

STATE OF DELAWARE

DEPARTMENT OF TRANSPORTATION

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NICOLE MAJESKI SECRETARY

TO: Current Holders of the Standard Construction Details

From: Mark Luszcz, P.E.

Deputy Director of Operations and Support

DATE: January 25, 2023

RE: 2022 Standard Construction Details Update

Attached is the 2022 update for the Standard Construction Details that are assigned to you. Please replace the sheets in your set with the attached. Below is a list of the changes in this revision:

- General Changes
 - o Several new Traffic Details have been incorporated into the Standard Construction Details.
- Detail B-1, Sheet 4 Type 1-31, Guardrail with Omitted Post
 - The nesting detail has been updated to match MWRSF's recommendations, and we have included additional guidance on installing the nested rail. The notes were updated for consistency.
- Detail B-2, Sheet 1 Grading for Guardrail End Treatment Attenuator, Type 1
 - o The limit of payment has been updated to reflect manufacturer's specifications for the attenuator.
- Detail B-2, Sheet 2 Grading for Guardrail End Treatment Attenuator, Type 2
 - o The limit of payment was updated to reflect manufacturer's specifications for the attenuator.
- Detail B-2, Sheet 3 Grading for Guardrail End Treatment Attenuator, Type 3
 - o The limit of payment was updated to reflect manufacturer's specifications for the attenuator.



• Detail B-3, Sheet 1 – Guardrail Over Culverts, Type 2-31

o This sheet has been renumbered. The notes have been updated to match recommendation documented in crash testing report TRP-03-187-07. A note has been included which requires installations with a guardrail flare to include a minimum length of tangent section adjacent to the unsupported length.

• Detail B-3, Sheet 2 – Guardrail Over Culverts, Type 3-31

o This sheet has been renumbered. The notes have been updated to match recommendation documented in crash testing report TRP-03-187-07. A note has been included which requires installations with a guardrail flare to include a minimum length of tangent section adjacent to the unsupported length.

• Detail B-4, Sheet 1 – End Anchorage, Type 31

o The limit of payment has been updated to the splice location rather than the post.

• Detail B-10, Sheet 1 – Guardrail to Barrier Connection, Approach, Type 3-31

o The limit of payment has been updated to the splice location rather than the post. The distance between the concrete barrier and post "1" was adjusted. Detail notes were updated for consistency.

• Detail B-13, Sheet 8 – End Anchorage Hardware

o Rod and hex nut dimensions for the swaged cable assemblage have been updated.

Detail C-1, Sheet 1 – PCC Curb, Typical Curb Section, and Typical Taper Section at Nose of Medians

o The title of the detail was updated to better reflect the contents of the detail.

• Detail C-1, Sheet 2 – Integral PCC Curb & Gutter

o The dimensions of the Type 3 gutter were modified to produce a 4.5% gutter pan.

Detail C-1, Sheet 3 – Integral PCC Curb & Gutter (For Use at Pedestrian Connections Only)

o Existing Note 4 was removed, and a new Note 4 was added for the placement of GABC. Note 5 and tables outlining transition length were added to facilitate drainage.

Detail C-2, Sheet 3 – Pedestrian connection, Type 1



o Note 7 was added for placement of detectable warning surfaces, and additional details were provided for blended transitions.

• Detail C-2, Sheet 7 – DWS Placement and Pedestrian Connection, Type 5

o A detail for directional tactile surface indicators for bicycle ramps was added and note 6 was added to facilitate placement.

• Detail C-3, Sheet 1 – Entrances

o A flare rate dimension was added to the entrance without sidewalk.

Detail C-4, Sheet 1 – Curb Opening

o The Section C-C detail was updated to include 6" of GABC.

Detail C-5, Sheet 1 – Curb/Sidewalk Opening

o A detail was added for the curb opening when the sidewalk is not adjacent to the curb. The slope of the flow channel under the sidewalk has been updated to a range of 2-4% and the outfall slope was updated to 4%.

• Detail D-3, Sheet 2 – Personnel Safety Grate for Pipe Inlet

o The note for the concrete cutoff wall has been modified for better clarification and Note 2 was added for consistency of installation.

• Detail D-5, Sheet 3 – Drainage Inlet Top Units

o The detail has been updated to include a note to clarify the use of a "Type E" top unit.

• Detail D-5, Sheet 8 – Drainage Inlet Top Units, Type S

o The detail has been updated to include an additional detail for a double grate setup in a sump condition and a double grate on grade to exemplify grate orientation regarding flow direction.

• Detail M-3, Sheet 8 – Shared-Use Path & Sidewalk

o The detail now includes a 4' minimum vertical offset from the shared use path and a post mounted sign to maintain consistency with the DE MUTCD.

• Detail M-7, Sheet 1 – Chain Link Fence

o A note was added to clarify fence installation by referencing the Standard Specifications.



