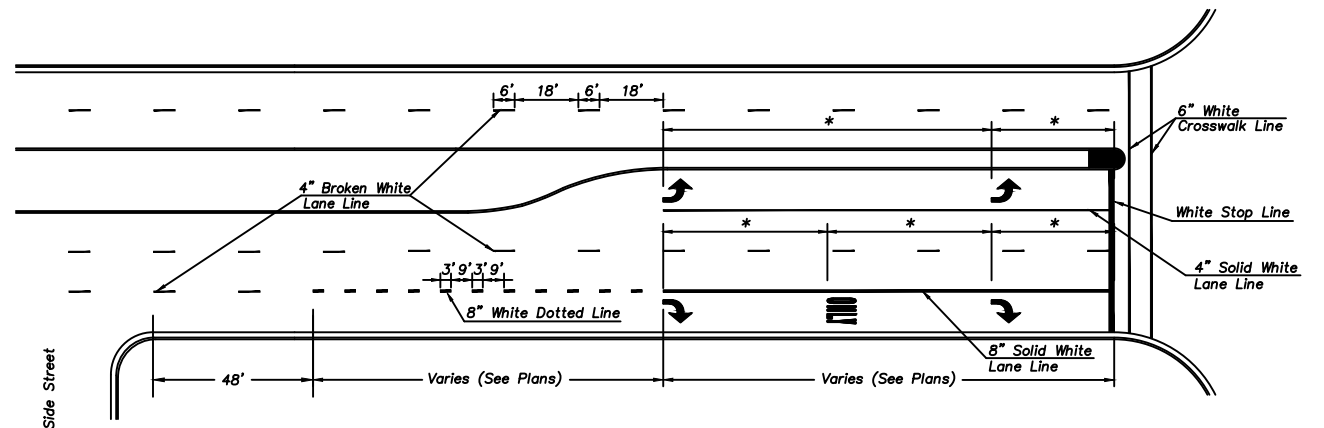
Stop Line Width (When Used):

- 1) 12" will be used at a location where a 30" Stop sign is required.
- 2) 24" will be used at a location where a 36" Stop sign is required.
- 3) 24" will be used at all controlled approaches to a traffic signal.

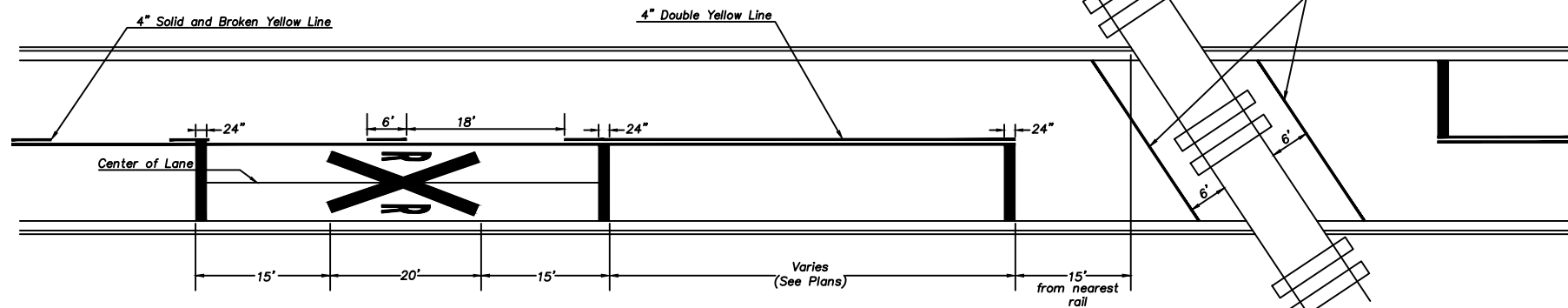
Typical Detail of Stop Line
and Crosswalk Separation



Lane Reduction Transition Markings

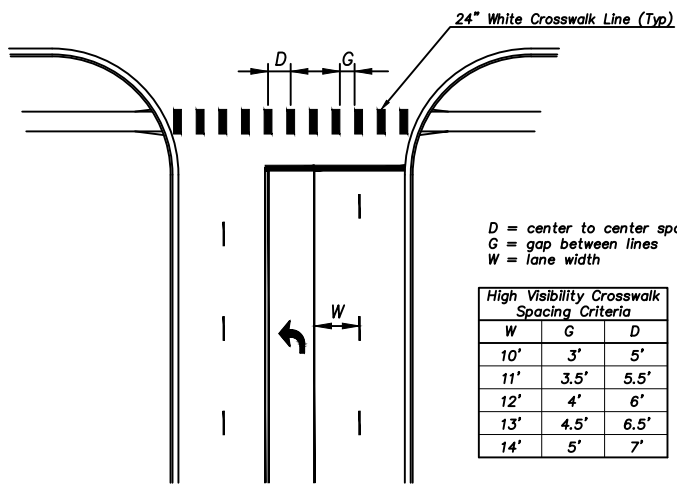


Trap Lane Drop Markings



Grade Crossing Pavement Markings

- Notes:
- 1) * Variable, see spacing schedule and/or plans for locations.
 - 2) D = posted speed limit in feet (i.e. 25mph = 25' spacing) adjust in the field for a minimum of two.



