Origination Form

Proposed Revisions to a Standard Plans Index

Originator:	Meyer, Ronald	Index Number:	700-120
Date:	6/5/2024 1:55:54 PM	Sheet Number(s):	7, 8, 10, 13, 14
E-mail:	Ronald.Meyer@dot.state.fl.us	Index Title:	ENHANCED HIGHWAY SIGNING ASSEMBLIES

Summary of the changes:

All Sheets: Renumbered Sheets

Sheets 9-14: Renumbered Roadside Sign Assembly.

Sheet 7: Deleted Sheet per 11th Edition MUTCD, Section 2A.12. Sheet 8: Deleted Sheet per 11th Edition MUTCD, Section 2A.12.

Sheet 10: Added LEDs in the middle of each sign edge, for a total of 8 LEDs. Sheet 13: Added LEDs in the middle of each sign edge, for a total of 8 LEDs. Sheet 14: Added LEDs in the middle of each sign edge, for a total of 16 LEDs.

Commentary/Background:

Sheets 7 and 8: The 11th Edition MUTCD, Section 2A.12 (12) states:Flashing LED units shall not be used within the legend or border of a Speed Limit sign to indicate that the displayed speed limit is in effect. Sheet 10, 13, and 14: Where LED units are used along the edge of a sign, at least one LED unit shall be placed along each edge of the sign, in addition to one LED unit at each corner of the sign, so that the distinct outline of the sign shape is recognized under nighttime viewing conditions. The LED units along each side of the sign shall be spaced approximately equidistantly. For a circular sign shape, the number of LED units shall clearly form the appearance of a circle and not be perceived as some other shape.

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

Implementation

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

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

Implementation



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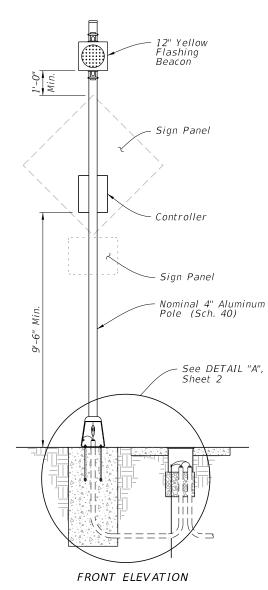
Renumbered

GENERAL NOTES:

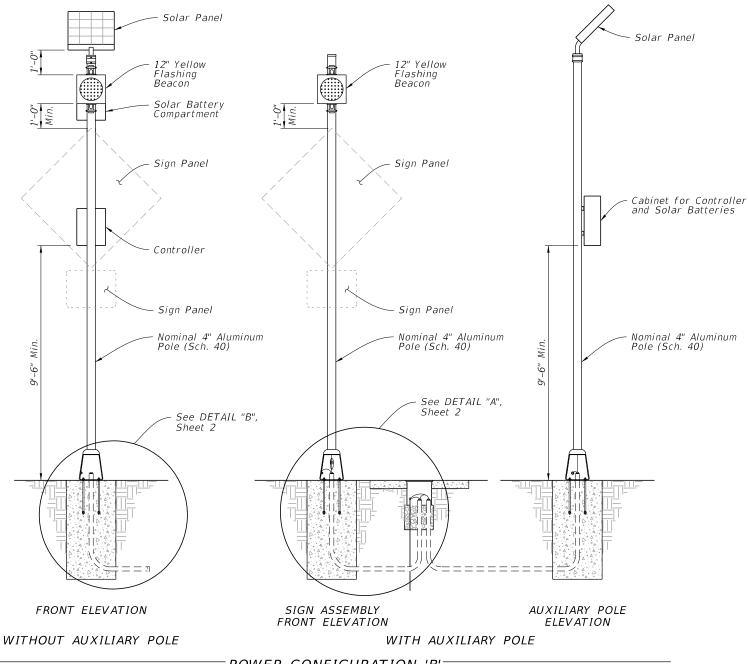
- 1. Meet the regirements of Specifications 646 and 700.
- 2. Engage all threads on the transformer base and post unless the aluminum post is fully seated into base.
- 3. Install a concrete slab around all roadside assemblies on slopes 6:1 or greater. The minimum slab dimension is 6" by 4'-0" by 5'-0".
- 4. When wire entry holes are drilled in the sign column, use a bushing or rubber grommet to protect conductors.

POWER CONFIGURATION 'B' NOTES:

- 1. Install a separate pole for mounting the solar panel, controller and batteries for all roadside assemblies with solar panels, controllers and batteries weighing more than 170 lbs.
- 2. Install the auxiliary pole as close to the right of way boundary as possible.
- 3. Install the auxiliary pole so that the height is the same as the column for the roadside assembly.
- 4. Orient solar panel to face South for optimal exposure to sunlight.
- 5. The controller and the solar batteries may be located in the same compartment.



POWER CONFIGURATION 'A' CONVENTIONALLY POWERED (Type A1 Shown)



POWER CONFIGURATION 'B' SOLAR POWERED (Type B1 Shown)

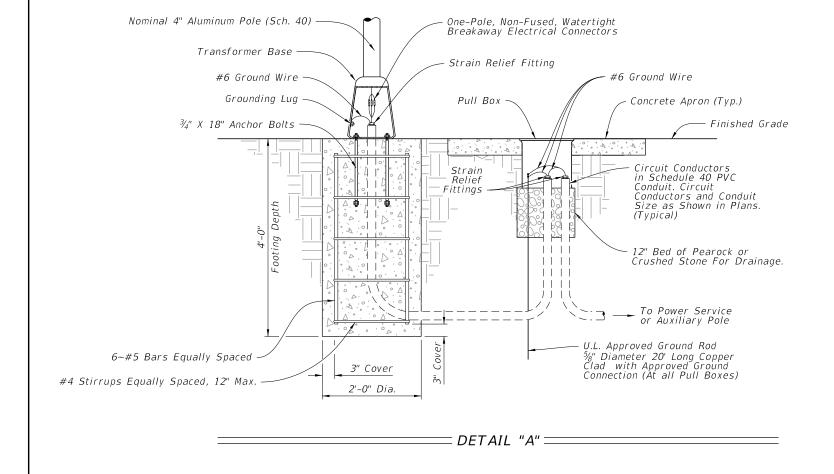
- 11/01/24

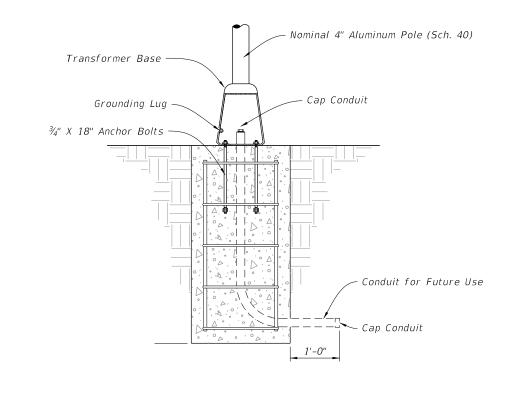




13

SHEET





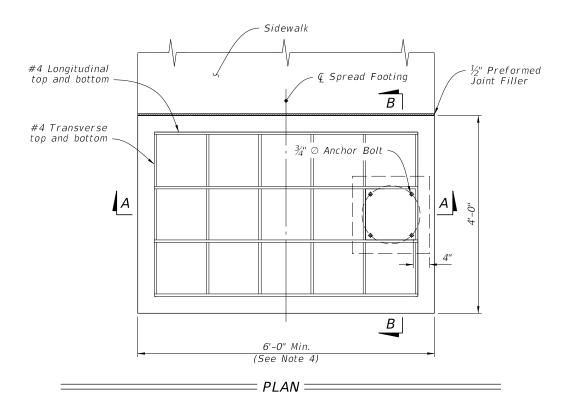
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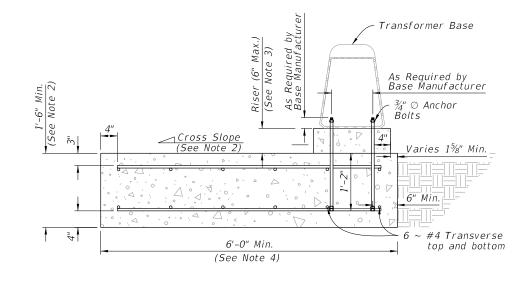
– 11/01/24

CONDUIT, WIRING, AND FOUNDATION DETAILS

DESCRIPTION: REVISION 11/01/23

FDOT



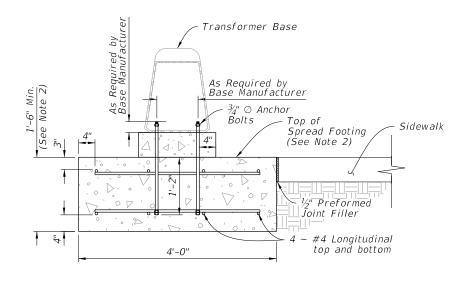


SECTION A-A=

NOTES:

1. Install the Spread Footing Foundation only where called for in the Plans.

- a. When abutting sidewalk, match the cross slope of the adjacent sidewalk or curb ramp where applicable. Maintain the minimum depth of footing.
- b. 1/2" expansion preformed joint filler required between sidewalk and spread
- c. Apply concrete surface finish to the top of the spread footing in accordance with Specification 522-7.
- d. Sidewalk placed on the other side or both sides of the spread footing is permitted where shown in the Plans.
- 3. Only use concrete riser when installed in-line with sidewalk curb that results in a drop off to the adjacent sidewalk.
- 4. For sidewalks greater than 6', match sidewalk width. Add one #4 transverse bar, top and bottom, per additional foot of spread footing to maintain at minimum the same reinforcement area per foot.
- 5. Base location can vary on spread footing. Location shown in Plans.

