

Transportation Details

1. **General Transportation**

In general transportation items should follow Virginia Department of Transportation standards unless otherwise allowed by Virginia Tech. Projects should use guidance from the Parking and Transportation Master Plan and Transportation and Parking Project Review Checklist (see appendix). Specific Virginia Tech transportation standards are further expanded in this section.

2. **Crosswalks**

In general crosswalks should follow the details below. Crosswalk Master Plan is under development.



W11-2



W16-7P



R1-6

R1-6 TO BE USED AT MID-BLOCK, HIGH VOLUME, OR TO INCREASE VISIBILITY

W11-2 & W16-7P SIGNS REQUIRED

OVERHEAD DECORATIVE HOKIE LIGHT POLE (BY VTES)

A

SIDEWALK

CENTERLINE OF ROAD

24" SOLID WHITE THERMOPLASTIC CROSSWALK LINE

24" BTWN STRIPES (TO BE PLACED TO AVOID WHEEL PATH)

6'-10" (TYP.), 20' (INFINITE LOOP)

R1-6

OVERHEAD DECORATIVE HOKIE LIGHT POLE (BY VTES)

W11-2 & W16-7P SIGNS REQUIRED

VARIABLE LANE

VARIABLE LANE

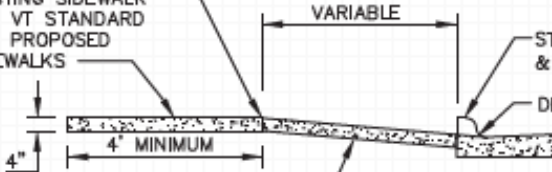
FACE-FACE

DIRECTION OF TRAVEL

CROSSWALK (HORIZONTAL)

EXPANSION JOINT

PROPOSED OR EXISTING SIDEWALK USE VT STANDARD FOR PROPOSED SIDEWALKS



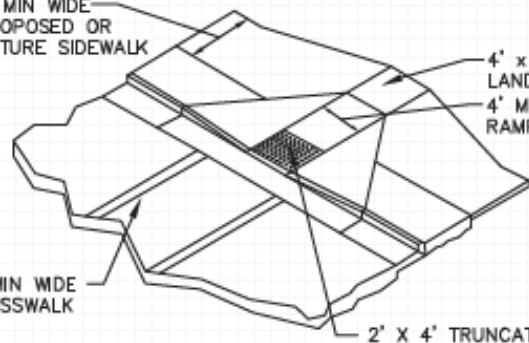
WHEELCHAIR RAMP. SLOPE NOT TO EXCEED 12:1. Min. 36" WIDE

SECTION A-A

STANDARD 2.5' CURB & GUTTER (CG-6)