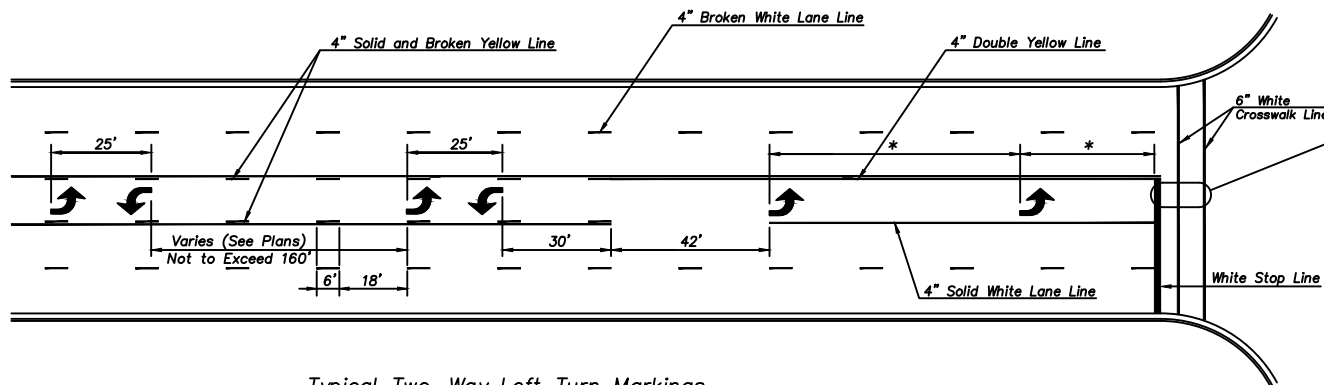
D = center to center spacing
G = gap between lines
W = lane width

High Visibility Crosswalk Spacing Criteria		
W	G	D
10'	3'	5'
11'	3.5'	5.5'
12'	4'	6'
13'	4.5'	6.5'
14'	5'	7'

Notes:

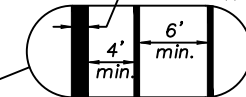
1. For roadways with variable lane widths, the lines and gaps should be spaced as evenly as possible across the lanes of vehicle travel to avoid wheel paths.
2. The gaps between the lines can vary from 3' to 5' within the same crosswalk, with the spacing from center to center varying from 5' to 7'.

High Visibility Crosswalk

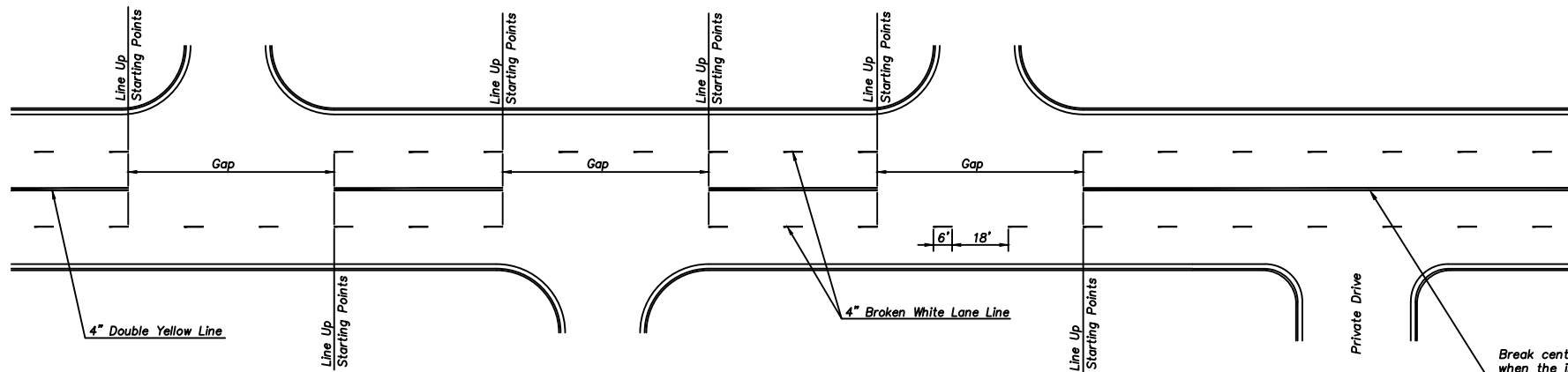


Typical Two-Way Left Turn Markings

- Stop Line Width (When Used):
- 1) 12" will be used at a location where a 30" Stop sign is required.
 - 2) 24" will be used at a location where a 36" Stop sign is required.
 - 3) 24" will be used at all controlled approaches to a traffic signal.