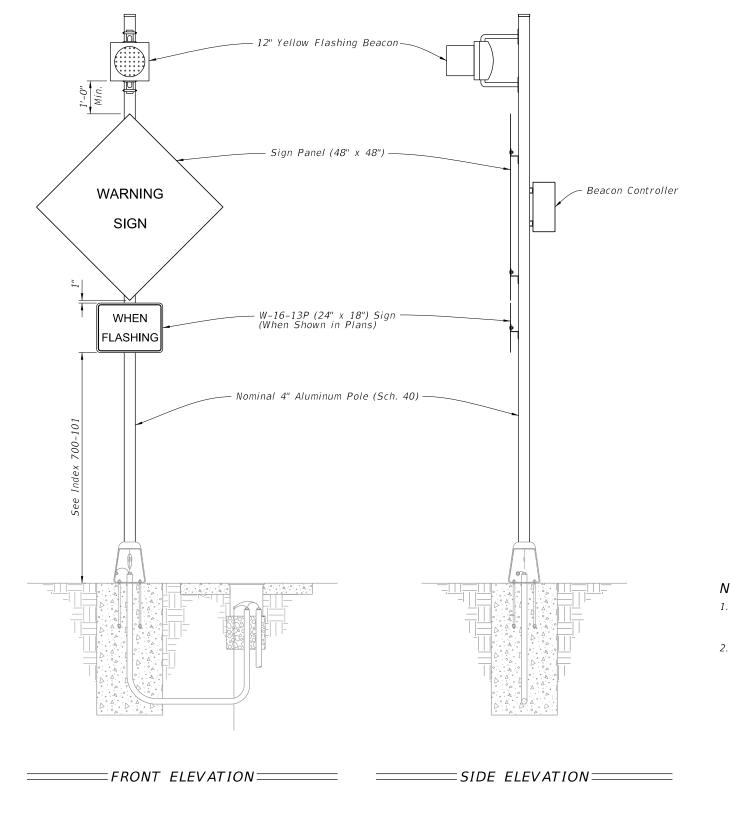


= SECTION B-B ===

- 11/01/24

DESCRIPTION:

13 -SPREAD FOOTING FOUNDATION



- 1. Type A1 Assembly (conventionally powered) is shown. Type B1 Assemblies (solar powered) similar.
- 2. Foundation reinforcement not shown.

- 11/01/24

13 -ROADSIDE SIGN ASSEMBLY-1

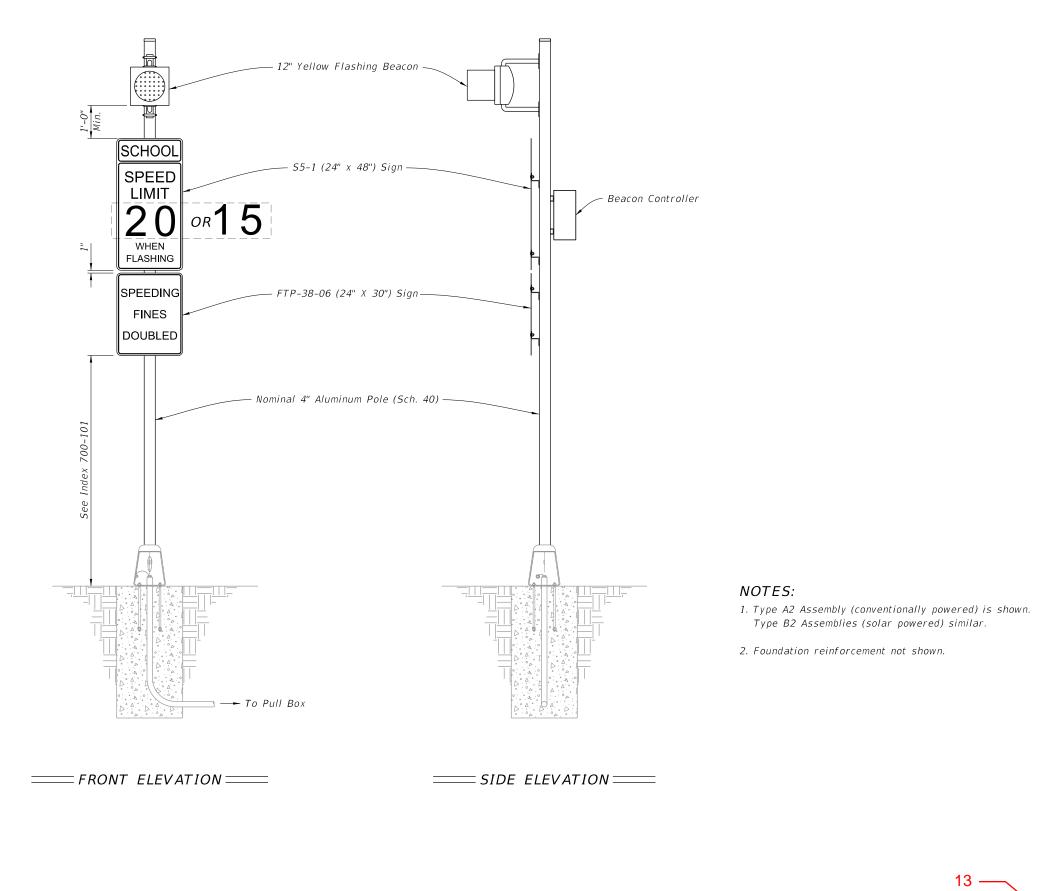
LAST REVISION 11/01/23 ≥ DESCRIPTION:

FDOT

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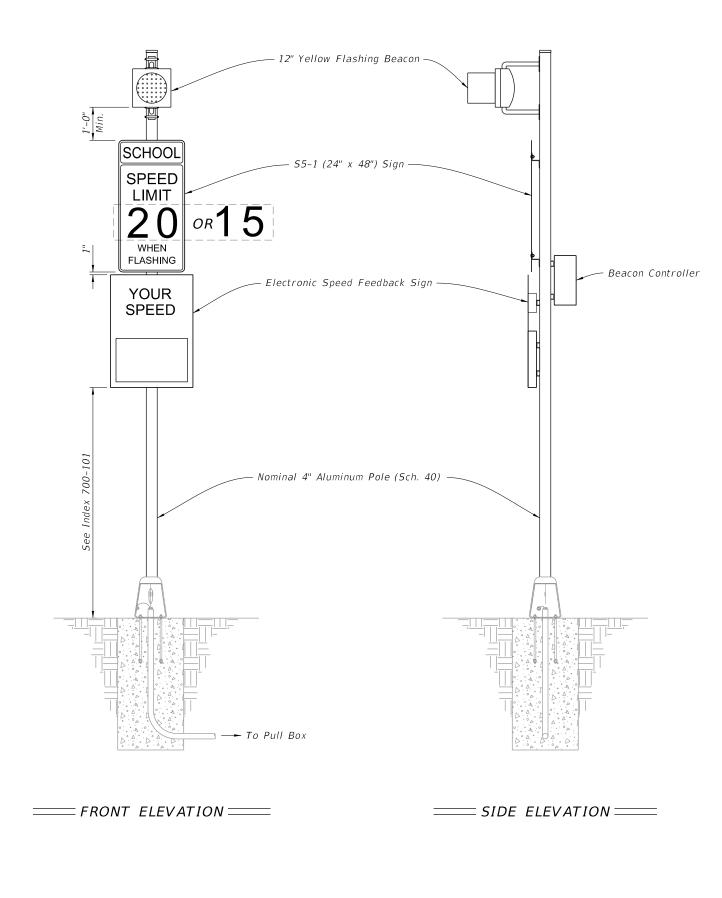
- 11/01/24

≥ DESCRIPTION:

ROADSIDE SIGN ASSEMBLY-2

FDOT

REVISION 11/01/23



- 1. Type A3 Assembly (conventionally powered) is shown. Type B3 Assemblies (solar powered) similar.
- 2. Use electronic speed feedback sign with 15" high numerals for posted speed of 45 mph or less, and 18" high numerals for posted speeds greater than 45 mph.
- 3. Foundation reinforcement not shown.