DEPRESSED CURB

5' MIN WIDE PROPOSED OR FUTURE SIDEWALK



4' x 4' LANDING

4' MIN RAMP WIDTH

6' MIN WIDE CROSSWALK

2' x 4' TRUNCATED DOMES MAT USE VT STANDARD

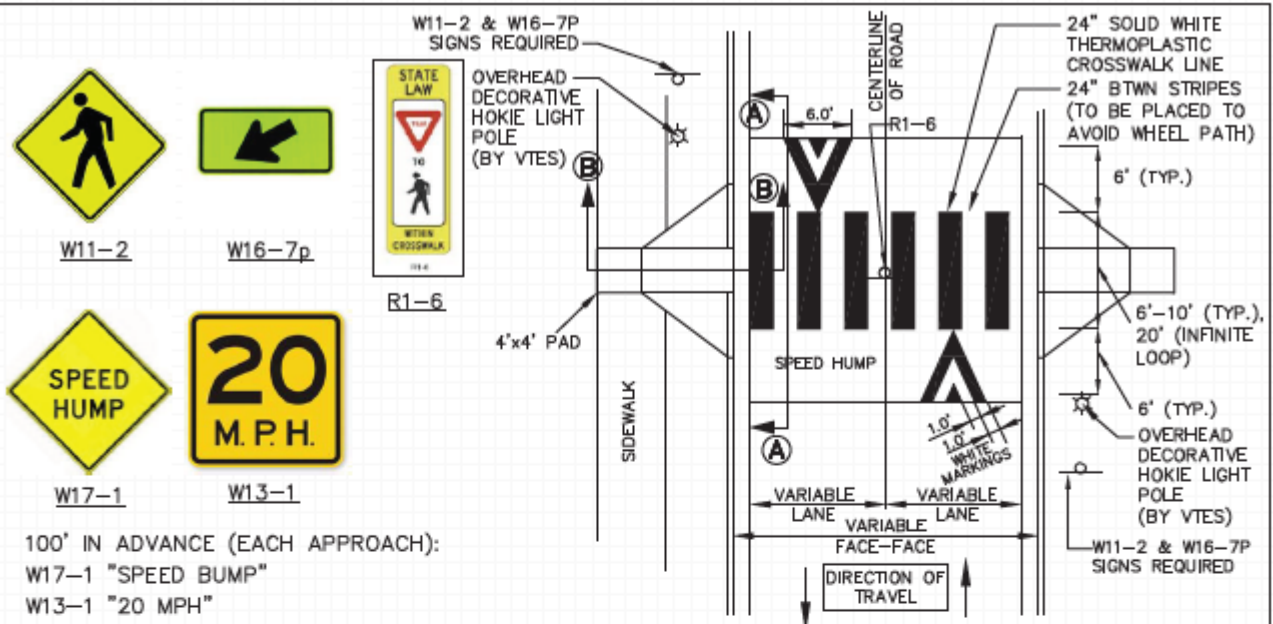
CURB RAMPS STANDARD DETAILS

NOTE: INSTALL LAMP POST PER VIRGINIA TECH LIGHTING STANDARDS

STANDARD CROSSWALK

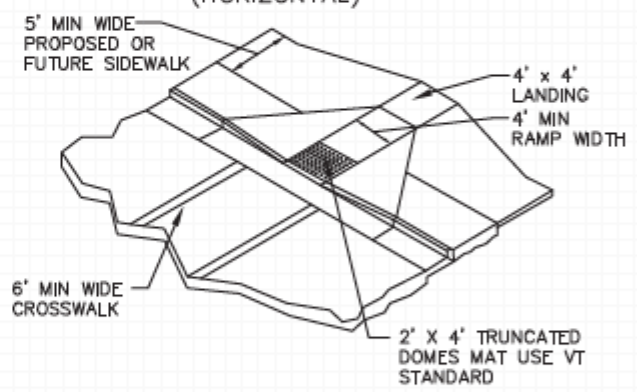
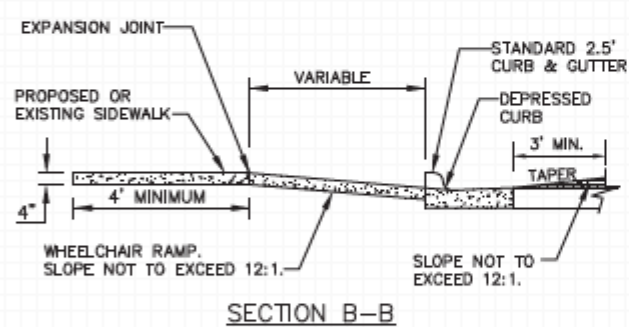
DRAWN NOT TO SCALE

CONSULT WITH VIRGINIA TECH OFFICE OF UNIVERSITY PLANNING FOR FURTHER DETAILS

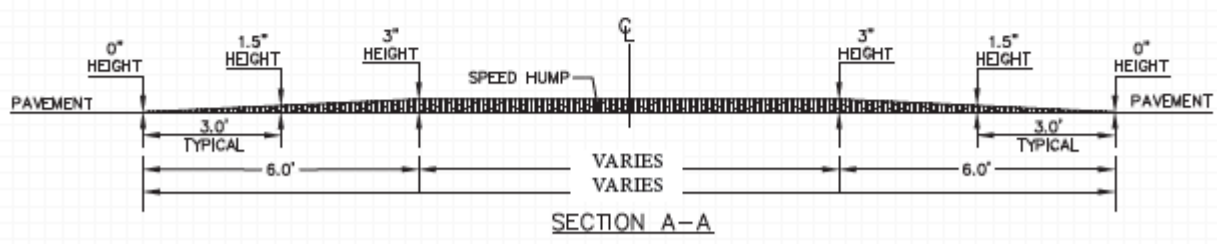


100' IN ADVANCE (EACH APPROACH):
 W17-1 "SPEED BUMP"
 W13-1 "20 MPH"
 R1-6 TO BE USED ONLY AT MID-BLOCK CROSSINGS

RAISED CROSSWALK (HORIZONTAL)