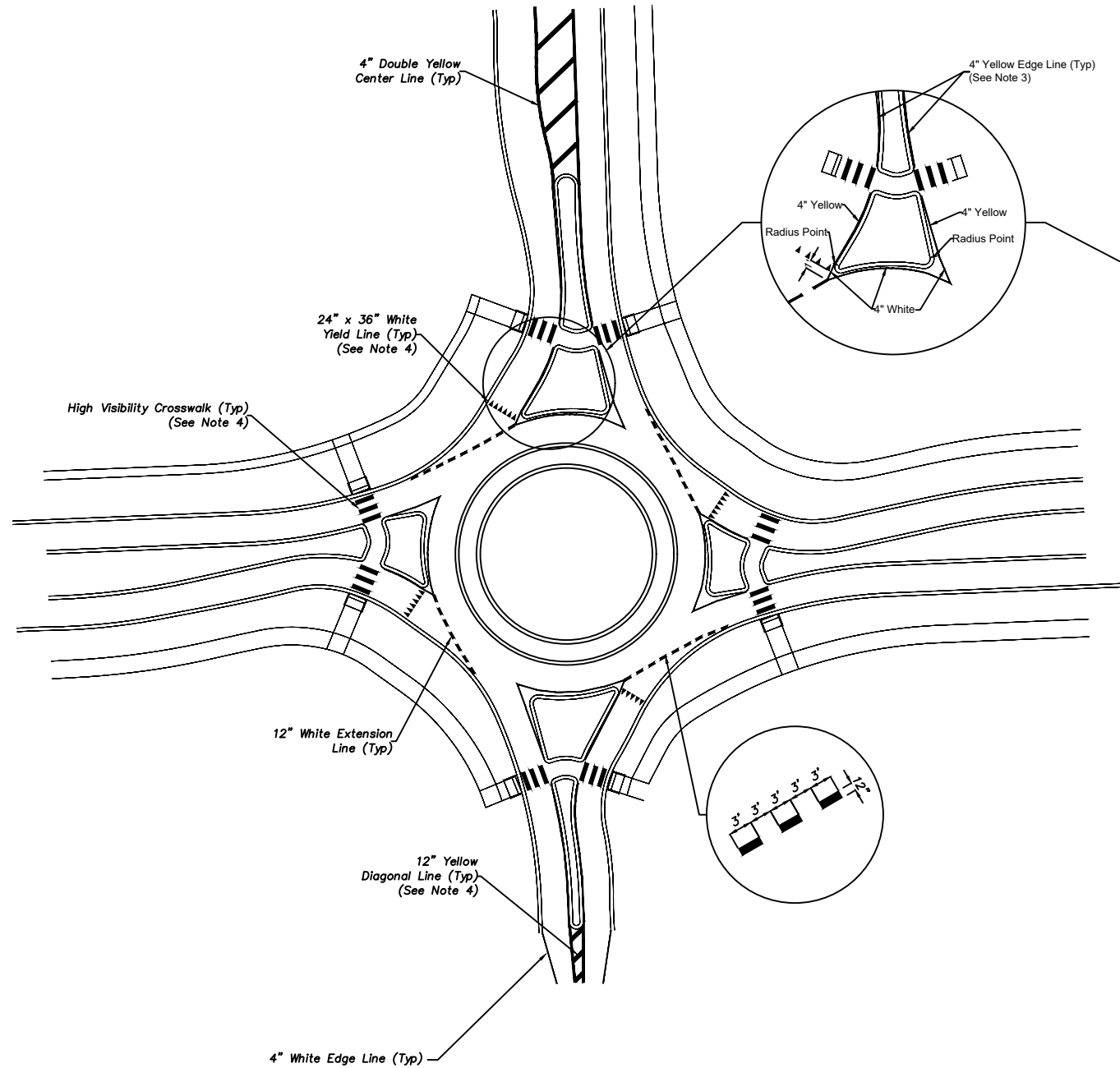


Typical Detail of Stop Line and Crosswalk Separation



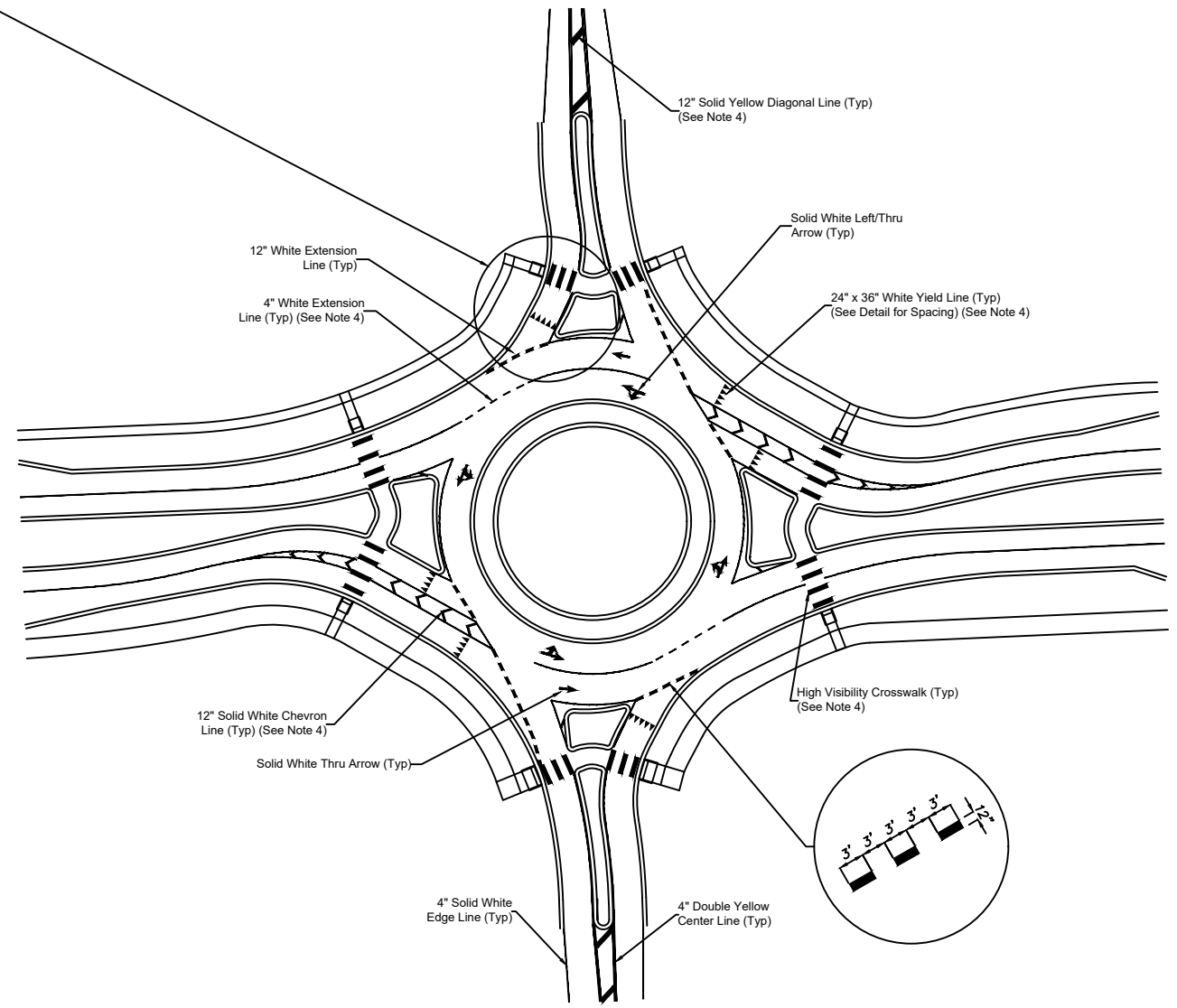
Typical Four-Lane Undivided Markings with Side Street Intersections

Break centerline for private drives only when the intersection is signalized or if there are left turn lanes from the major street.

