

Welcome

Delaware Department of
Transportation

Winter Workshop

Delaware Department of
Transportation

Year In Review
by
Joe Ellis

Joseph.ellis@state.de.us



2008 Year In Review

- Topics
 - DelDOT's Standard Specifications
 - DelDOT's Standard Construction Details
 - ADA
 - Pavement Markings
 - Drainage Inlets
 - plus others



2008 Year In Review

- Topics not presented
 - DelDOT's Subdivision Manual
 - DelDOT's Road Design Manual
 - DelDOT's DGMs
- www.DelDOT.gov
 - Publications

Subdivisions

Entrance pipe or frontage ditches





V-ditches



Positive drainage along pavement



•Curb Openings

Subdivisions

- Drainage Easements
 - needed for maintenance
- Vacant Lots
 - Clean up R/W, topsoil & seed



Subdivisions

- Dead end streets
 - Temporary cul-de-sac or Type III

Subdivisions

- Signage
 - In accordance w/ Subdivision Manual Chapter 5
 - Development Name Signs have changed back from wood to 2” steel tube
 - All sign breakaway 4” max from ground



Mailboxes

8 to 12 inches from face of curb
(flow line)











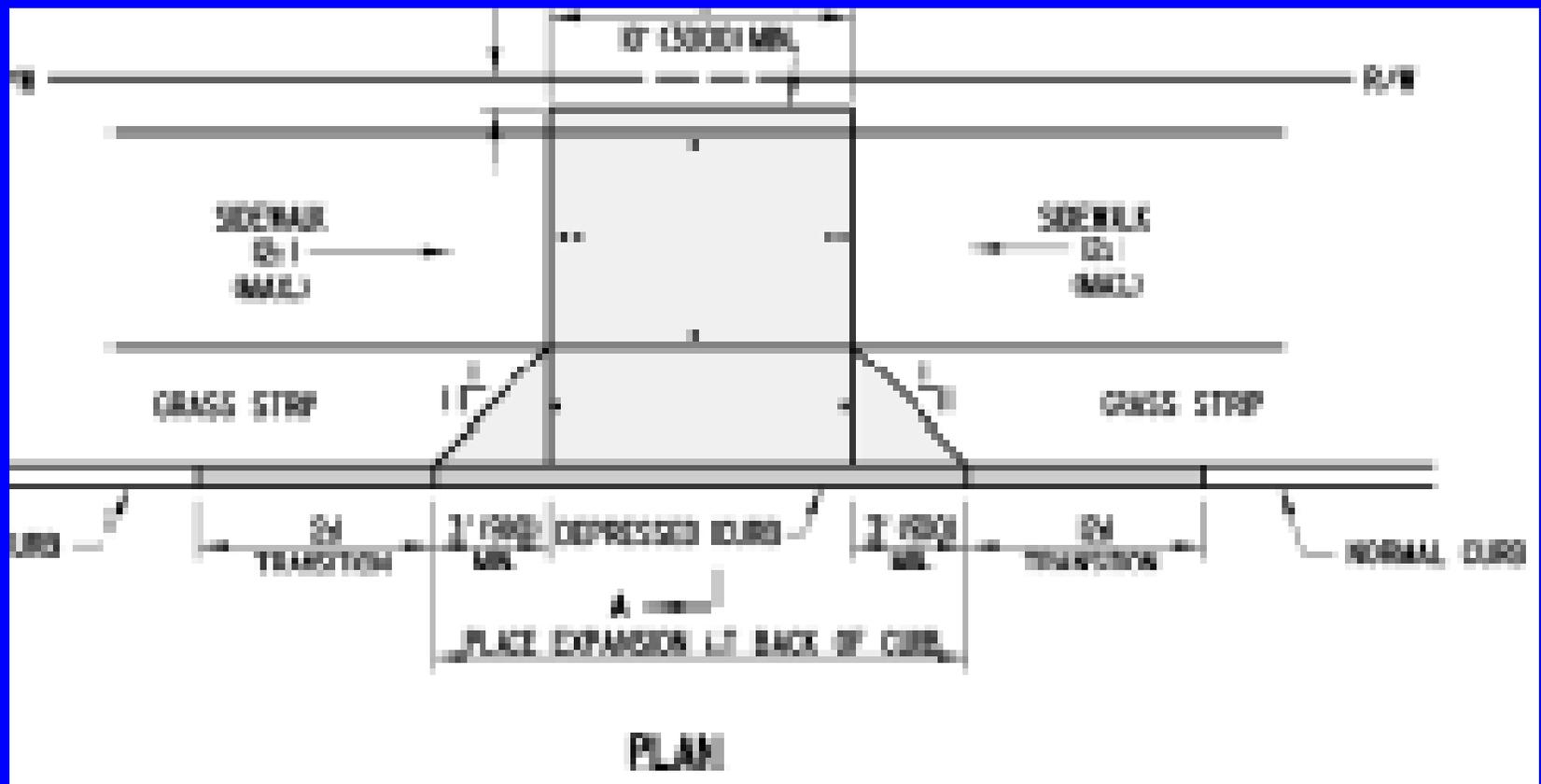


2% cross-slope



Driveway Aprons

- Standard Const Detail C-3





Shared Use Paths

- A shared use path is a facility that is physically separated from the roadway and intended for exclusive use of modes other than motorized vehicles.

Shared Use Paths

- These facilities serve bicyclists, in-line skaters, roller skaters, wheelchair users and pedestrians, including walkers, runners, people with baby strollers, people walking dogs, etc.