CURB RAMPS STANDARD DETAILS



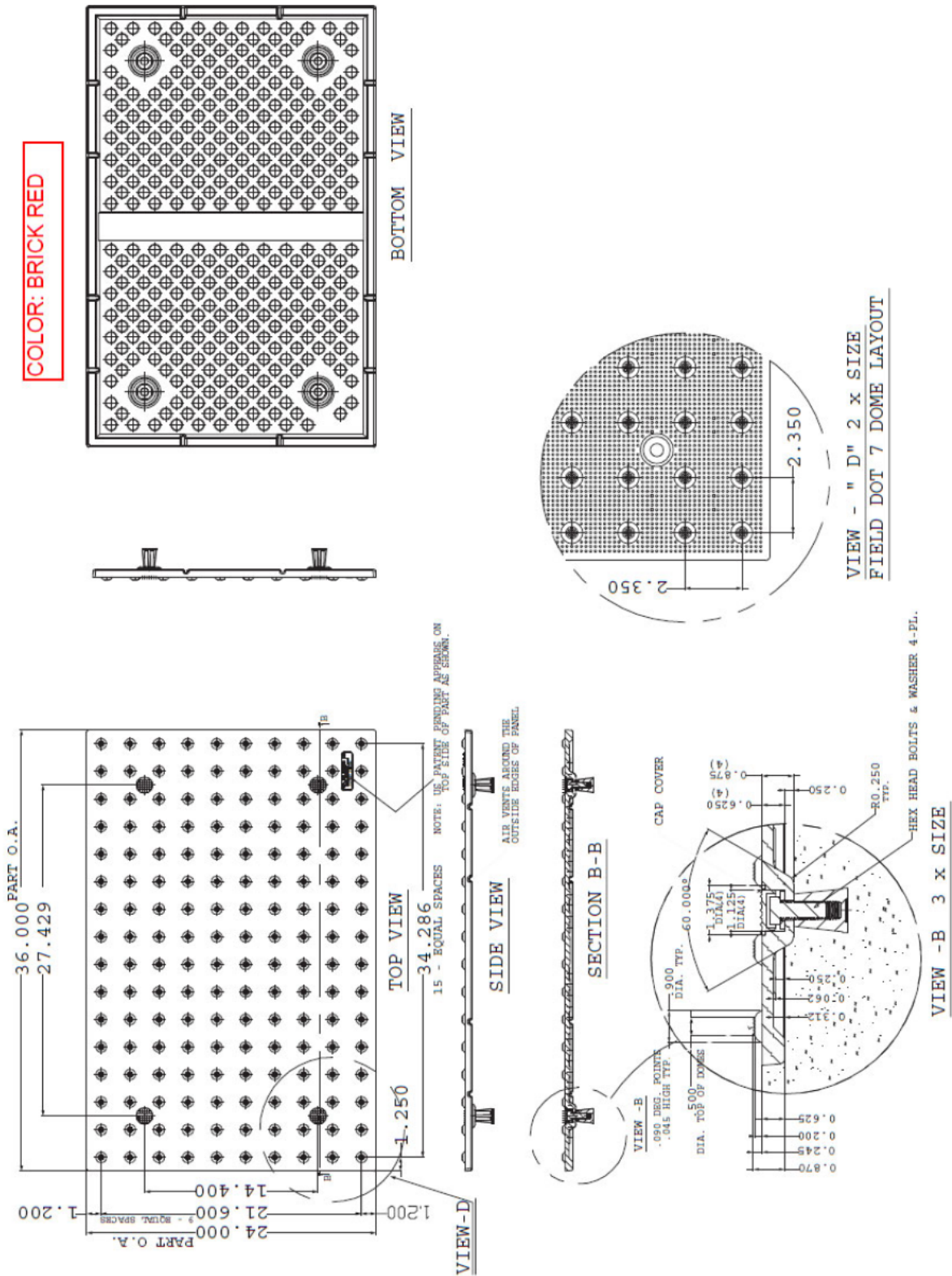
NOTE: INSTALL LAMP POST PER VIRGINIA TECH LIGHTING STANDARDS

