
Index 218

Shoulder Barrier Inlet

ORIGINATION

Date: September 5, 2017

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COMMENTARY

1. Update concrete sections for new Single-Slope Barrier.
2. Change Index name to "Shoulder Barrier Inlet" to more clearly describe application with regards to the new Single-Slope Concrete Barrier Index.

COMMENTS AND RESPONSES

BLACK = Industry Review Comments **RED** = Standard Plans Response

Name: Stephanie Sharp, P.E. (TPE compiled comments)

Date: Tuesday, September 26, 2017 9:13 AM

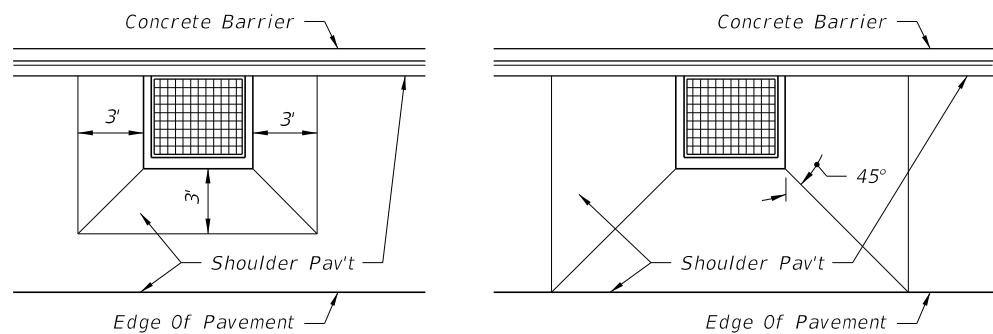
COMMENT:

If previous comment above regarding combining Indices 425-030, -031, & -032 is not implemented, then: The title block shows a name change from "Barrier Wall Inlet" to "Shoulder Barrier Inlet" which is confusing. Index 521-001 uses the name "Concrete Barrier", not "Shoulder Barrier". So, it appears you can use this inlet any time there is a shoulder barrier and not necessarily a concrete barrier wall. Is that the intent? General Note 1 states the inlet is intended for use adjacent to concrete barrier walls. Use of this inlet adjacent to other wall types shall be approved by the Drainage Engineer. Also, Median Barrier Inlet (in Index 425-30) does not include the word "Shoulder" and medians have shoulders too. Please clarify the intent and be consistent where possible between indices.

RESPONSE:

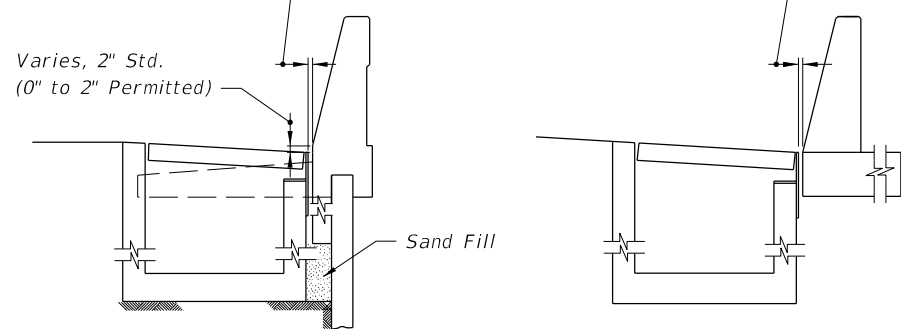
Date: 10/13/2017

The new Index titles give added clarity by corresponding directly to the three Concrete Barrier types in Index 521-001 (previous 217 thru 219 Index titles did not differentiate inlet type usage from each other). These inlet types would not be physically applicable without use of matching barrier shapes in Index 521-001, which references directly to 425-030, -031, & -032 in the General Note as well as throughout the drawing details. Likewise, the details and notes in 425-030, -031, & -032 also reference back to 521-001. Now, per this comment, Note 1 in each inlet Index Sheet will be updated to immediately reference usage with 521-001 to avoid possible misunderstanding of usage (per previous comment for 425-030). Changes made.