- Detail M-9, Sheet 1 Bus Stop Pad, Types 1, 2, & 3
 - o The detail has been updated to include clarifying notes for curb applications and additional notes have been included regarding shared use path installations.
- Detail P-1, Sheet 1 Slab Plan (With Dowel and Tie Locations)
 - o The shading for a dowel rod has been updated.
- Detail P-3, Sheet 3 Butt Joints
 - o An additional note has been added to the detail for joint sealing.
- Detail T-3, Sheet 1 Standard Lighting Cabinet, Types M, P, and R
 - o This is a new detail.
- Detail T-5, Sheet 1 Pole Bases Round Base & Round Base With Square Foundation Header
 - o The sheet number has been updated.
- Detail T-5, Sheet 2 Pole Bases Typical Section and Installation (Bases 1, 2, 2A, 2B, 3, 3A and 3B)
 - o The sheet number has been updated.
- Detail T-5, Sheet 3 Pole Bases Typical Section (Base 6A) And Pole Base Data Chart
 - o The detail for Pole Bases Type 6A and 6B has been separated into two details.
- Detail T-5, Sheet 4 Pole Bases Typical Section (Base 6B) And Pole Base Data Chart
 - o The detail for Pole Bases Type 6A and 6B has been separated into two details.
- Detail T-5, Sheet 5 POLE BASES Typical Section (Base 4A and 4B) and Anchor and Breakaway Coupling
 - o The sheet number has been updated.
- Detail T-9, Sheet 4 Wiring Installation Typical Wiring Color Codes
 - o All references for "Ground" have been updated to "Neutral" in accordance with our Standard Specifications. Note 4 was added to the detail.



- Detail T-12, Sheet 3 Span Wire Assembly
 - o A signal head label was added to the detail.
- Detail T-15, Sheet 1 Breakaway Sign Post and Pin Assembly Details
 - o A "Soil" identifier was added to the "Breakaway Assembly Elevation View".
- Detail T-17, Sheet 1 Electrical Service Pedestal Signal & ITS Component Installations - 100 AMP (3+ Devices)
 - o The concrete collar has been included in the detail.
- Detail T-17, Sheet 2 Electrical Service Pedestal Signal & ITS Component Installations - 100 AMP (Condensed)
 - o The concrete collar has been included in the detail.
- Detail T-17, Sheet 3 Electrical Service Pedestal Signal & ITS Component Installations - 100 AMP (Up to 2 Devices)
 - o The concrete collar has been included in the detail.
- Detail T-17, Sheet 4 Electrical Service Pedestal Signal & ITS Component Installations 200 AMP Standard Lighting Component Installations
 - o The concrete collar has been included in the detail.
- Detail T-17, Sheet 5 Electrical Service Pedestal Signal & ITS Component Installations Lighting Component Installation (12 or Less Fixtures)
 - o The concrete collar has been included in the detail.
- Detail T-17, Sheet 6 Electrical Service Pedestal Signal & ITS Component Installations Sign Assemblies With Flashing Beacons 100 AMP
 - o This is a new detail.
- Detail T-17, Sheet 7 Electrical Service Pedestal Signal & ITS Component Installations Sign Assemblies With Flashing Beacons 100 AMP (Condensed)
 - o This is a new detail.
- Detail T-18, Sheet 1 Pedestrian Pushbutton Location Pushbutton Assembly Location on Pole
 - o The mounting hardware for the signal pole has been updated.



- Detail T-18, Sheet 2 Pedestrian Pushbutton Location Sign Attachment
 - o The sheet number has been updated.
- Detail T-18, Sheet 3 Pedestrian Pushbutton Location AC- Powered RRFB Signal Pole Installation
 - o This is a new Detail.
- T-19, Sheet 1 Barrier Mounted Sign
 - o This is a new Detail.
- T-19, Sheet 2 Barrier Mounted Sign
 - o This is a new Detail.
- T-20, Sheet 1 Breakaway Steel Sign Support Charts
 - o This is a new Detail.
- T-20, Sheet 2 Breakaway Steel Sign Support Charts
 - o This is a new Detail.
- T-21, Sheet 1 Sign Installation Date Decal
 - o This is a new Detail.
- T-22, Sheet 1 Extruded Aluminum Details Vertical Support Attachment
 - o This is a new Detail.
- T-23, Sheet 1 Breakaway Steel Sign Support Foundation
 - o This is a new Detail.
- T-23, Sheet 2 Breakaway Steel Sign Support Foundation
 - o This is a new Detail.
- T-24, Sheet 1 Galvanized Steel Beam Sign Post Vertical and Lateral Clearance
 - o This is a new Detail.
- T-25, Sheet 1 Mile Marker Barrier Mount
 - o This is a new Detail.



- T-26, Sheet 1 Galvanized Steel Beam Sign Posts Service Panel Attachment Details
 - o This is a new Detail.
- T-27, Sheet 1 Extruded Aluminum Detail
 - o This is a new Detail.
- T-27, Sheet 2 Extruded Aluminum Detail
 - o This is a new Detail.

Please contact Andrew Short at (302) 760-2313 if you have any questions.

Enc.

ML/as

cc: Shanté Hastings, Deputy Secretary & Chief Engineer, Doug Atkins, Division Administrator FHWA, Delaware Division Maureen Kelley, Deputy Director for Design, Transportation Solutions