RAISED CROSSWALK

DRAWN NOT TO SCALE
 CONSULT WITH VIRGINIA TECH OFFICE OF UNIVERSITY PLANNING FOR FURTHER DETAILS

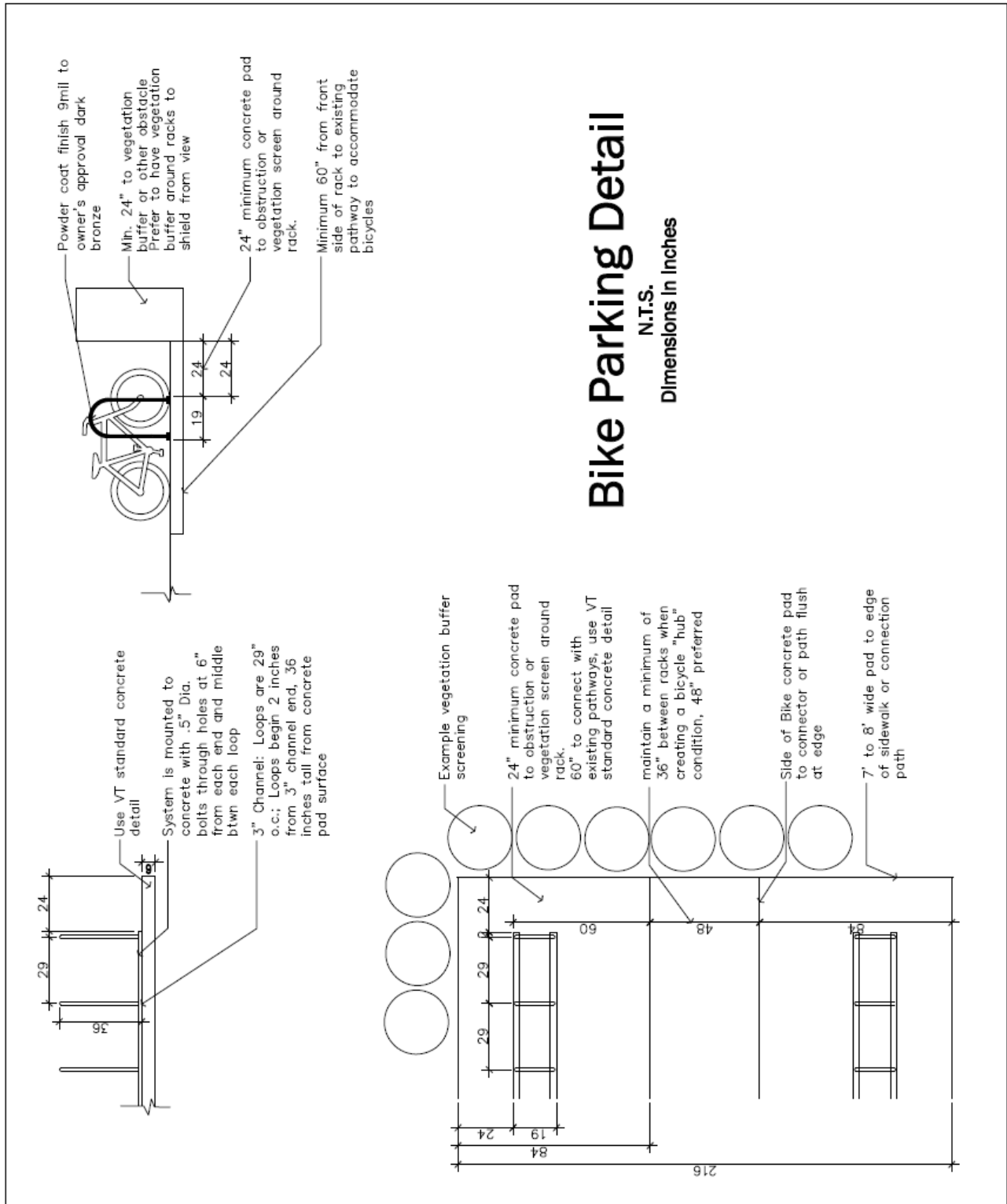
3. Detectable Warning Surface

In general detectable warning surfaces (truncated domes) should follow the standard shown below.