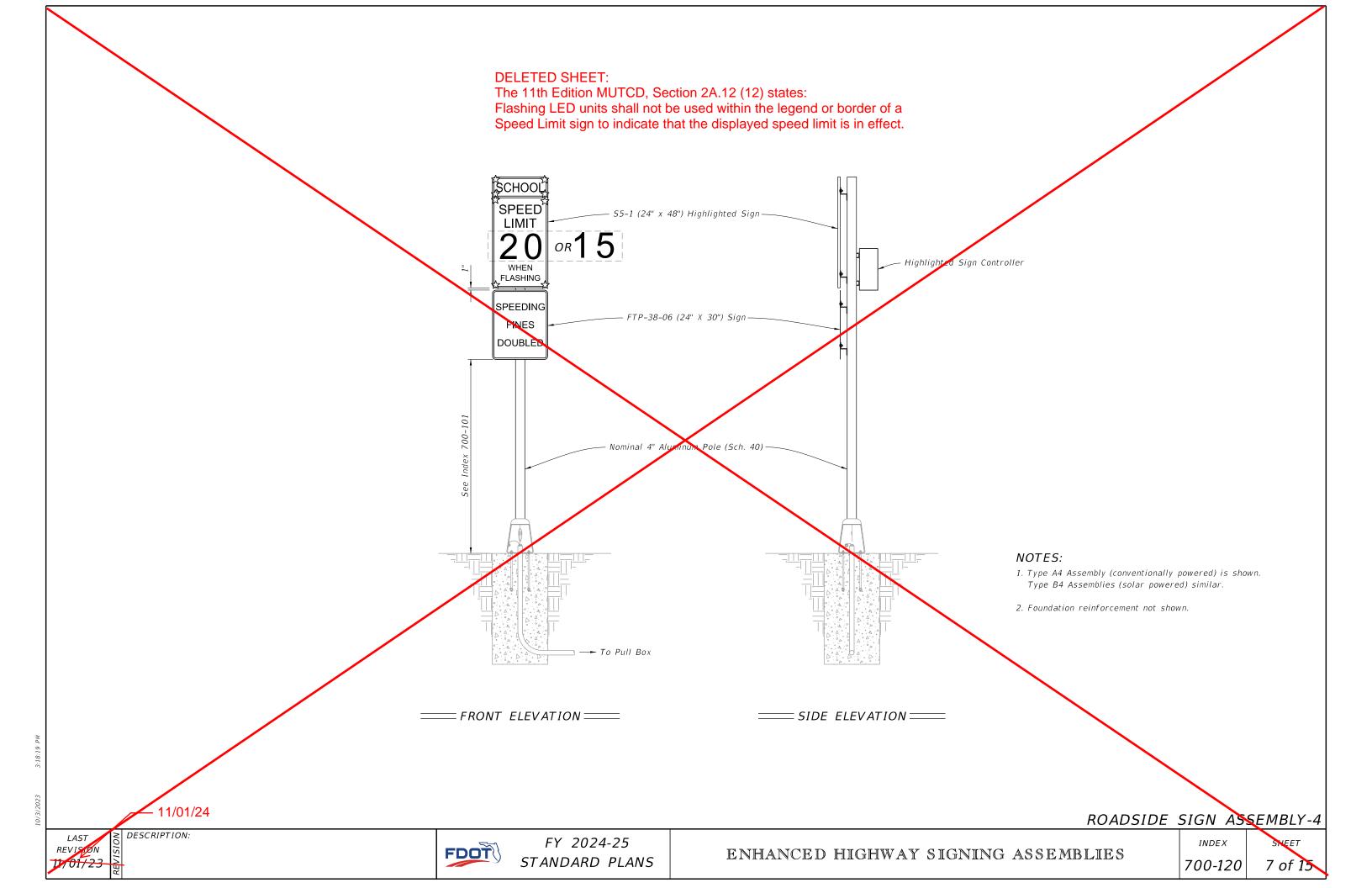
ROADSIDE SIGN ASSEMBLY-3

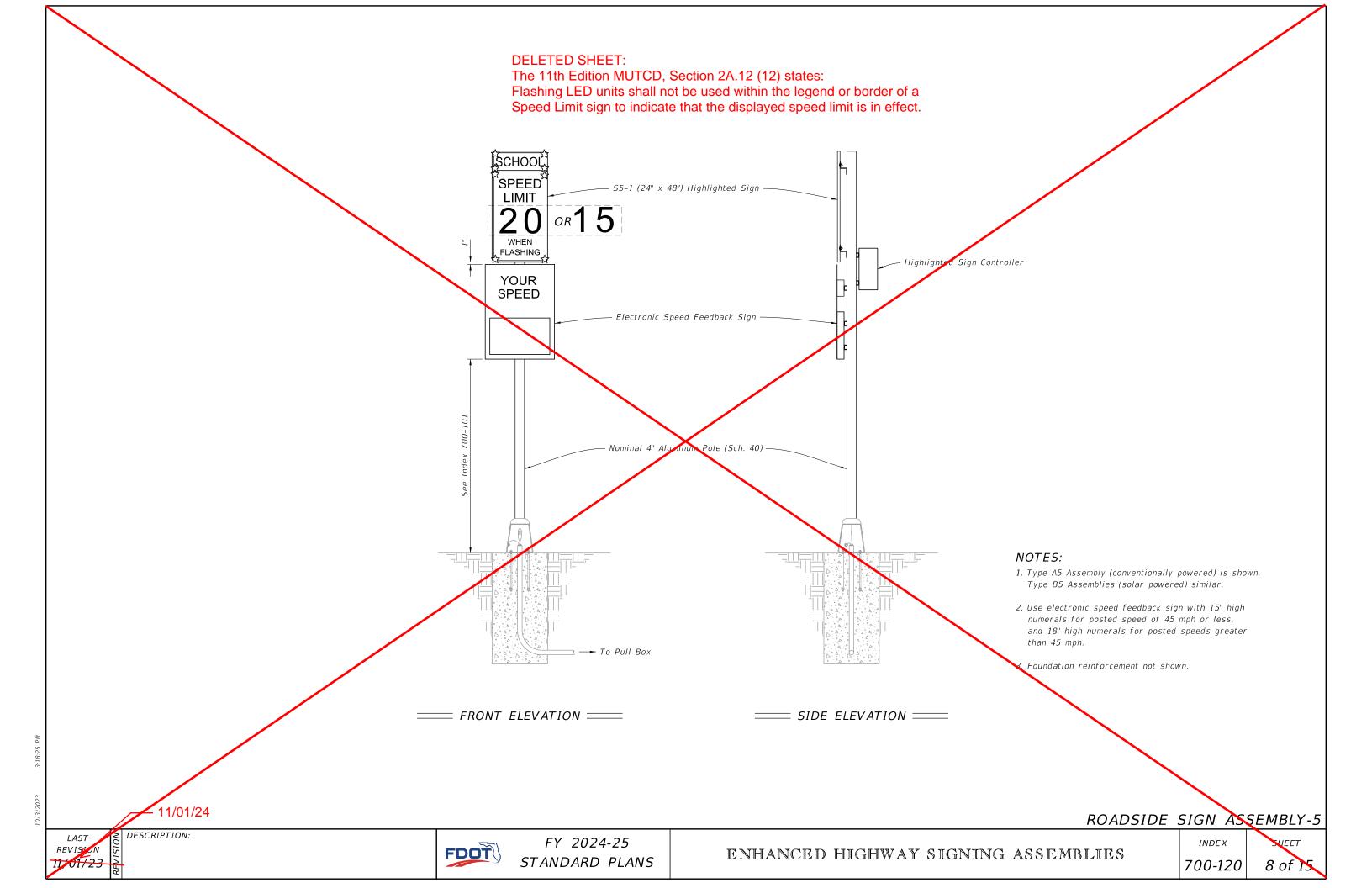
13 -

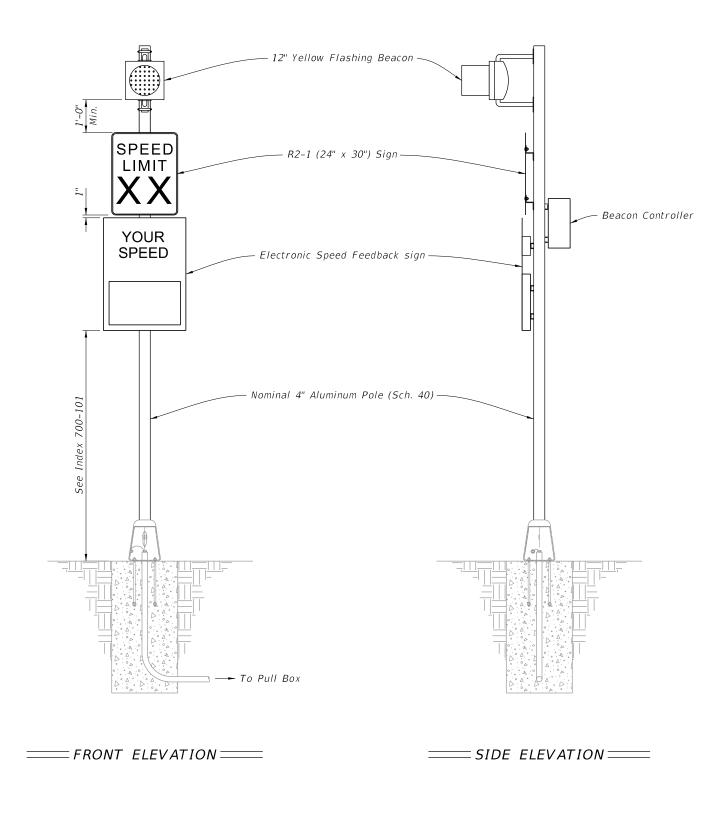
≥ DESCRIPTION: REVISION 11/01/23

- 11/01/24

FDOT







- 1. Type A6 Assembly (conventionally powered) is shown. Type B6 Assemblies (solar powered) similar.
- 2. Use electronic speed feedback sign with 15" high numerals for posted speed of 45 mph or less, and 18" high numerals for posted speeds greater than 45 mph.
- 3. Foundation reinforcement not shown.

