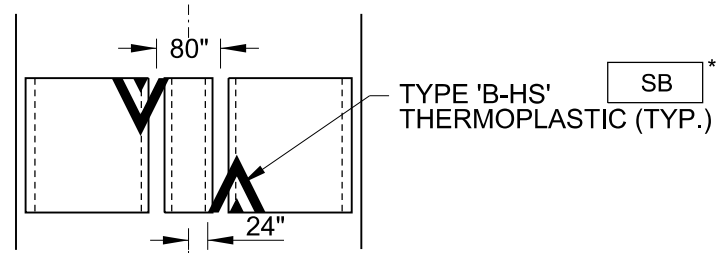


SCALE: 3/8" = 1'-0"

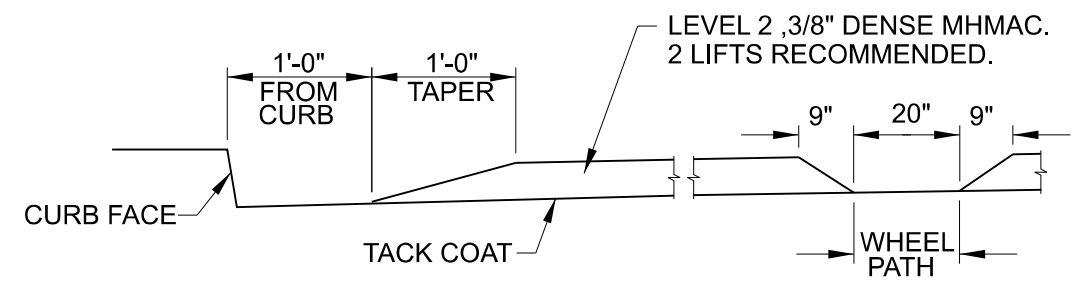
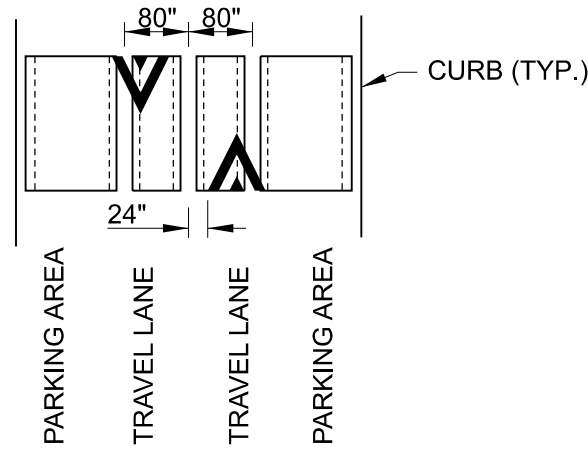
Filename: U:\usdot\port\ogm\city of portland - standard drawings\section DIVISIONS\3-STREETS\MICROSTATION\STD DRAWING NO P-442\PLOT\_SHT\_P-442.dgn

Plot Date: 2/28/2022 7:00:11 AM

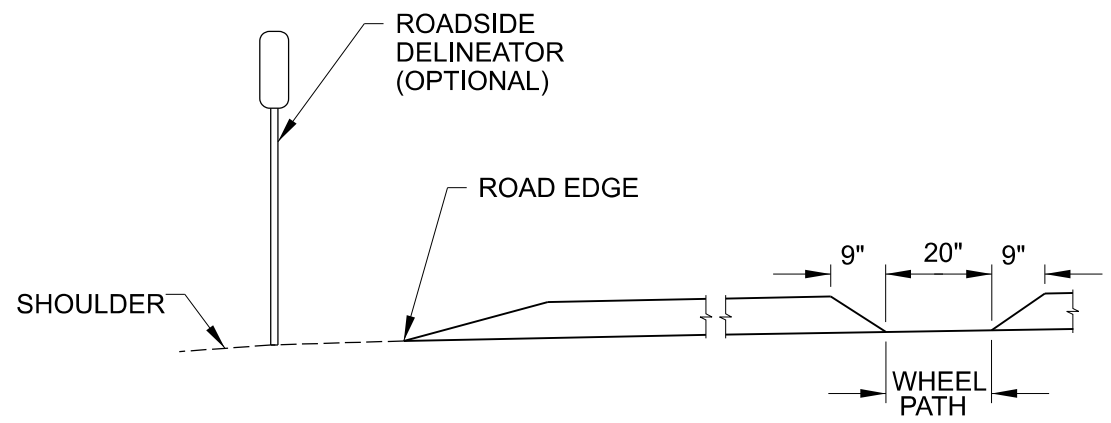
### THREE-CUSHION SPEED BUMP



### FOUR-CUSHION SPEED BUMP



**CURB DETAIL**



**SHOULDER DETAIL FOR STREETS WITHOUT CURBS**

**NOTES:**

1. 3- AND 4-CUSHION SPEED BUMPS ARE REQUIRED ON MAJOR AND SECONDARY EMERGENCY RESPONSE ROUTES IN ACCORDANCE WITH THE TSP.
2. PAVEMENT MARKINGS ON SPEED BUMP SHALL BE INSTALLED CONCURRENTLY WITH THE ASPHALT STRUCTURES. FOLLOW MANUFACTURER'S INLAY PROCEDURES FOR PAVEMENT MARKINGS ON SPEED BUMPS.
3. PAVEMENT MARKINGS AND SIGNS SHALL BE INSTALLED BEFORE OPENING ANY LANE TO TRAFFIC THAT IS OCCUPIED BY A NEW SPEED BUMP.
4. PAVEMENT MARKING LAYOUT ASSUMES A TWO-LANE, TWO-WAY STREET WITH PARKING ON BOTH SIDES. FOR ALL OTHER CONFIGURATIONS SUBMIT REVISED LAYOUT TO ENGINEER FOR APPROVAL.
5. INSIDE EDGE OF PAVEMENT MARKINGS SHALL BE 24" FROM CENTERLINE (SHOWN.)
6. SEE STD. DRG. P-440 FOR SPEED CUSHION LENGTH (14') AND PROFILE DETAIL.
7. THE 4-CUSHION LAYOUT IS USED FOR STREETS WITH HIGHER TRAFFIC VOLUMES (3000 VEHICLES PER DAY OR MORE) AND HORIZONTAL CURVES.

\* SEE PBOT STANDARD DETAIL P-435

<p>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.</p>	<p><i>Steve Townsen</i> City Engineer</p>	
	<p>Standard Drawing Title</p> <p><b>MULTI CUSHION SPEED BUMPS</b></p>	
	<p>Note: All material and workmanship shall be in accordance with the City of Portland Standard Construction Specifications.</p>	<p>Effective Date: 11-02-2021</p> <p>Calc. Book No.: Calc_Book_No.</p> <p>Std. Drg. Report Date: Date</p>