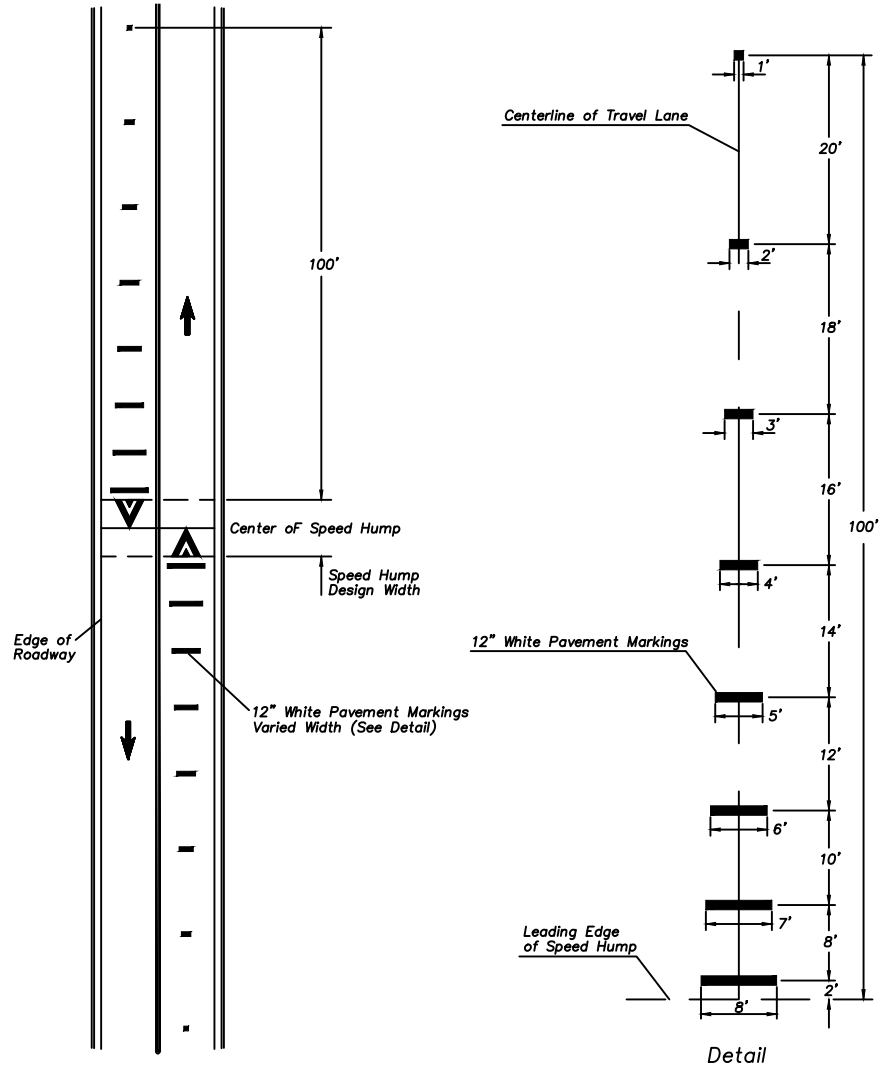


Notes:

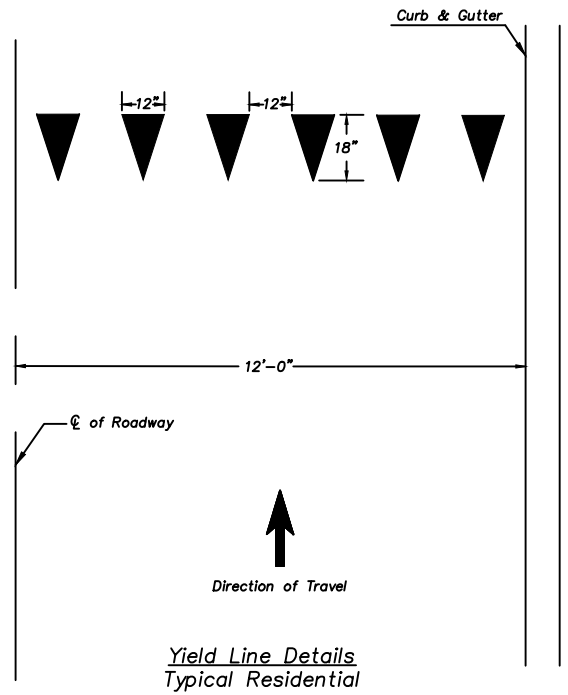
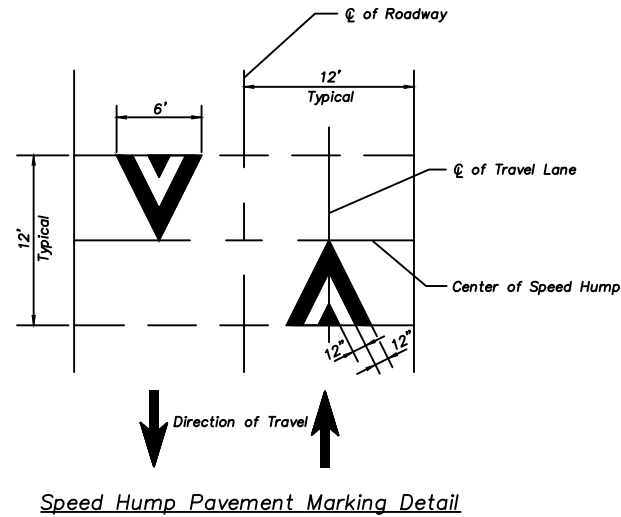
1. Because of the variability in design for every roundabout, these details are general guidelines only and do not necessarily reflect all the markings that are necessary.
2. The number of yield line symbols shown are schematic only. Refer to Yield Line Details for proper number and spacing based on lane widths.
3. Install 4" yellow edge line along the splitter island in advance of the crosswalk when the raised splitter island is not an extension of a raised median throughout the corridor.
4. High visibility crosswalks, yellow diagonal lines, chevron lines, extension lines and yield lines are shown only for reference. See specific details on other sheets or plan sheets for spacing requirements.