CHANGED TO: 4

7 of 13 —

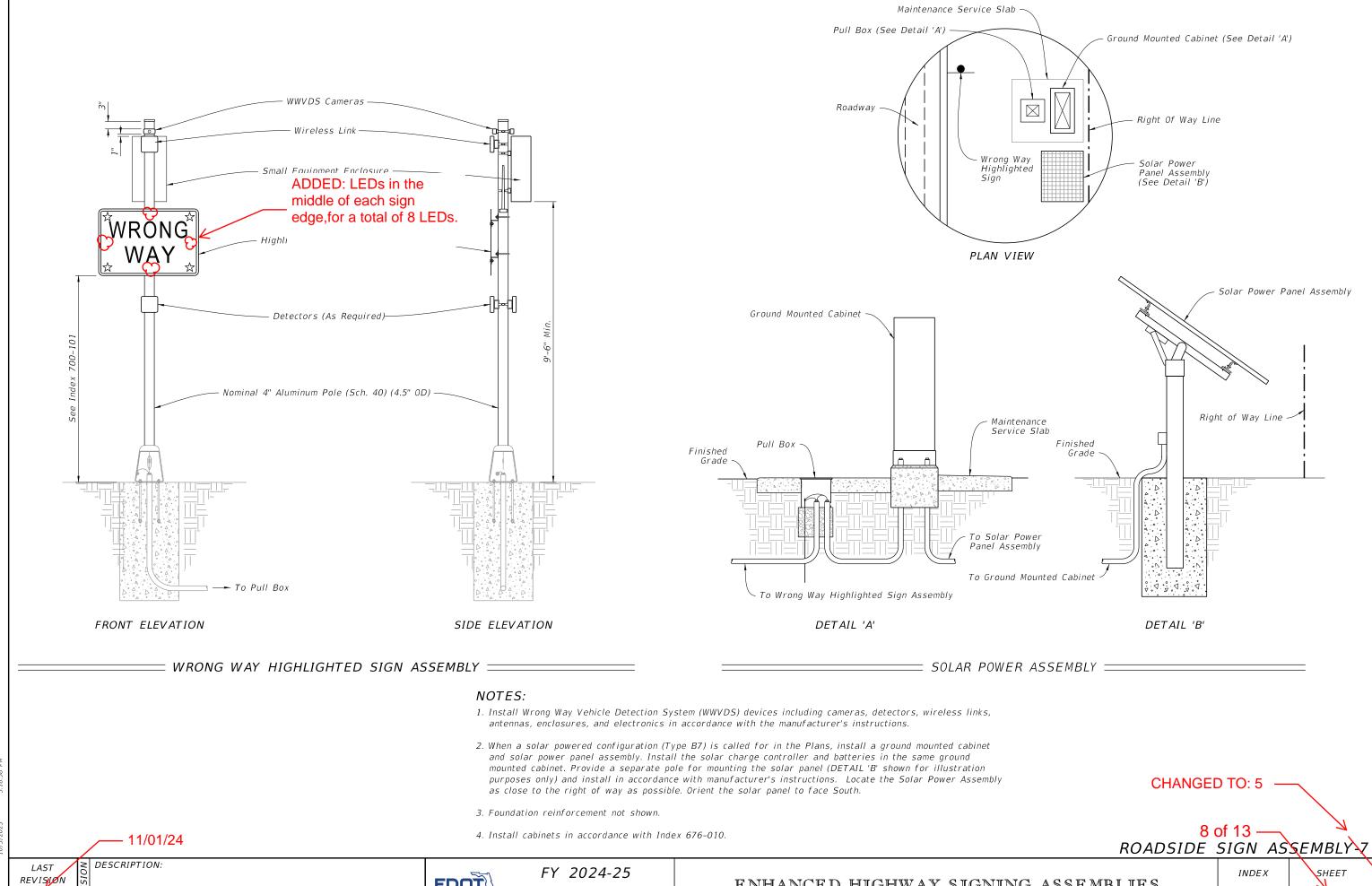
ROADSIDE SIGN ASSEMBLY-6

LAST REVISION 11/01/23

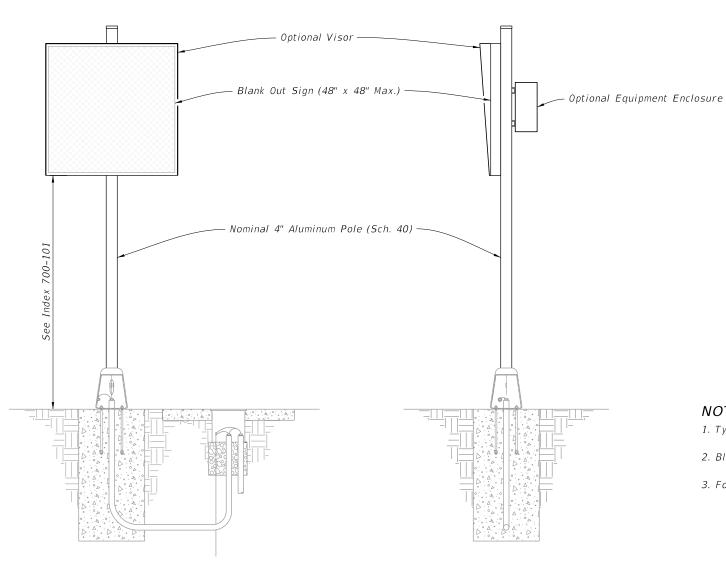
FDOT

FY 2024-25 STANDARD PLANS

≥ DESCRIPTION:



11/01/23



- 1. Type A8 Assembly (conventionally powered) is shown.
- 2. Blank Out Sign visors are optional.
- 3. Foundation reinforcement not shown.

= SIDE ELEVATION =

CHANGED TO: 6

9 of 13 — PROADSIDE SIGN ASSEMBLY-8

LAST REVISION 11/01/23 ≥ DESCRIPTION:

— 11/01/24

FDOT

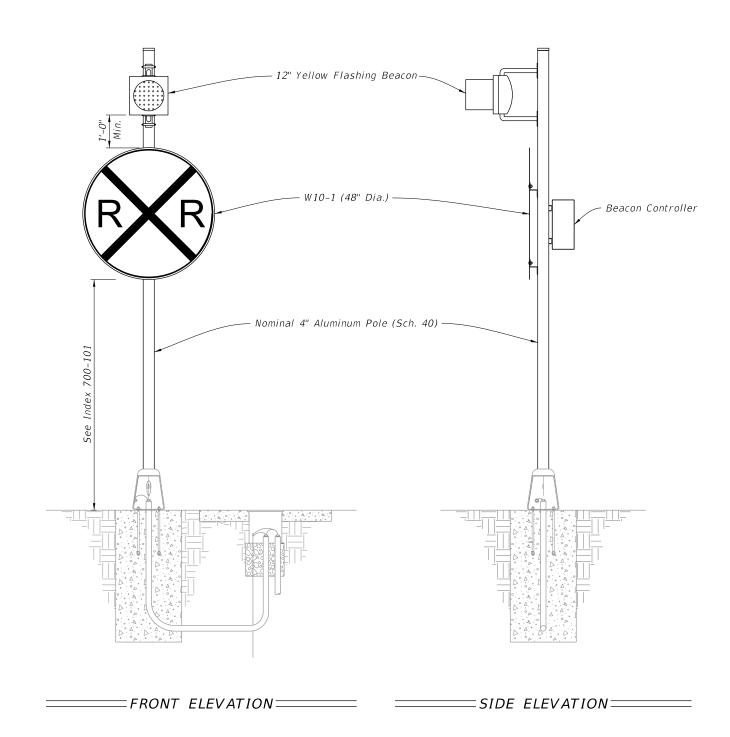
FY 2024-25 STANDARD PLANS

= FRONT ELEVATION ==

ENHANCED HIGHWAY SIGNING ASSEMBLIES

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- 1. Type A9 Assembly (conventionally powered) is shown. Type B9 Assemblies (solar powered) similar.
- 2. Foundation reinforcement not shown.

CHANGED TO: 7

10 of 13 — NOADSIDE SIGN ASSEMBLY-9

LAST REVISION 11/01/23 ≥ DESCRIPTION:

- 11/01/24

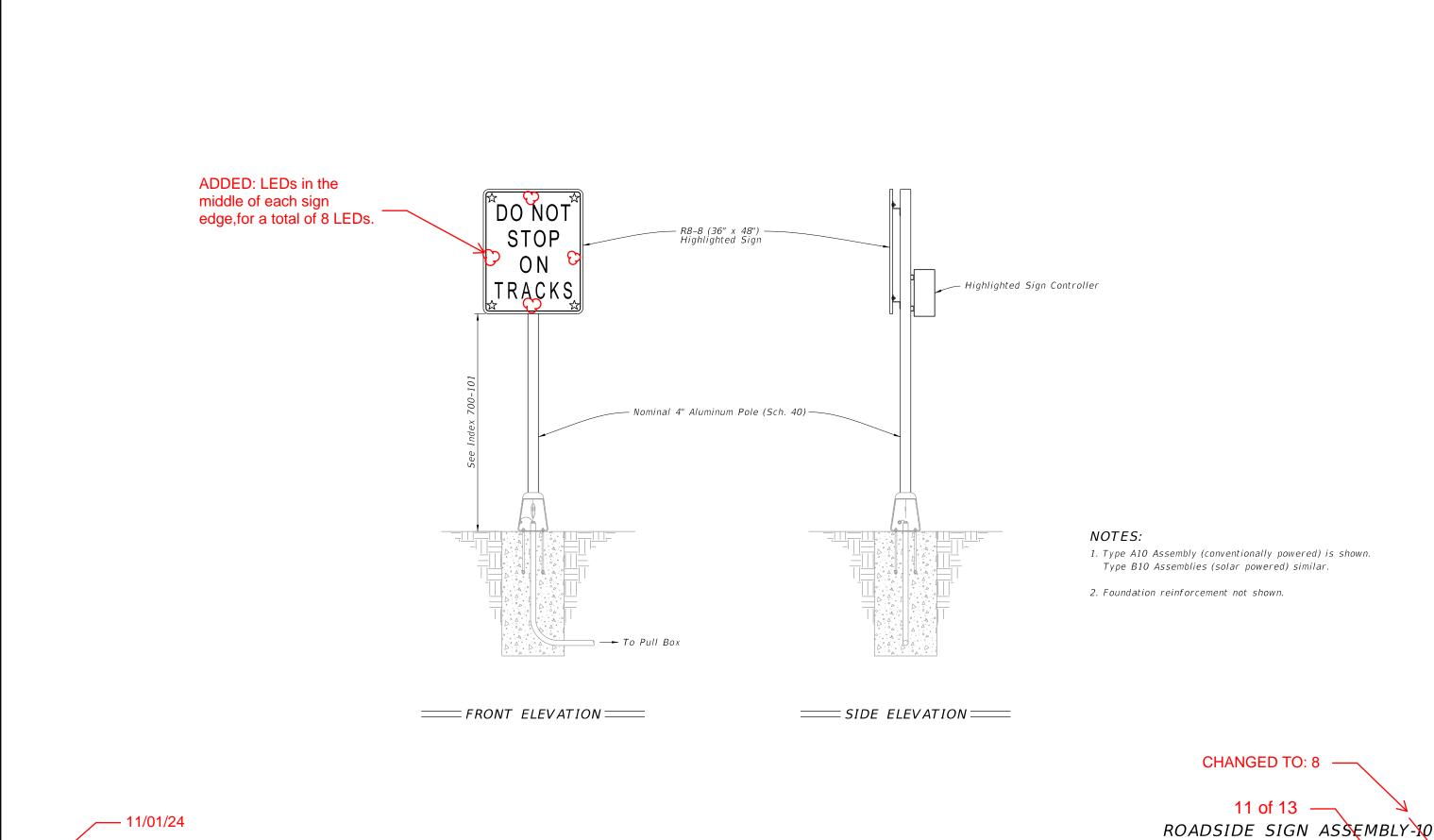
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ENHANCED HIGHWAY SIGNING ASSEMBLIES

