Origination Form

Proposed Revisions to a Standard Plans Index

Originator:	Turley, Joshua	Index Number:	630-010
Date:	5/15/2025	Sheet Number(s):	Sheets 1,2,4
E-mail:	Joshua.Turley@dot.state.fl.us	Index Title:	CONDUIT DETAILS - EMBEDDED

Summary of the changes:

Sheet 1: Added to note 5 a max height to conduit.

Sheet 2: Added a max elevation for conduit in EJB "B" DETAIL and PARTIAL ELEVATION VIEW ALONG BRIDGE

Sheet 4: Added a max elevation for conduit in PARTIAL ELEVATION VIEW ALONG APPROACH

Commentary/Background:

Conduit height in the barrier is being limited to avoid conflicts with conduits when drilling holes for anchorage. This aligns with changes to Index 700-012, where the sign mounting plate was raised.

Other Affected Documents/Offices	Person Contacted	Affected (Yes/No)
Other Standard Plans		No
FDOT Design Manual		No
Standard Specifications		No
Basis of Estimates Manual		No
Approved Product List		No
Construction Office		No
Maintenance Office		No

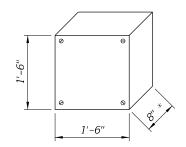
Implementation

["FY-Standard Plans (Next Release)"]

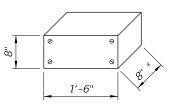
- 1. Furnish and install approved Conduits, Fittings and Embedded Junction Boxes (EBJ's) in accordance with Specification Sections 630 and 635, this Standard, the National Electric Code (NEC) and as directed by the Engineer.
- 2. Furnish and install Embedded Junction Boxes (EJB) with weatherproof covers sized in accordance with NEC requirements and the maximum size limits shown. Install EJB adjacent to the Begin and End of Bridges, Begin and End of Retaining Walls, (except omit EJB adjacent to the Bridge unless a precast Traffic Railing with junction slab is used), and at other locations as necessary to maintain 300 foot maximum spacing. See Plans for additional locations and details.
- 3. For Conduit not designated for future use, see Plans for details. For Conduit designated for future use, stub out and cap the Conduit. Drive a 3'-0" \pm long $rac{3}{4}$ " (min.) diameter Steel Pipe flush with the ground line adjacent to the end of the Conduit as shown on Sheets 2, 3 or 4. Provide the location of the stub out with Steel Pipe to the Engineer for inclusion on the As-Built Plans.
- 4. Shift vertical Railing reinforcement symmetrically to provide 2" clearance to EJB. Space shifted vertical reinforcement at minimum 3" centers. Cut horizontal Railing reinforcement to provide 2" clearance to EJB and provide supplemental reinforcement as shown. To facilitate placement of Conduit, Expansion Fittings, and Expansion/Deflection Fittings, shift reinforcing a maximum of 1" but do not cut railing reinforcing to facilitate Conduit or Fittings. Do not
- 5. Place conduits as indicated in this Standard unless Structures Plans indicate fewer. Max elevation of the top of conduit is 1'-6" above top of coping for traffic barriers and 1'-2" for parapets.

bundle Conduits, or Conduit and horizontal reinforcement

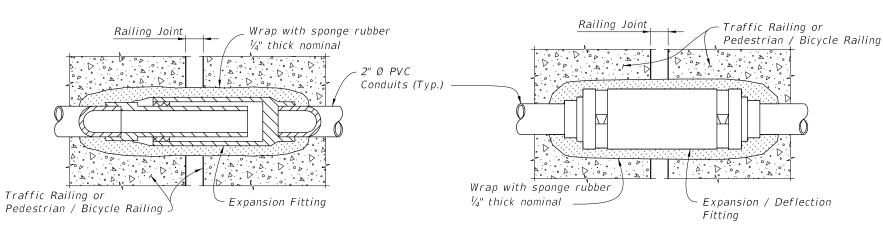
* Reduce to 6" maximum when installed in Pedestrian/ Bicycle Railings.