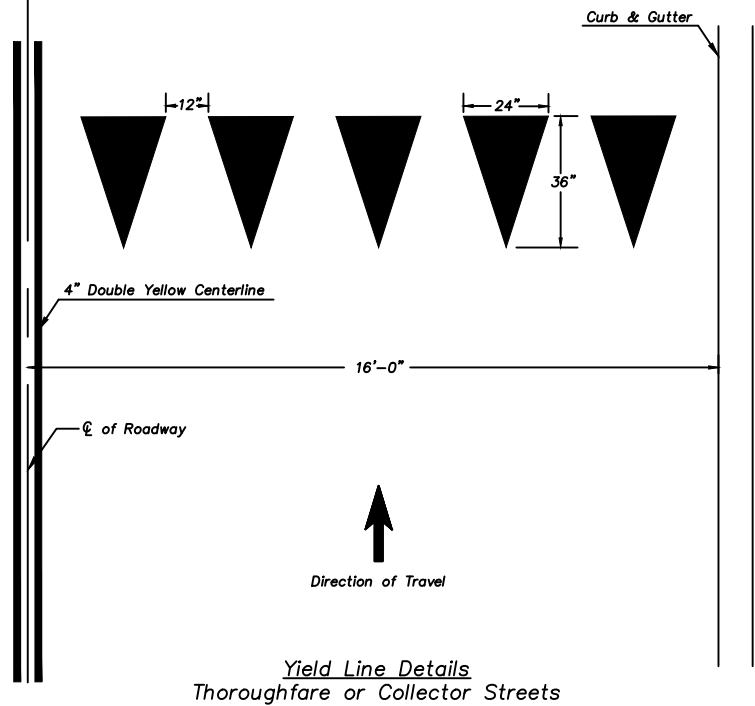
September 2, 2021 - 8:05 AM
K:\Details_Specs\Detail_Drawings\Traffic\SD Index\In Progress\Current MASTER Sheets\2021 Pavement Marking Details - MASTER.dwg
lkeller



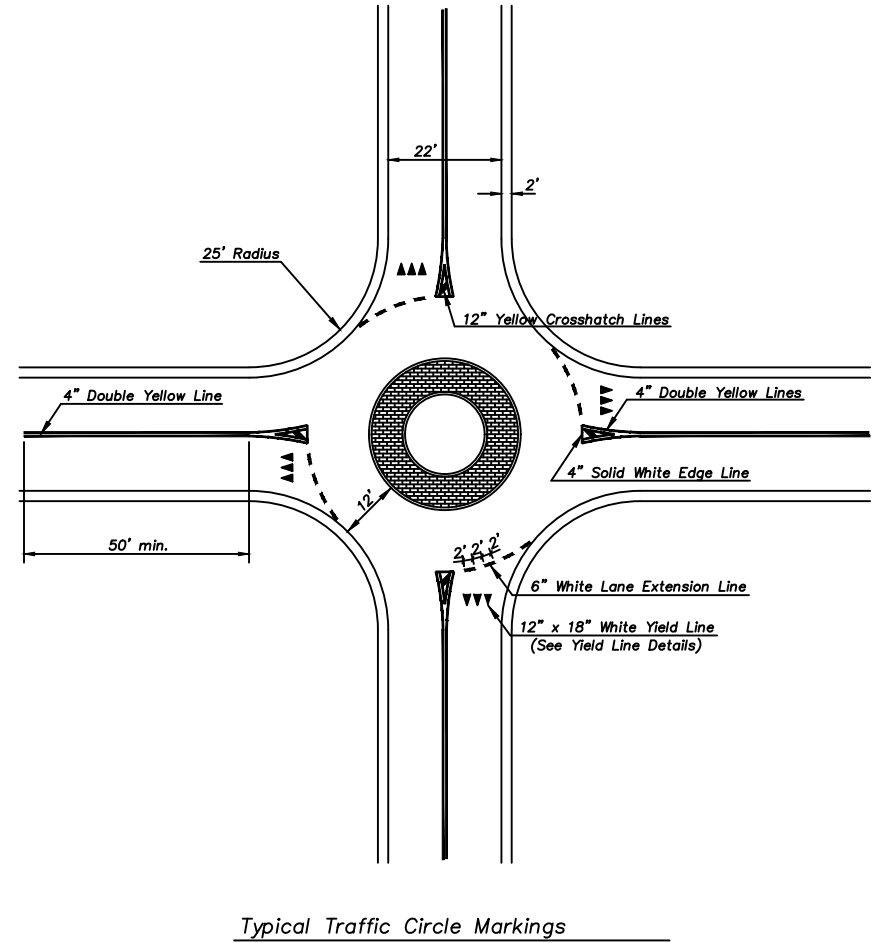
Typical Advance Warning Markings For Speed Humps
Advance warning markings and speed hump markings shall be measured as "Speed Hump Marking" per each approach.