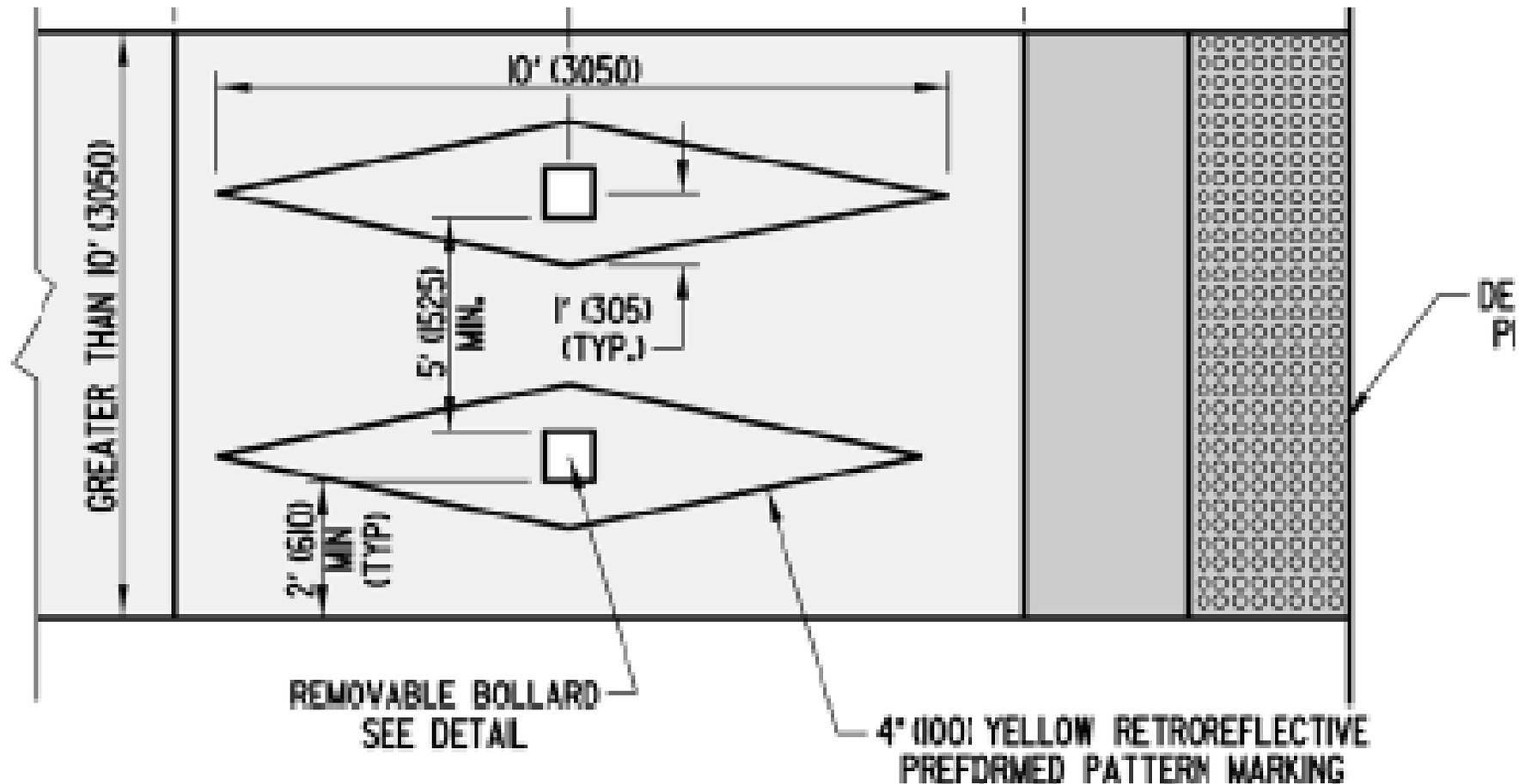


- 10 ft wide
- 8 ft for very light traffic
- 12 ft for heavy traffic areas



- Max 2% cross slope (50:1)
- Max 5% running slope (20:1)





- 8 to 10 ft = one bollard
- > 10 ft = two bollards
- Reflector panel on all sides
- Yellow diamond delineating bollard
 - Preformed tape

Shared Use Paths

- Sign height 4 to 5 ft (Fig 9B-1, MUTCD)

ADA

- Positive drainage
- Access and clearance
- Retaining wall joints
- Pedestrian access across bridges
- 2% cross-slope in crosswalks





Guardrail

- Grading per Standard Details
- Reflective material on head



Guardrail

- Butterfly reflectors
- Paved maintenance strip



- Taper corners flush w/pavement
- 4 ft bike lane
- Flexible Rubber Delineators







Stamped Concrete





Striping Concerns

- Better review
- Responsibility of inspector and contractor
- Epoxy, thermoplastic (paint & preformed), tape (striping & symbols), paint
 - Proper turn lanes
 - Stop bar use vs sharks teeth
 - Centerline no passing