LOW SIDE SUPERELEVATION PAVEMENT WARP FOR SHOULDERS IN SUPERELEVATION
HIGH SIDE TRANSITION PAVEMENT WARP FOR SHOULDERS IN SUPERELEVATION

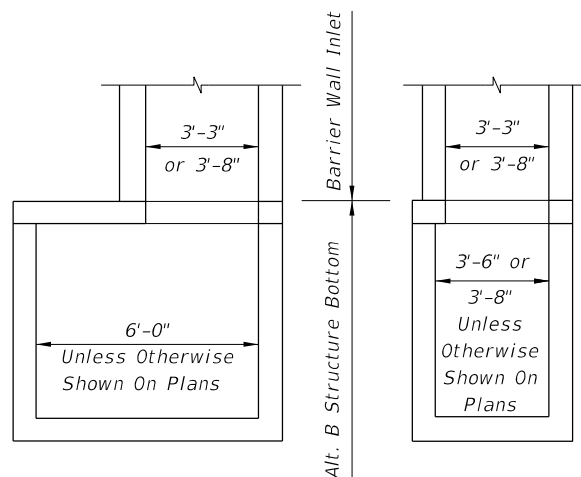
Joint And Bond Breaker:
Cast-In-Place Inlets:
One layer ASTM D6380 Class S, Type III Organic Felt bond breaker between inlet and barrier, including footings.
Precast Inlets:
Joint width 1" max. Seal with backer rod and Department-approved pavement joint sealant. See Section BB For Other Barrier Shape.



TRAFFIC RAILING / RETAINING WALL

ROADWAY BARRIER

INLET SECTION AT WALLS



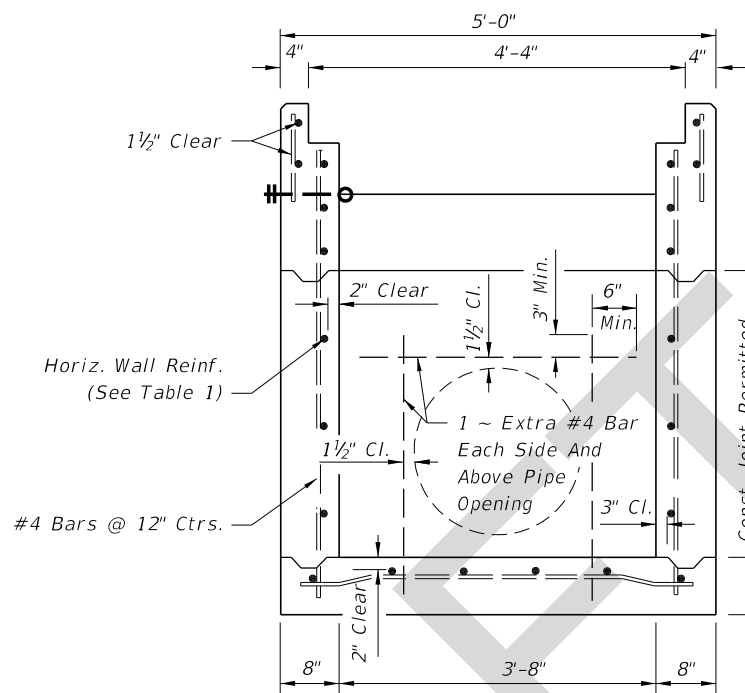
Note: Alt. B Structure Bottom Only. See Index 425-010

INLET WITH STRUCTURE BOTTOM

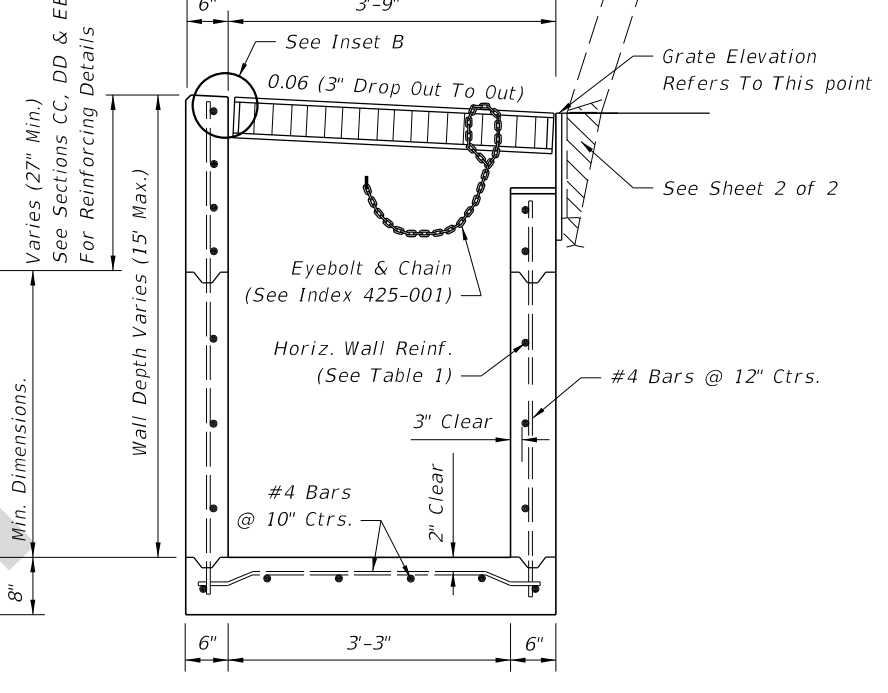
Refer to usage with Shoulder Barrier per Index 521-001 and Traffic Railing per Index 521-610