EJB "A" Double or Triple Conduit (Maximum Dimensions)



EJB "B" Single Conduit (Maximum Dimensions)



DETAIL "A" EXPANSION FITTING DETAIL

DETAIL "B" EXPANSION / DEFLECTION FITTING DETAIL (CONCRETE / CONCRETE) DETAIL "C" EXPANSION / DEFLECTION FITTING DETAIL (CONCRETE / SOIL)

GENERAL

REVISION 05/01/25

DESCRIPTION:

FDOT

FY 2025-26 STANDARD PLANS

2026-27

Updated Note

CONDUIT DETAILS - EMBEDDED

INDEX

Wrap with sponge rubber

Ø PVC Conduits

½" thick nominal

SHEET

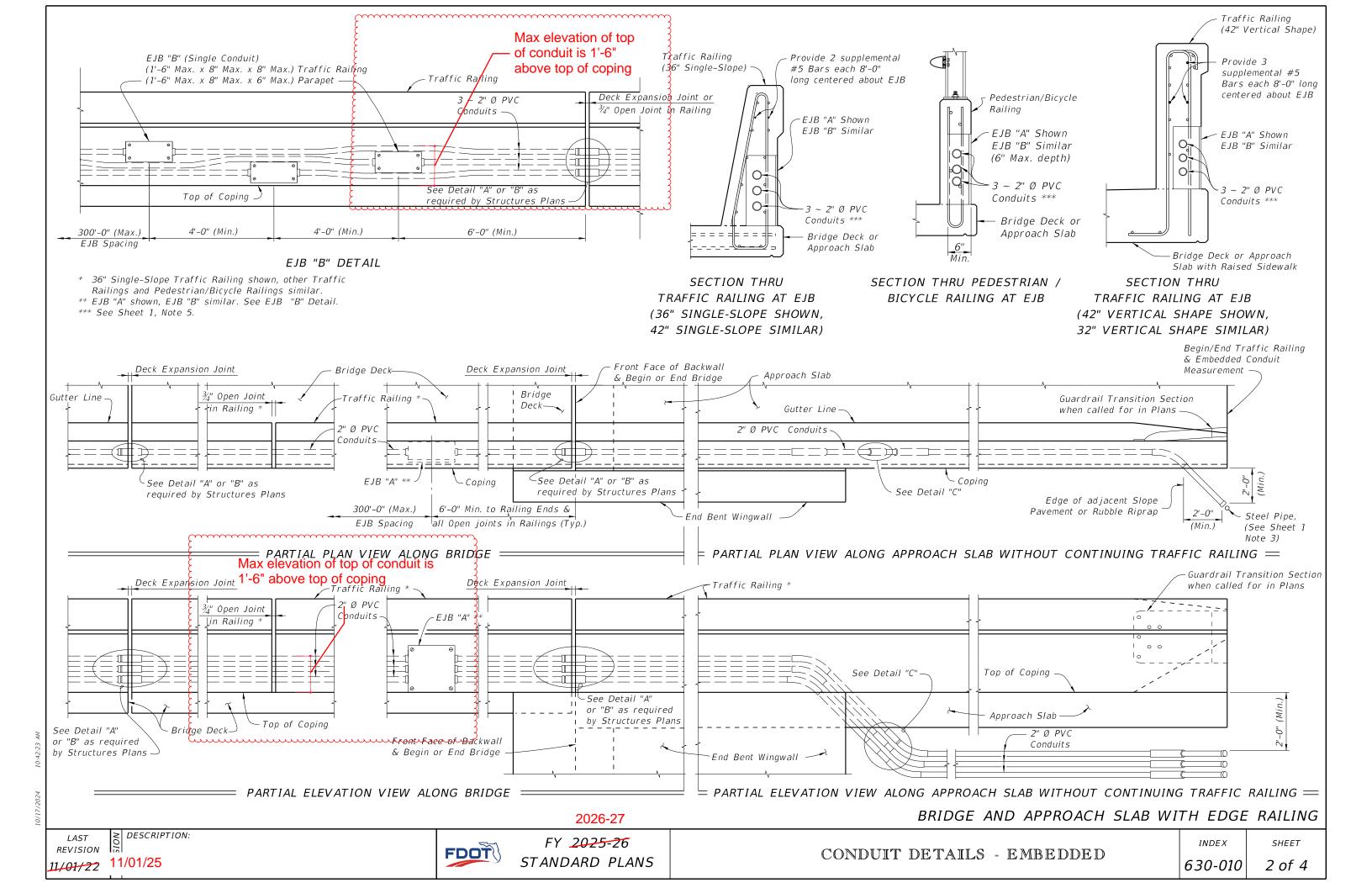
11/01/23

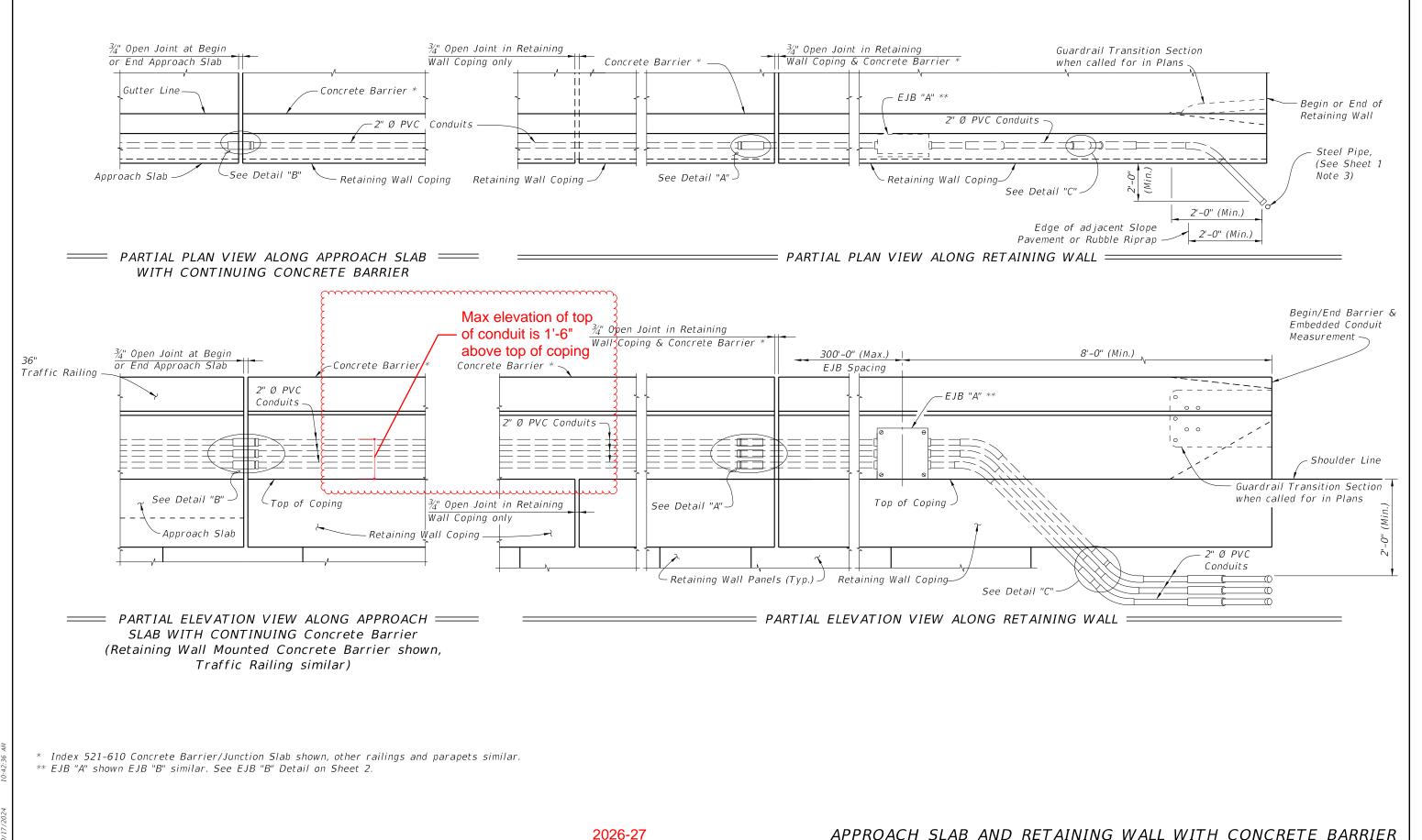
630-010

9 Š

Fitting_

Expansion / Deflection





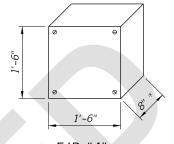
LAST O DESCRIPTION:

11/01/22 11/01/25

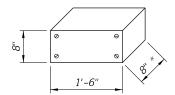
FDOT

- 1. Furnish and install approved Conduits, Fittings and Embedded Junction Boxes (EBJ's) in accordance with Specification Sections 630 and 635, this Standard, the National Electric Code (NEC) and as directed by the Engineer.
- 2. Furnish and install Embedded Junction Boxes (EJB) with weatherproof covers sized in accordance with NEC requirements and the maximum size limits shown. Install EJB adjacent to the Begin and End of Bridges, Begin and End of Retaining Walls, (except omit EJB adjacent to the Bridge unless a precast Traffic Railing with junction slab is used), and at other locations as necessary to maintain 300 foot maximum spacing. See Plans for additional locations and details.
- 3. For Conduit not designated for future use, see Plans for details. For Conduit designated for future use, stub out and cap the Conduit. Drive a 3'-0" \pm long $\frac{3}{4}$ " (min.) diameter Steel Pipe flush with the ground line adjacent to the end of the Conduit as shown on Sheets 2, 3 or 4. Provide the location of the stub out with Steel Pipe to the Engineer for inclusion on the As-Built Plans.
- 4. Shift vertical Railing reinforcement symmetrically to provide 2" clearance to EJB. Space shifted vertical reinforcement at minimum 3" centers. Cut horizontal Railing reinforcement to provide 2" clearance to EJB and provide supplemental reinforcement as shown. To facilitate placement of Conduit, Expansion Fittings, and Expansion/Deflection Fittings, shift reinforcing a maximum of 1" but do not cut railing reinforcing to facilitate Conduit or Fittings. Do not bundle Conduits, or Conduit and horizontal reinforcement.
- 5. Place conduits as indicated in this Standard unless Structures Plans indicate fewer. Max elevation of the top of conduit is 1'-6" above top of coping for traffic barriers and 1'-2" for parapets.

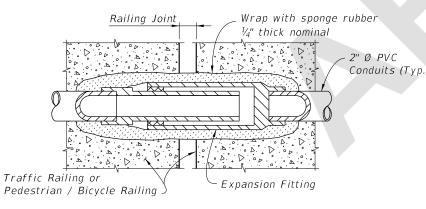
* Reduce to 6" maximum when installed in Pedestrian/ Bicycle Railings.



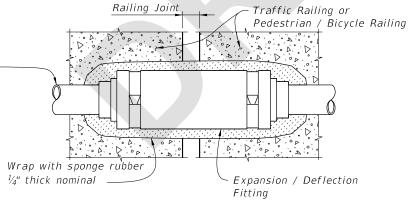
EJB "A" Double or Triple Conduit (Maximum Dimensions)



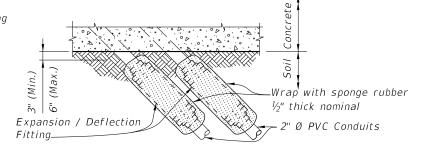
EJB "B" Single Conduit (Maximum Dimensions)



DETAIL "A" EXPANSION FITTING DETAIL



DETAIL "B" EXPANSION / DEFLECTION FITTING DETAIL (CONCRETE / CONCRETE)



DETAIL "C" EXPANSION / DEFLECTION FITTING DETAIL (CONCRETE / SOIL)

GENERAL

LAST REVISION 11/01/25

DESCRIPTION:

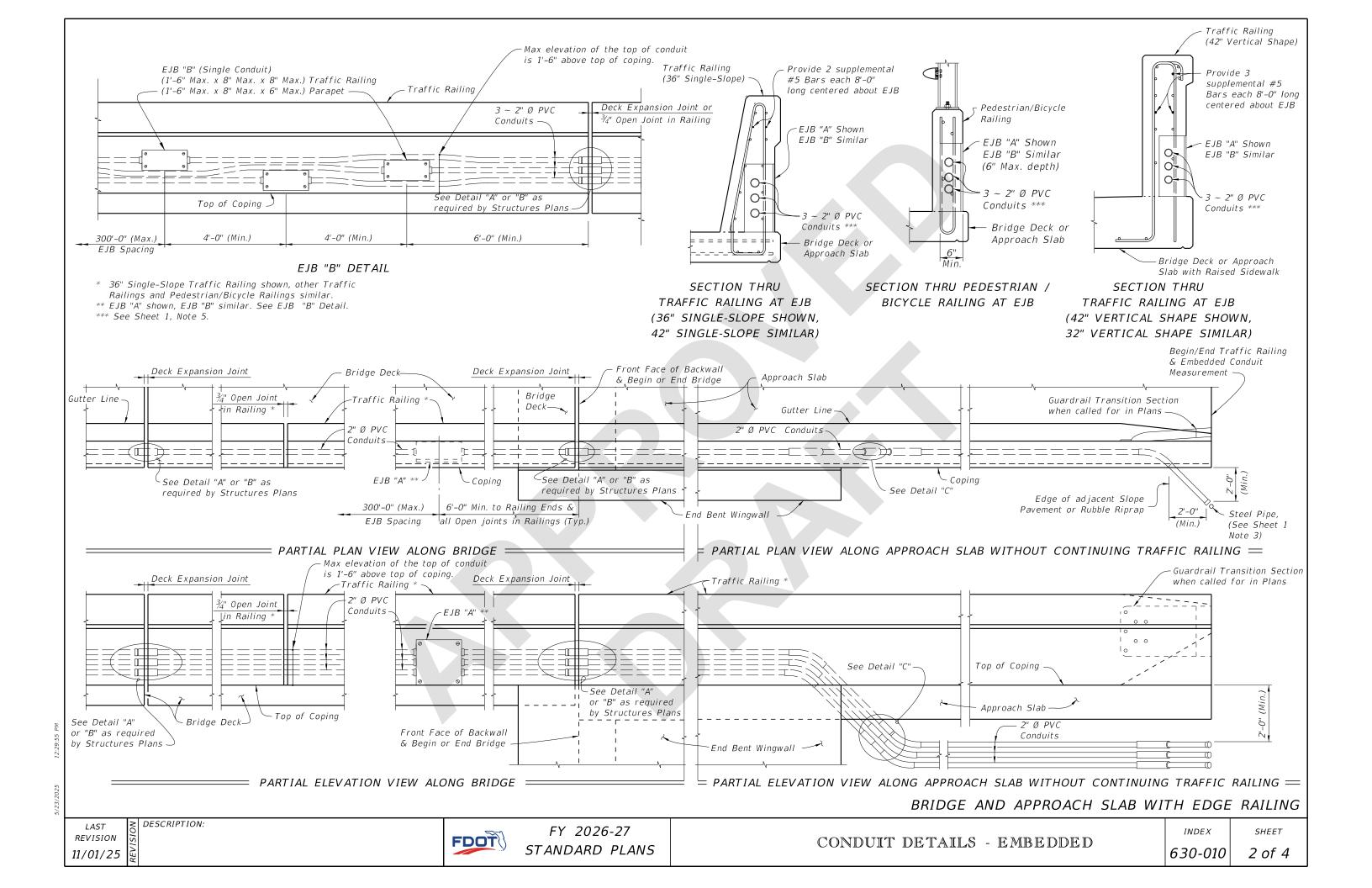
2" Ø PVC

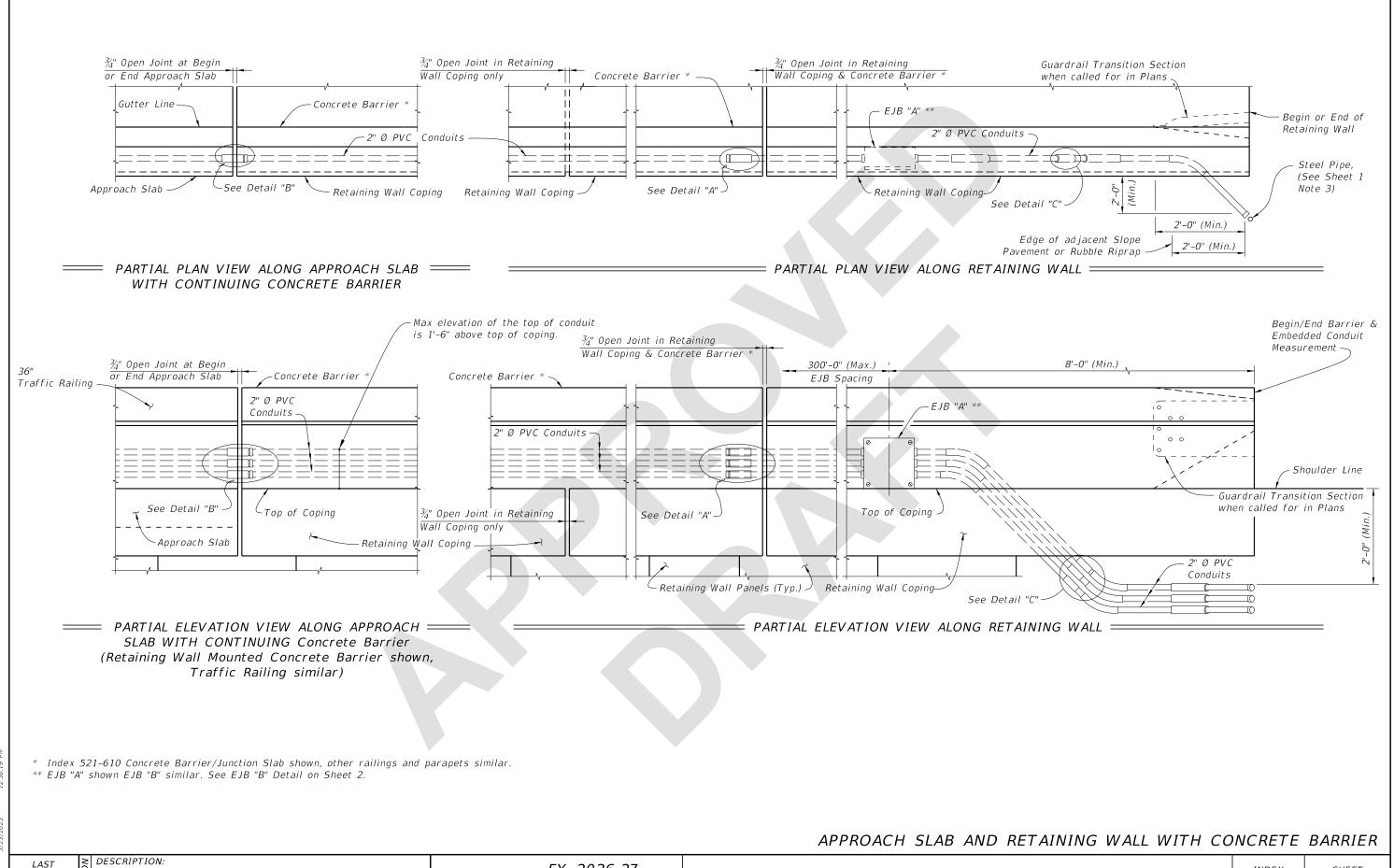
FY 2026-27 STANDARD PLANS

CONDUIT DETAILS - EMBEDDED

INDEX 630-010

SHEET 1 of 4





INDEX

630-010

CONDUIT DETAILS - EMBEDDED

SHEET

4 of 4

FY 2026-27

STANDARD PLANS

FDOT

/23/2025

REVISION

11/01/25