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LAST REVISION 11/01/23

≥ DESCRIPTION:

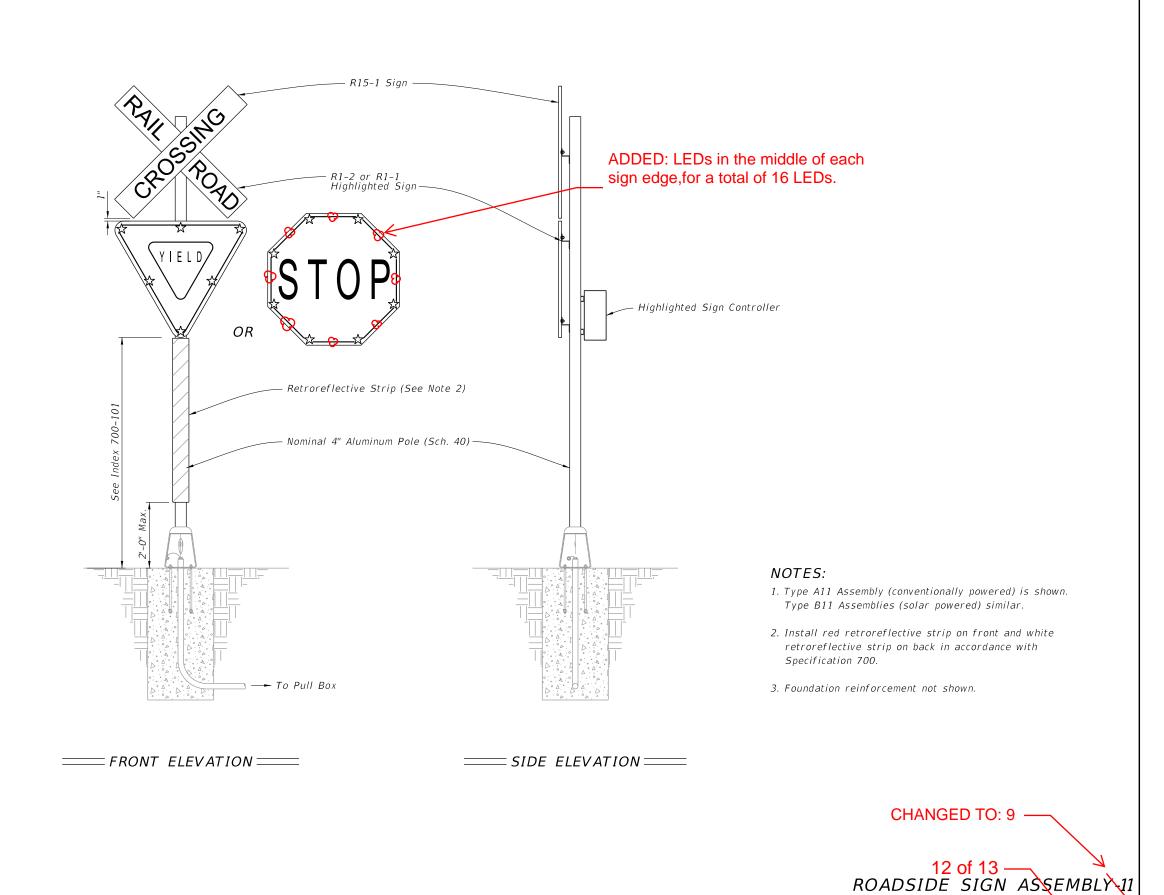
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ENHANCED HIGHWAY SIGNING ASSEMBLIES

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DESCRIPTION:

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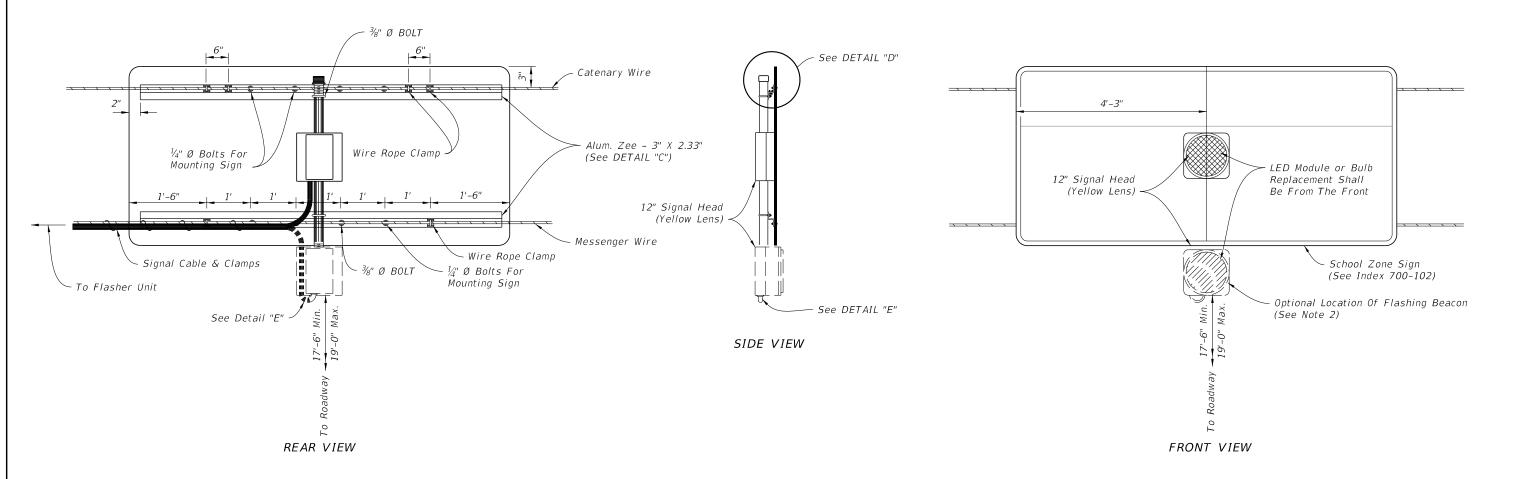
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FY 2024-25 STANDARD PLANS

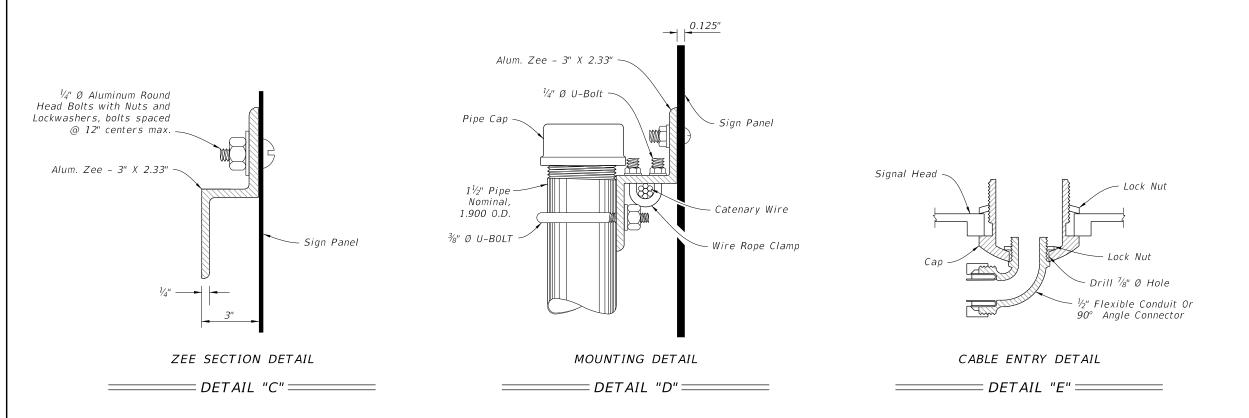
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- 1. Flasher unit and cabinet to be placed on the strain pole supporting overhead sign assembly or on service pole. The flasher unit not to overhang private property or sidewalk.
- 2. Optional flashing beacon will be called for in the Plans. They may be placed within or below the panel, or face to the rear.