GENERAL NOTES:

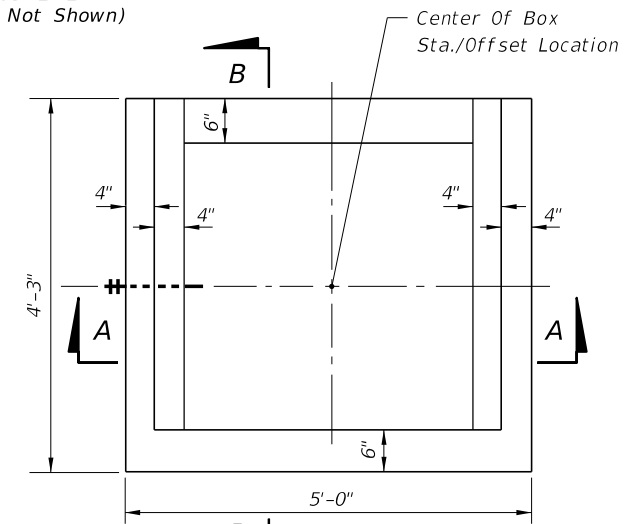
1. This inlet is primarily intended for use adjacent to concrete barriers on paved shoulders. Use of the inlet adjacent to other wall types shall be approved by the Drainage Engineer. The inlet is suitable for bicycle and occasional pedestrian traffic, with roller bar installation (see inset B) but should not be placed in a designated pedestrian travel way. It is not intended for use in curb and gutter or other areas where throated inlets are required, nor areas subject to high debris.
2. Inlets located in embankments constructed with earth anchored retaining wall shall be designed with minimum depths to reduce adverse impact on the anchorage system. Runs of pipe parallel to and near anchored wall shall be avoided wherever practical. Special coordination must be exercised during the design and construction of storm water systems within anchored wall systems.
3. Inlet bottoms and/or tops may be either precast or cast-in-place. Whether cast as a single unit or as multiple segments, and whether precast or cast-in-place, the upper 2'-3" of the inlet shall be reinforced in accordance with sections CC, DD and EE.
4. All exposed edges and corners shall be 3/4" chamfer or tooled to 1/4" radius.
5. When Alternate G grate is specified in the plans, the grate is to be hot-dip galvanized after fabrication. Field installation of the filler bar called for in Inset B will not be permitted, thereby requiring tolerance adjustment during fabrication and/or casting, or, matching grate to structure prior to galvanizing.
6. All reinforcing is Grade 60 bars. See Index 425-001 for equivalent area of welded wire fabric.
7. All dimensions are for both precast and cast-in-place inlets unless otherwise noted.
8. For supplemental details see Indexes 425-001 and 425-010.
9. Inlets to be paid for under the contract unit for Inlets (Barrier Wall), Ea.



SECTION A-A (WITHOUT GRATE)
(Pipe Opening Shown)



SECTION B-B
(Pipe Opening Not Shown)



TOP VIEW (WITHOUT GRATE)

TABLE 1: HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING	
			BARS	WWF
0'-5'	A12	0.20	12"	8"
5'-10'	A6	0.20	6"	5"
10'-15'	A4	0.20	4"	3"
10'-15'	B5.5	0.24	5 1/2"	5"