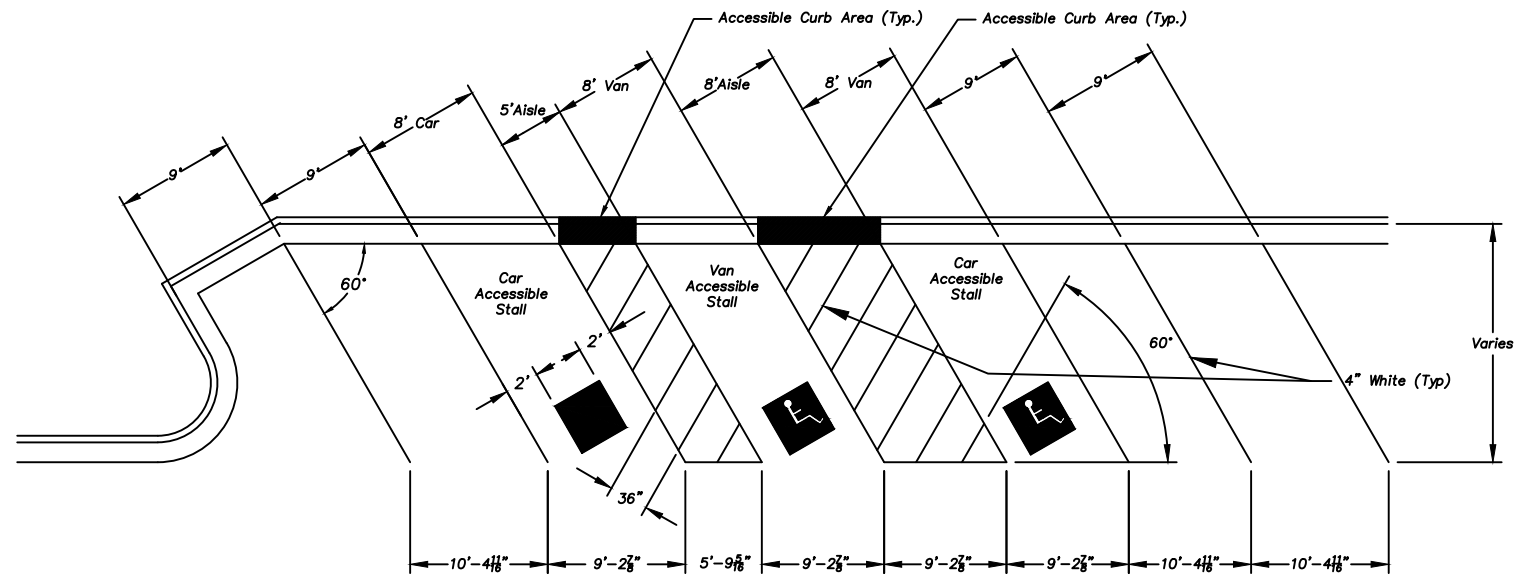
Yield Line Details
Typical Residential



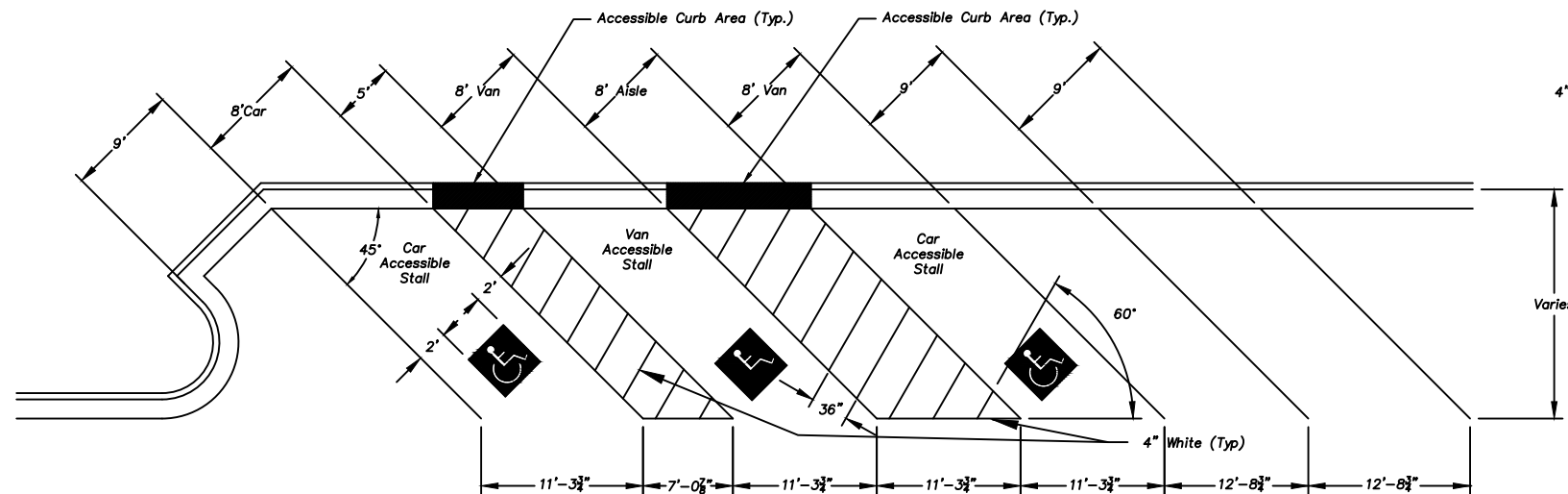
Yield Line Details
Thoroughfare or Collector Streets