13 of 13 —

OVERHEAD SIGN ASSEMBLY

- 11/01/24 DESCRIPTION: REVISION 11/01/23

FDOT

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ENHANCED HIGHWAY SIGNING ASSEMBLIES

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4	Roadside Sign Assembly-1
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6	Roadside Sign Assembly-3
7	Roadside Sign Assembly-4
8	Roadside Sign Assembly-5
9	Roadside Sign Assembly-6
10	Roadside Sign Assembly-7
11	Roadside Sign Assembly-8
12	Roadside Sign Assembly-9
13	Overhead Sign Assembly

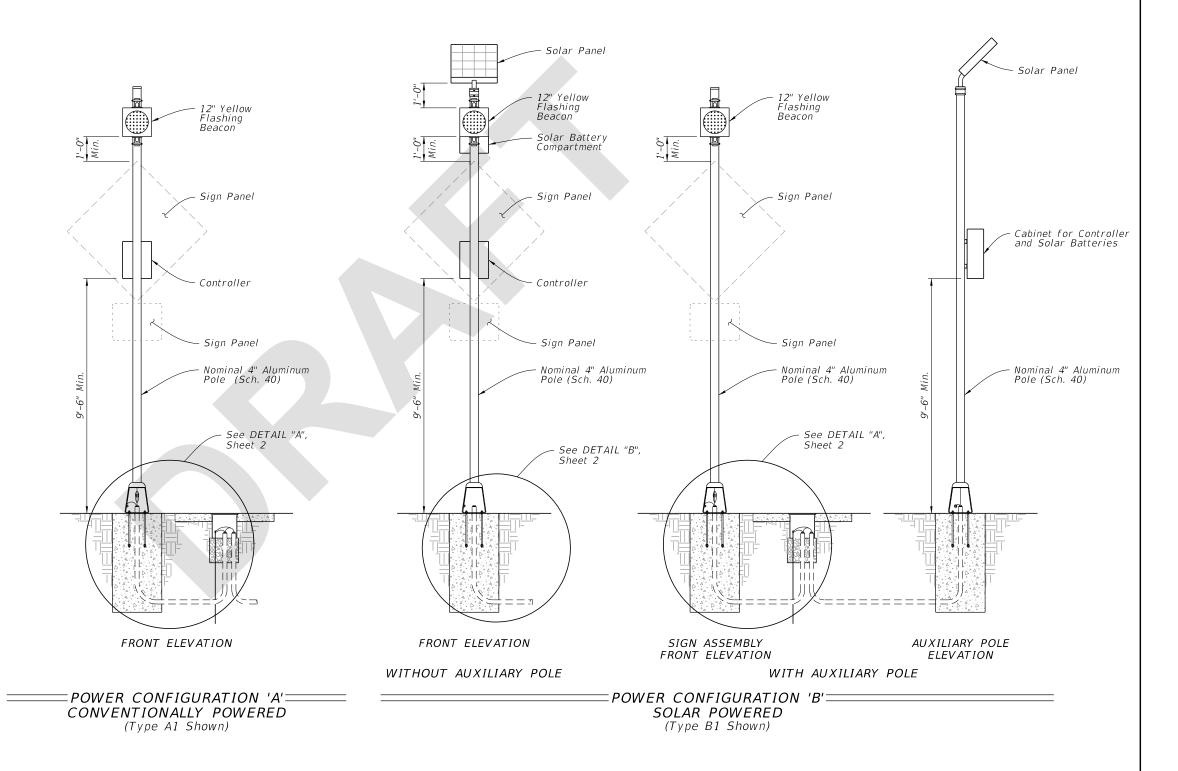
GENERAL NOTES:

- 1. Meet the regirements of Specifications 646 and 700.
- 2. Engage all threads on the transformer base and post unless the aluminum post is fully seated into base.
- 3. Install a concrete slab around all roadside assemblies on slopes 6:1 or greater. The minimum slab dimension is 6" by 4'-0" by 5'-0".
- 4. When wire entry holes are drilled in the sign column, use a bushing or rubber grommet to protect conductors.

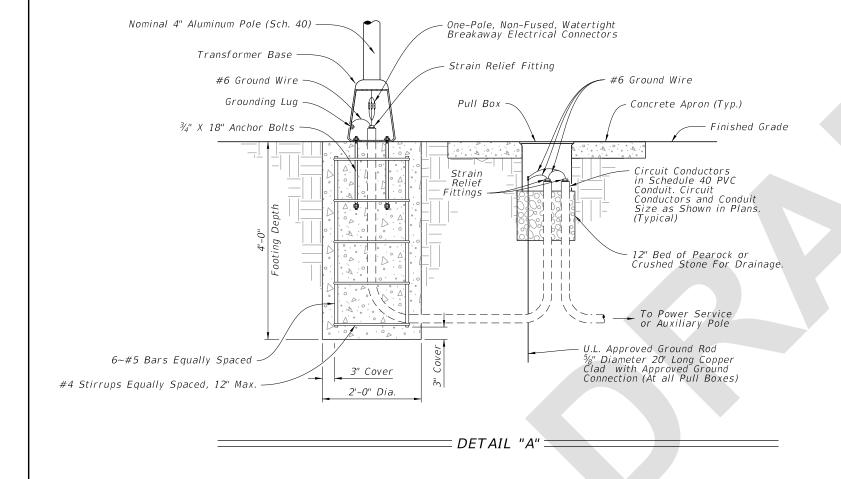
POWER CONFIGURATION 'B' NOTES:

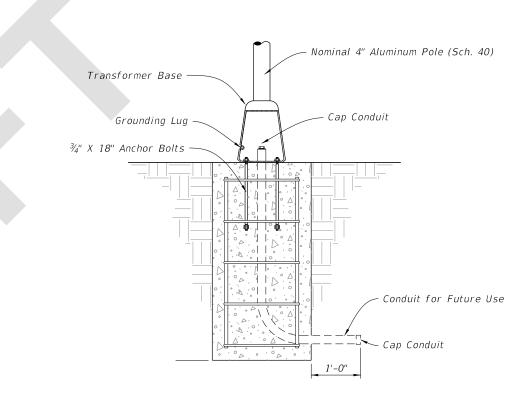
- 1. Install a separate pole for mounting the solar panel, controller and batteries for all roadside assemblies with solar panels, controllers and batteries weighing more than 170 lbs.
- 2. Install the auxiliary pole as close to the right of way boundary as possible.
- 3. Install the auxiliary pole so that the height is the same as the column for the roadside assembly.
- 4. Orient solar panel to face South for optimal exposure to sunlight.
- 5. The controller and the solar batteries may be located in the same compartment.

DESCRIPTION:



REVISION 11/01/24



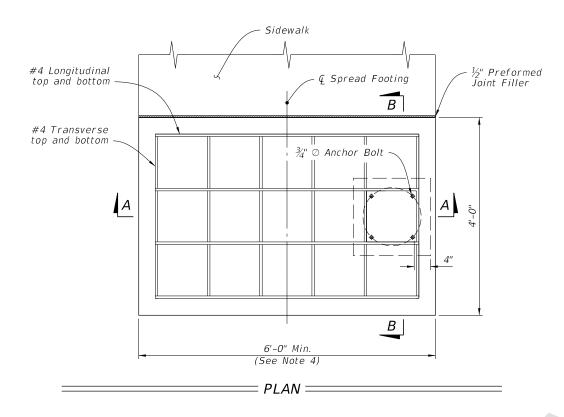


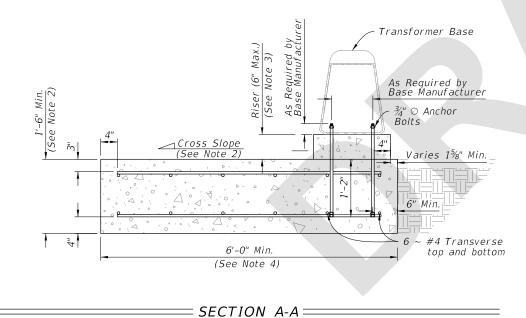
DETAIL "B" =

CONDUIT, WIRING, AND FOUNDATION DETAILS

REVISION 11/01/24

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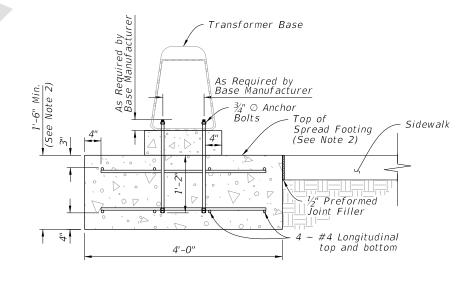