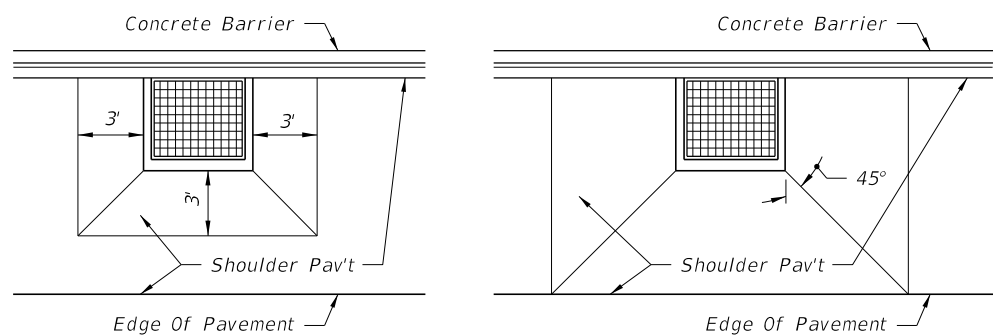
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LAST REVISION 11/01/17	DESCRIPTION:
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**FY 2018-19
STANDARD PLANS**

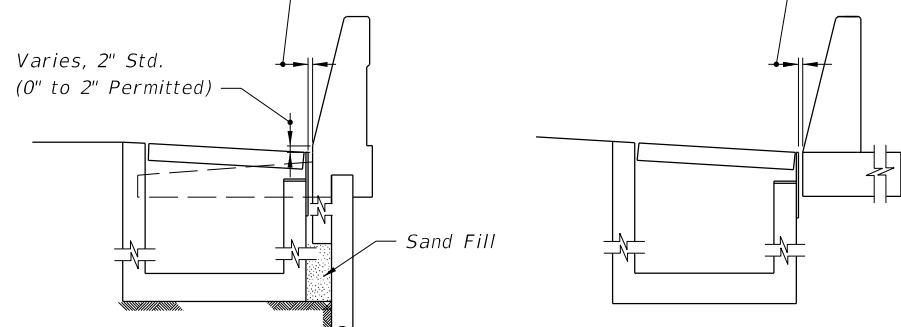
SHOULDER BARRIER INLET

INDEX 425-031	SHEET 1 of 2
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LOW SIDE SUPERELEVATION PAVEMENT WARP FOR SHOULDERS IN SUPERELEVATION
HIGH SIDE TRANSITION PAVEMENT WARP FOR SHOULDERS IN SUPERELEVATION

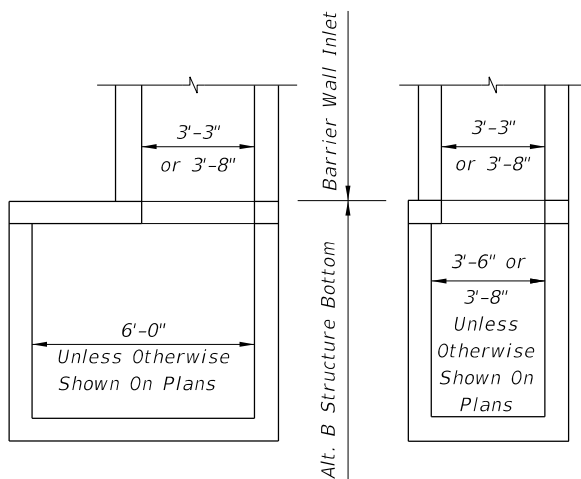
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TRAFFIC RAILING / WALL COPING