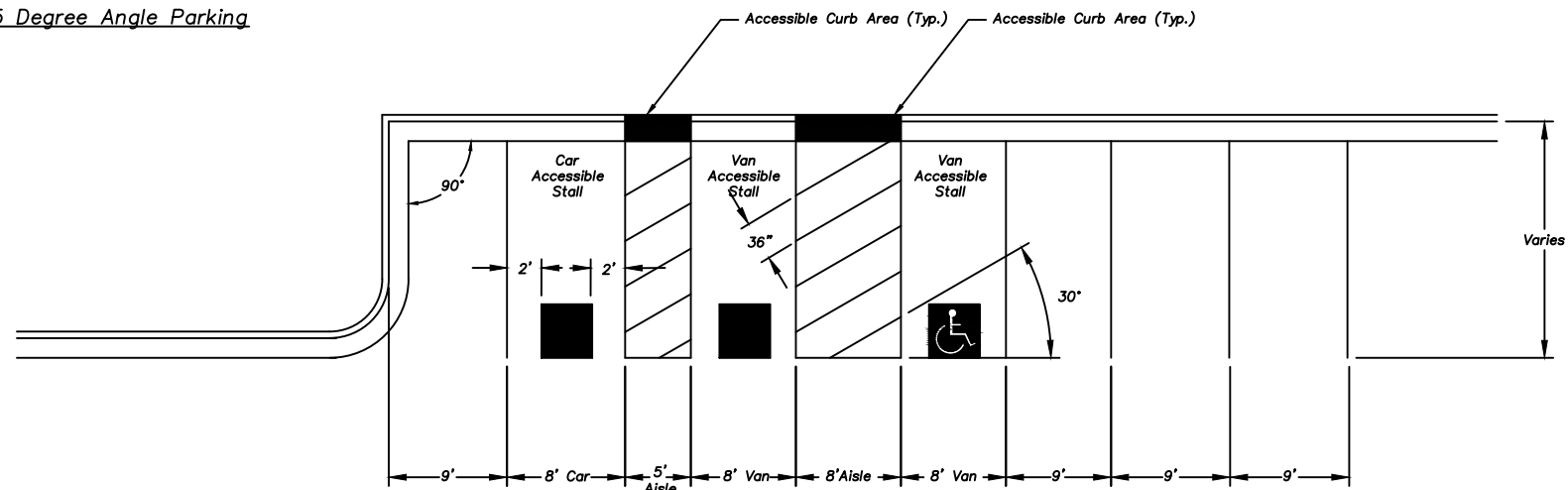
Typical Traffic Circle Markings



60 Degree Angle Parking

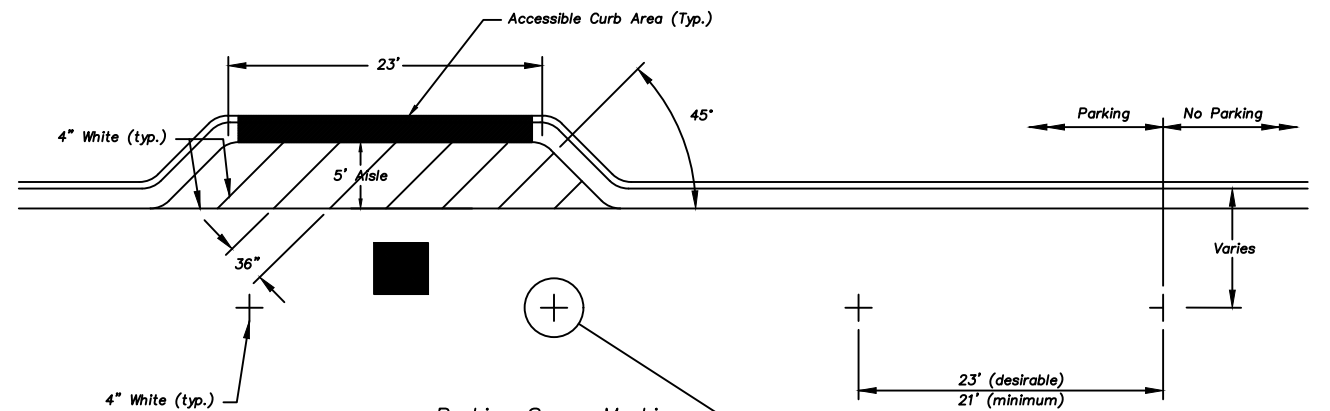


45 Degree Angle Parking



90 Degree Angle Parking

Accessible Parking Pavement Marking Details



Parking Space Marking
Parallel Parking