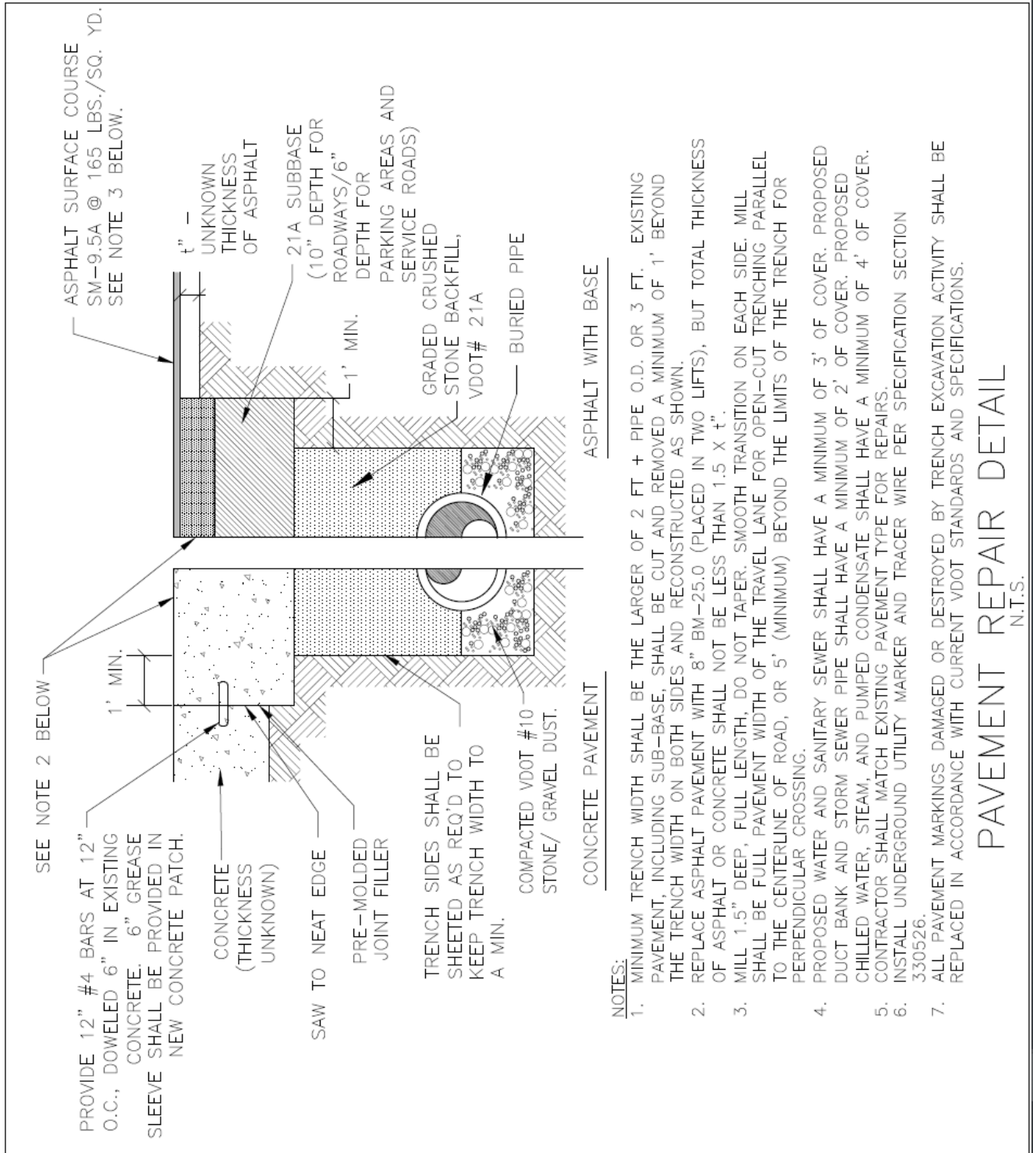
4. Bike Parking

In general bike parking should follow the Bike Parking Master Plan (see appendix) and the standard shown below.



5. Pavement Repair

In general pavement repair should follow the standard shown below.