1. Install the Spread Footing Foundation only where called for in the Plans.

2. SIDEWALK:

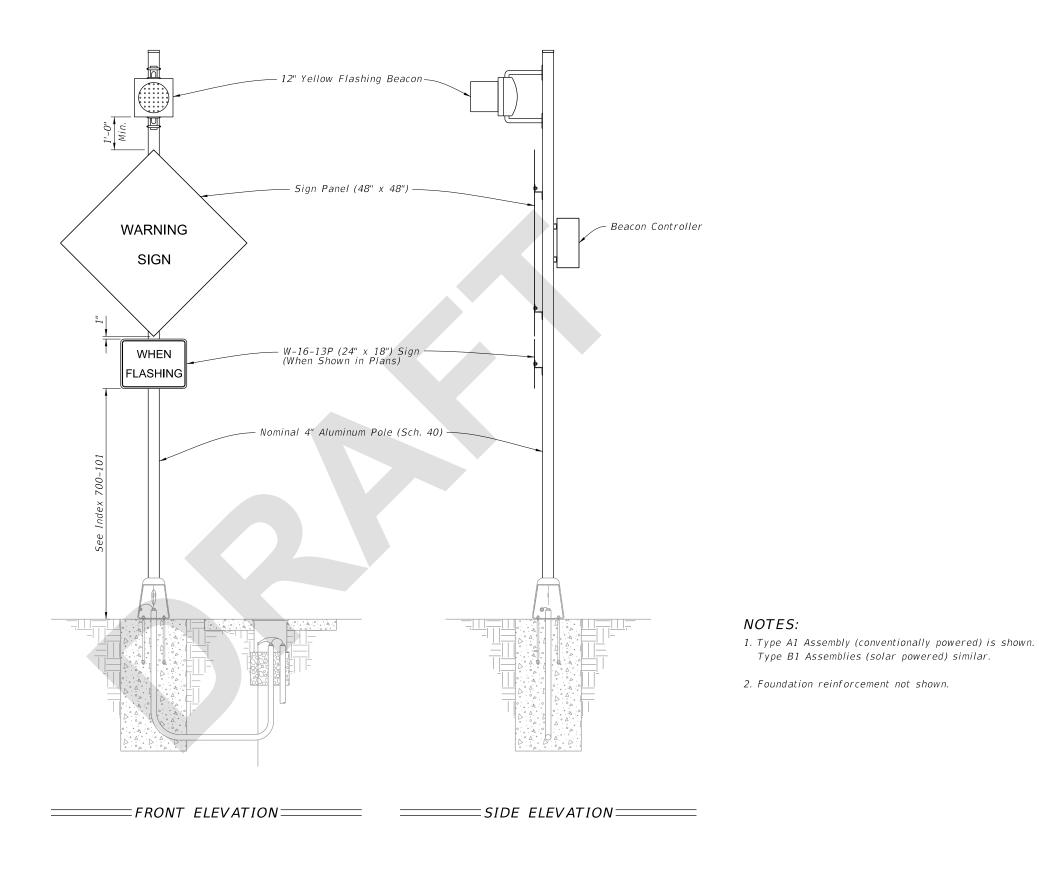
- a. When abutting sidewalk, match the cross slope of the adjacent sidewalk or curb ramp where applicable. Maintain the minimum depth of footing.
- b. $\frac{1}{2}$ " expansion preformed joint filler required between sidewalk and spread footing.
- c. Apply concrete surface finish to the top of the spread footing in accordance with Specification 522-7.
- d. Sidewalk placed on the other side or both sides of the spread footing is permitted where shown in the Plans.
- 3. Only use concrete riser when installed in-line with sidewalk curb that results in a drop off to the adjacent sidewalk.
- 4. For sidewalks greater than 6', match sidewalk width. Add one #4 transverse bar, top and bottom, per additional foot of spread footing to maintain at minimum the same reinforcement area per foot.
- 5. Base location can vary on spread footing. Location shown in Plans.



= SECTION B-B ====

SPREAD FOOTING FOUNDATION

LAST REVISION 11/01/24

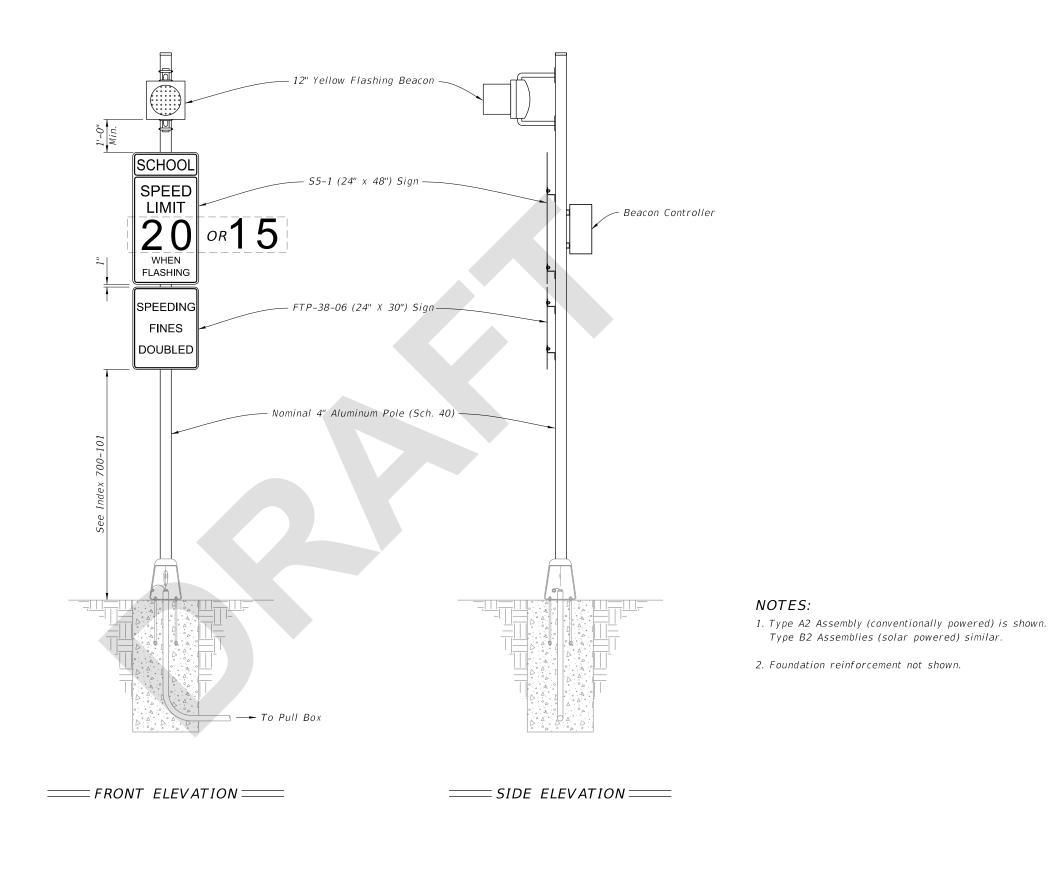


ROADSIDE SIGN ASSEMBLY-1

REVISION 11/01/24

DESCRIPTION:

FDOT



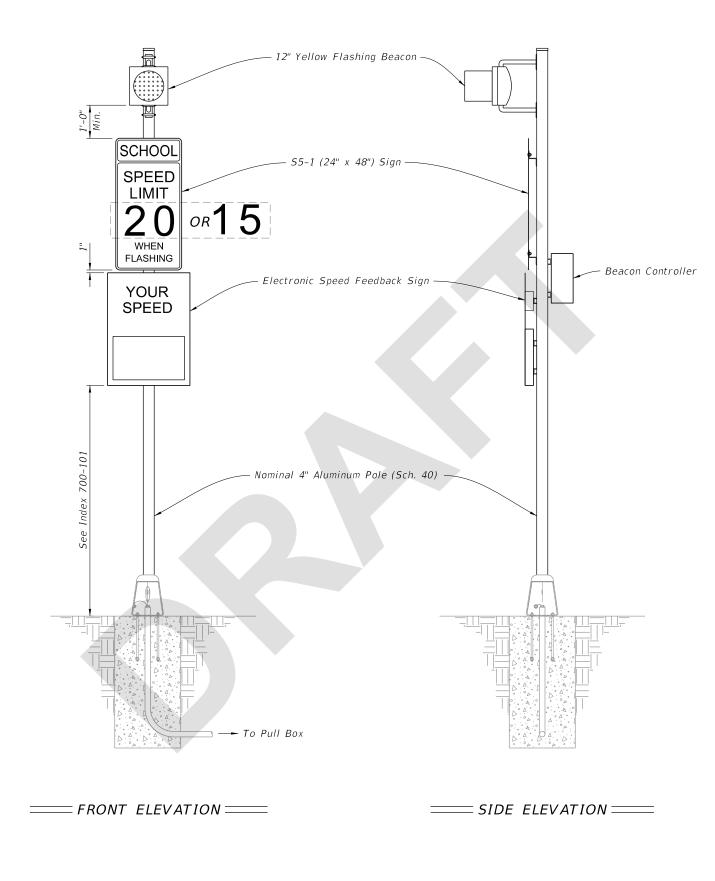
REVISION 11/01/24 DESCRIPTION:

FDOT

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ROADSIDE SIGN ASSEMBLY-2

SHEET



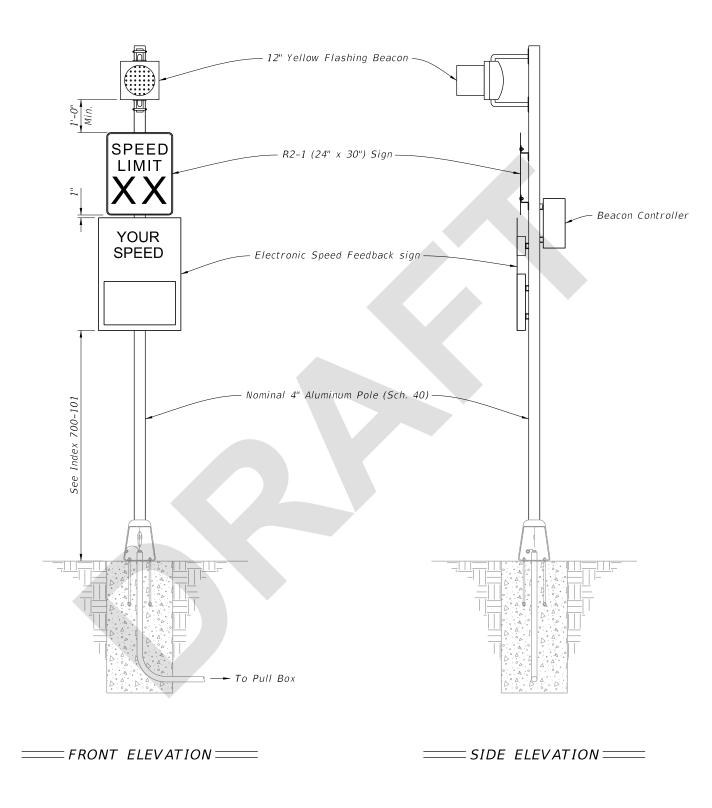
- 1. Type A3 Assembly (conventionally powered) is shown. Type B3 Assemblies (solar powered) similar.
- 2. Use electronic speed feedback sign with 15" high numerals for posted speed of 45 mph or less, and 18" high numerals for posted speeds greater than 45 mph.
- 3. Foundation reinforcement not shown.