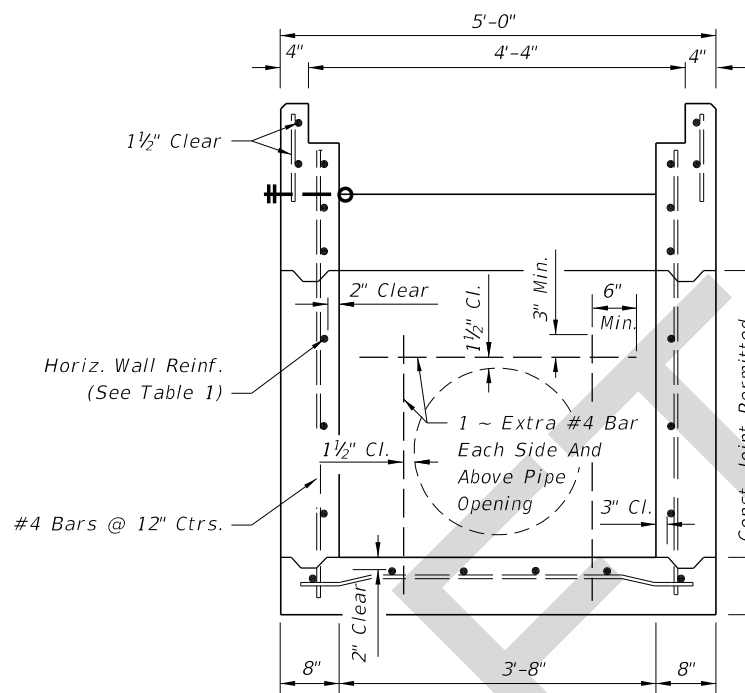
ROADWAY BARRIER

INLET SECTION AT WALLS

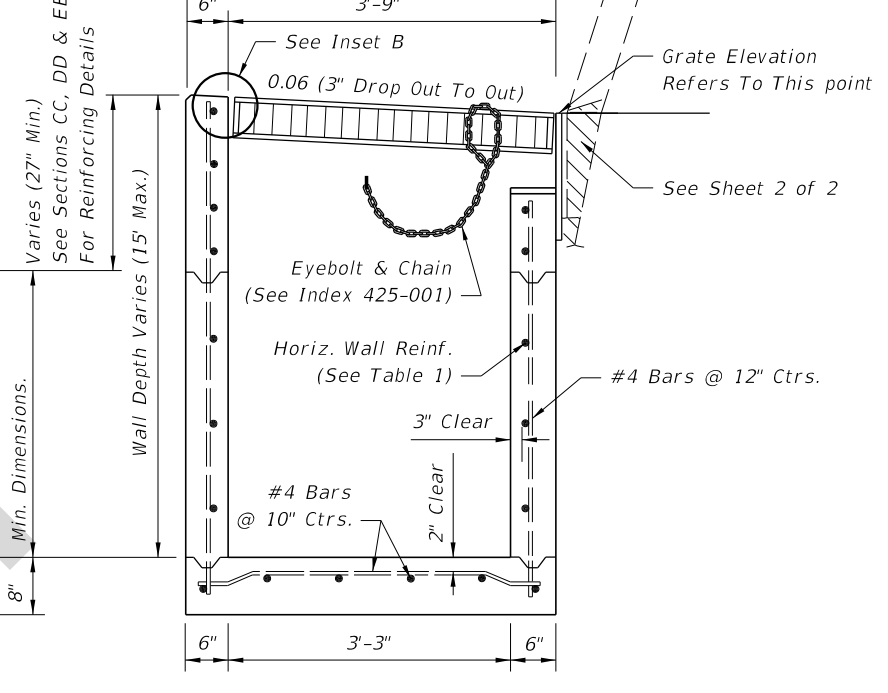


Note: Alt. B Structure Bottom Only. See Index 425-010

INLET WITH STRUCTURE BOTTOM



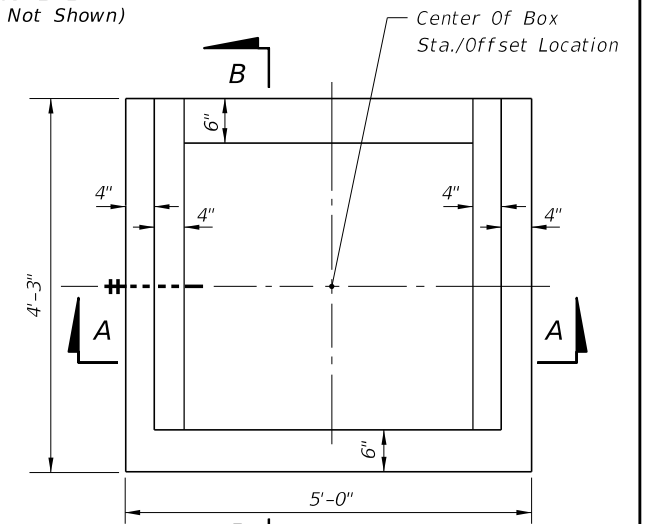
SECTION A-A (WITHOUT GRATE)
(Pipe Opening Shown)



SECTION B-B
(Pipe Opening Not Shown)

GENERAL NOTES:

- Where called for in the Plans, use this inlet in conjunction with Shoulder Barrier per Index 521-001 or a Wall Coping with Traffic Railing/Junction Slab per Index 521-610. Use of the inlet adjacent to other Concrete Barrier or Traffic Railing types requires approval of the Drainage Engineer. The inlet is suitable for bicycle and occasional pedestrian traffic, with roller bar installation (see INSET B), but should not be placed in a designated pedestrian travel way.
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LAST REVISION	DESCRIPTION:
11/01/17	