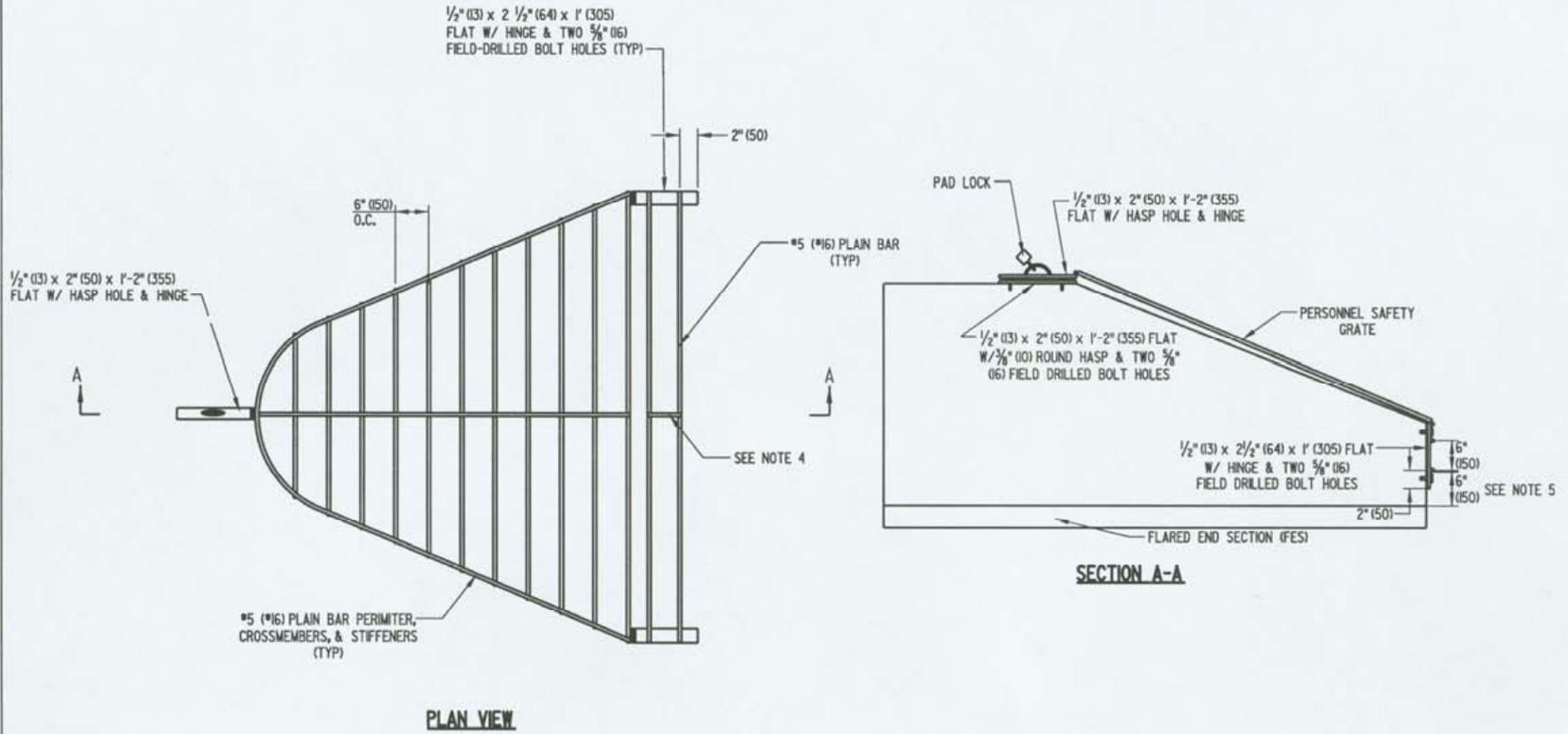


COMPACTION



Personnel Safety Grates

SCALE : N.T.S.



- NOTES:
1. PERSONNEL SAFETY GRATES (PSG) SHALL ONLY BE INSTALLED ON STORM WATER PIPE INLETS.
 2. THE GRATE SHALL BE MADE TO FIT THE OUTSIDE PERIMETER OF THE FLARED END SECTION (FES) 1/2" (13).
 3. ALL BOLT HOLES ARE TO BE DRILLED IN THE FIELD.
 4. A STIFFENER IS TO BE INSTALLED WHERE TWO OR MORE BARS ARE USED.
 5. BOTTOM BAR SHALL BE 6" (150) ABOVE INVERT OF FES.



DELAWARE
DEPARTMENT OF TRANSPORTATION

SAFETY GRATES

STANDARD NO. D-3 (2005) SHT. 2 OF 2

APPROVED *Candace Wick* 12/5/05
CHIEF ENGINEER DATE
 RECOMMENDED *James M. O'Brien* 11/29/05
DESIGN ENGINEER DATE

01/19/2006

Standard Detail D3 Sht 2 of 2

Safety



SAFETY