6. ADA Parking Signs

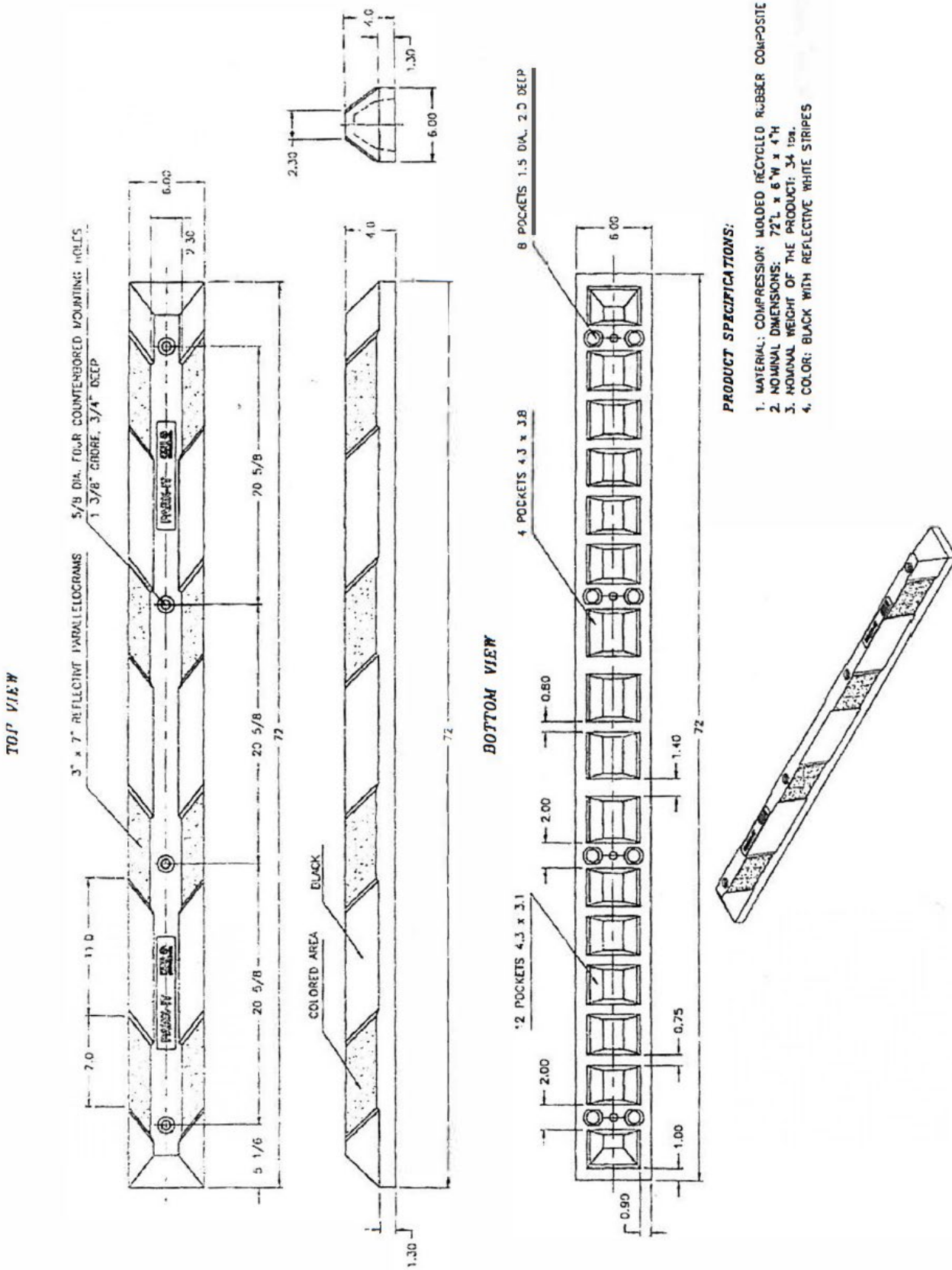
In general ADA Parking Signs should follow the standard shown below.



- Size: 12" wide by 18" tall
- Rust free engineer grade prismatic .080 aluminum
- White copy on blue field
- Reflective lettering
- Reflective background
- Holes centered top/bottom
- Rated for 7 years
- Fade resistant

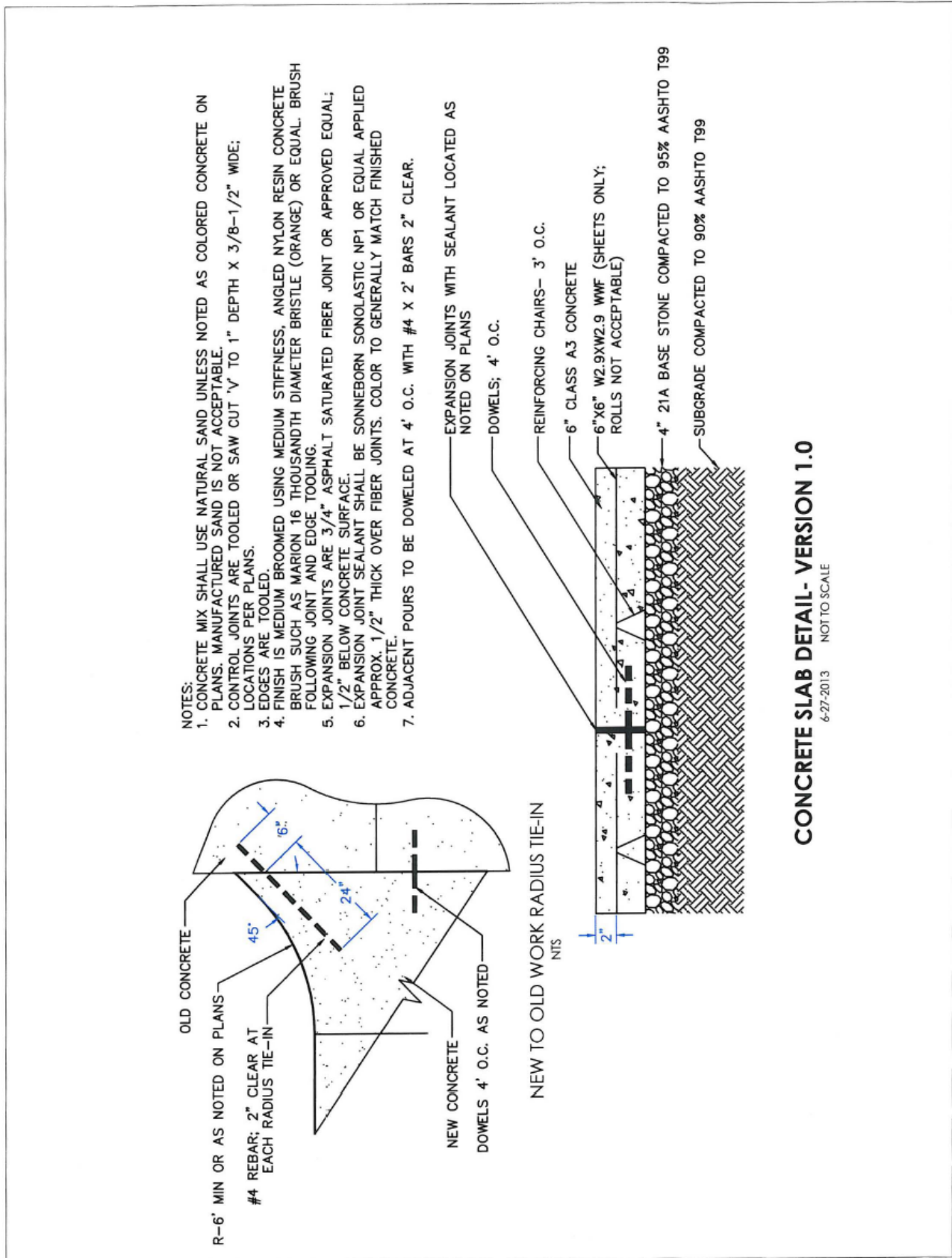
7. Parking Wheel Stops

In general parking wheel stops should follow the standard shown below



8. Sidewalk Detail

In general sidewalks should follow the standard below.



9. Fire Truck Turning Movements

In general fire truck turning movements should follow the standard below.

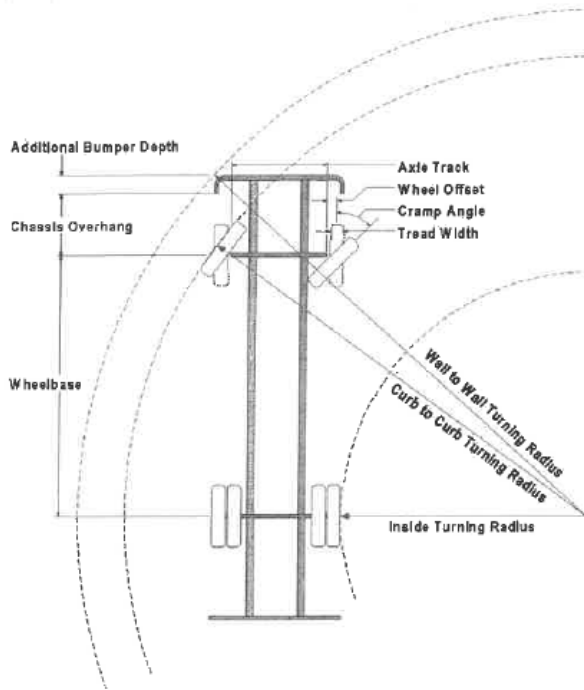


Turning Performance Analysis

10/08/2018

Bid Number: 778
Department: Blacksburg Fire Dept, Town of

Chassis: Velocity Chassis, PAP/Midmount (Big Block), 2010
Body: Aerial, Platform 100', Alum Body



Parameters:

*Inside Cramp Angle:	45°
Axle Track:	82.92 in.
Wheel Offset:	4.68 in.
Tread Width:	16.6 in.
Chassis Overhang:	78 in.
Additional Bumper Depth:	19 in.
Front Overhang:	146.6 in.
Wheelbase:	257 in.

Calculated Turning Radii:

Inside Turn:	20 ft. 2 in.
Curb to curb:	36 ft. 6 in.
Wall to wall:	44 ft. 7 in.

Category	Option	Description
Axle, Front, Custom	0637059	Axle, Front, Oshkosh TAK-4, Non Drive, 24,000 lb, Velocity (425 Tires)
Wheels, Front	0019611	Wheels, Front, Alcoa, 22.50" x 12.25", Aluminum, Hub Pilot
Tires, Front	0679621	Tires, Front, Michelin, XZY3 (wb), 425/65R22.50, 20 ply, Fire Service Load Rtnq
Bumpers	0123625	Bumper, 19" Extended, Imp/Vel
Aerial Devices	0784643	Aerial, 100' Pierce Platform, 35 MPH Wind Rating, 400lb Tip Load Allowance

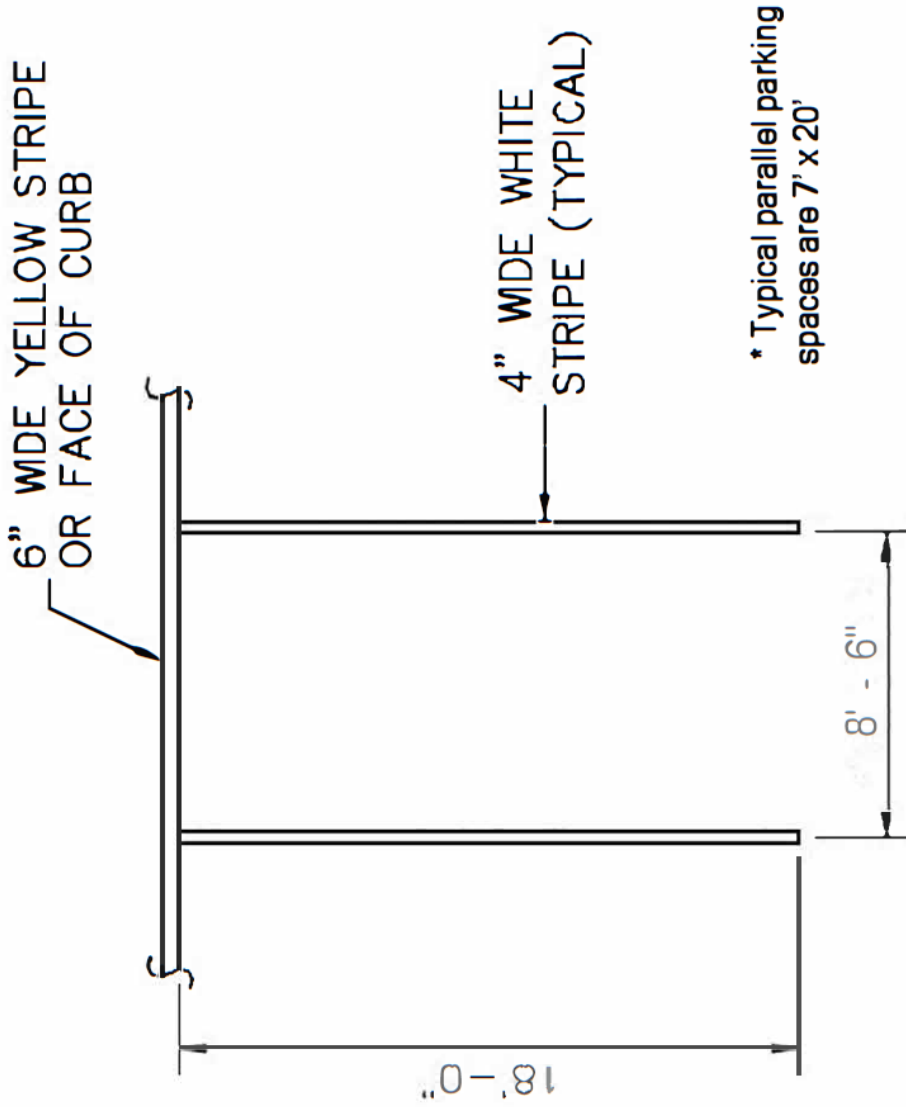
Notes:

*Actual inside cramp angle may be less than shown.

Curb to Curb turning radius calculated for 9.00 inch curb.

10. Typical Parking Spaces

In general typical parking spaces should follow the standard below.



STRIPING PATTERN FOR SINGLE PARKING STALL