ROADSIDE SIGN ASSEMBLY-3

REVISION 11/01/24

DESCRIPTION:

FDOT

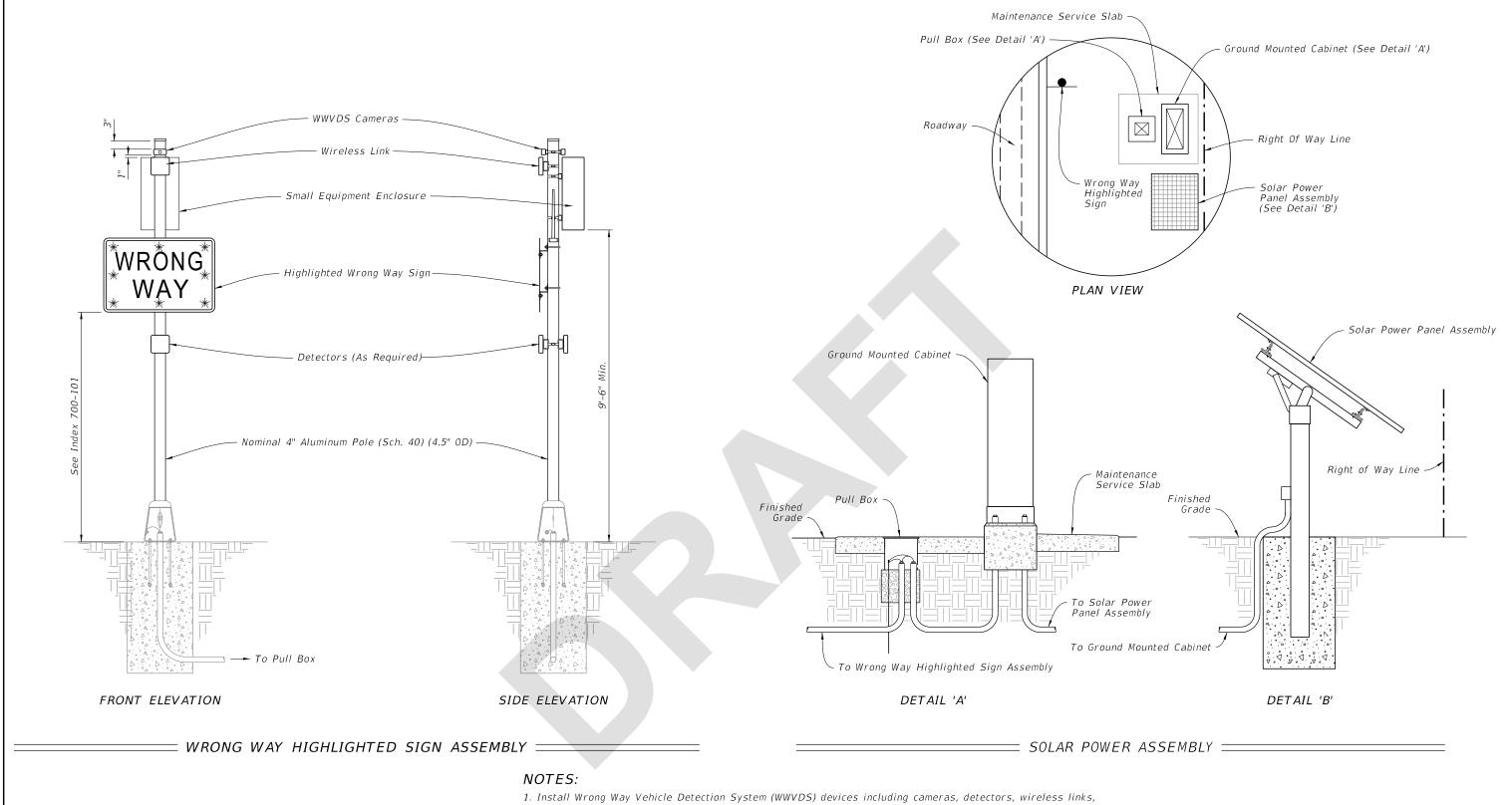


- 1. Type A6 Assembly (conventionally powered) is shown. Type B6 Assemblies (solar powered) similar.
- 2. Use electronic speed feedback sign with 15" high numerals for posted speed of 45 mph or less, and 18" high numerals for posted speeds greater than 45 mph.
- 3. Foundation reinforcement not shown.

ROADSIDE SIGN ASSEMBLY-4

DESCRIPTION: REVISION 11/01/24

FDOT

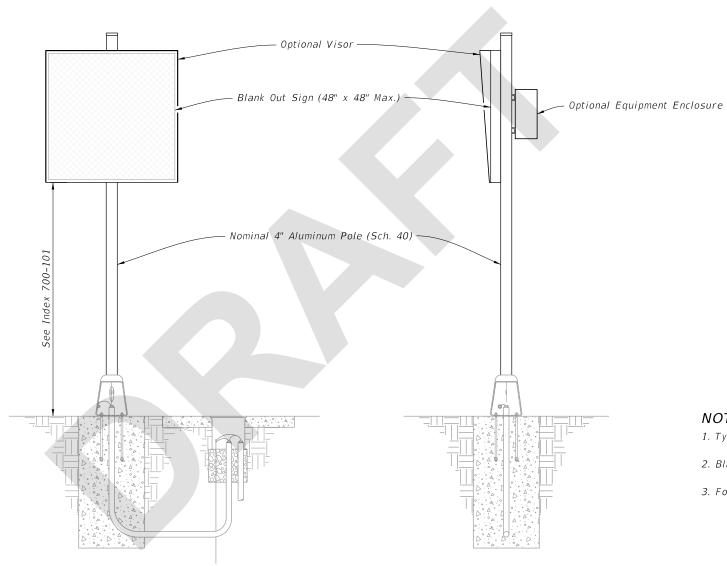


- antennas, enclosures, and electronics in accordance with the manufacturer's instructions.
- 2. When a solar powered configuration (Type B7) is called for in the Plans, install a ground mounted cabinet and solar power panel assembly. Install the solar charge controller and batteries in the same ground mounted cabinet. Provide a separate pole for mounting the solar panel (DETAIL 'B' shown for illustration purposes only) and install in accordance with manufacturer's instructions. Locate the Solar Power Assembly as close to the right of way as possible. Orient the solar panel to face South.
- 3. Foundation reinforcement not shown.
- 4. Install cabinets in accordance with Index 676-010.

ROADSIDE SIGN ASSEMBLY-5

REVISION 11/01/24 DESCRIPTION:

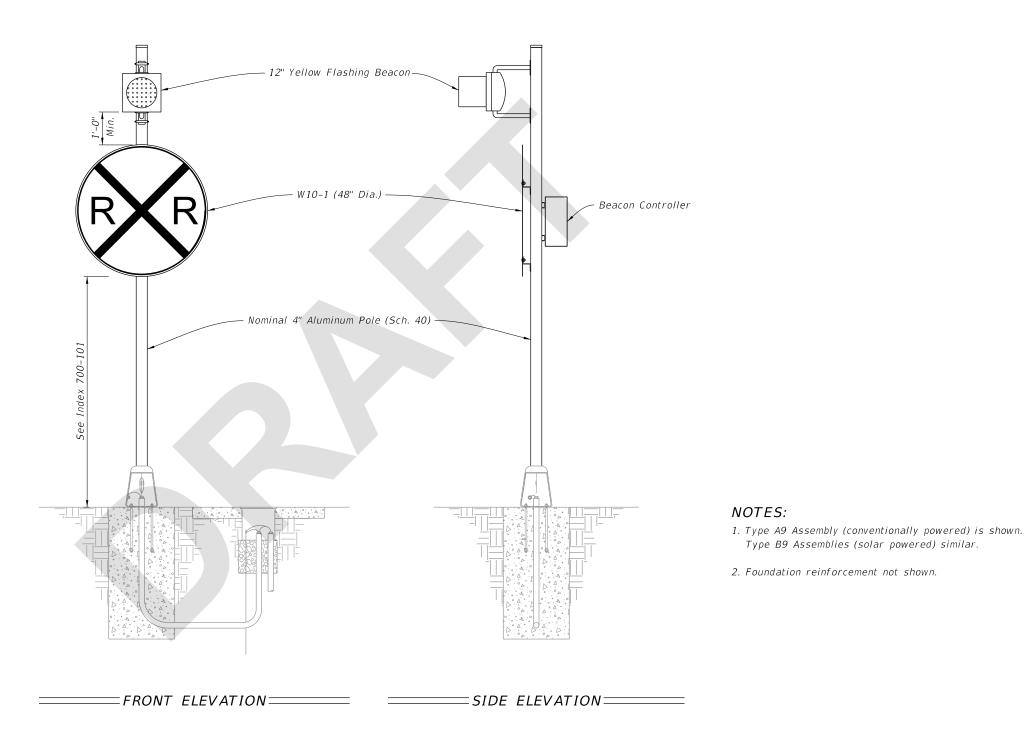
FDOT



- 1. Type A8 Assembly (conventionally powered) is shown.
- 2. Blank Out Sign visors are optional.
- 3. Foundation reinforcement not shown.

ROADSIDE SIGN ASSEMBLY-6

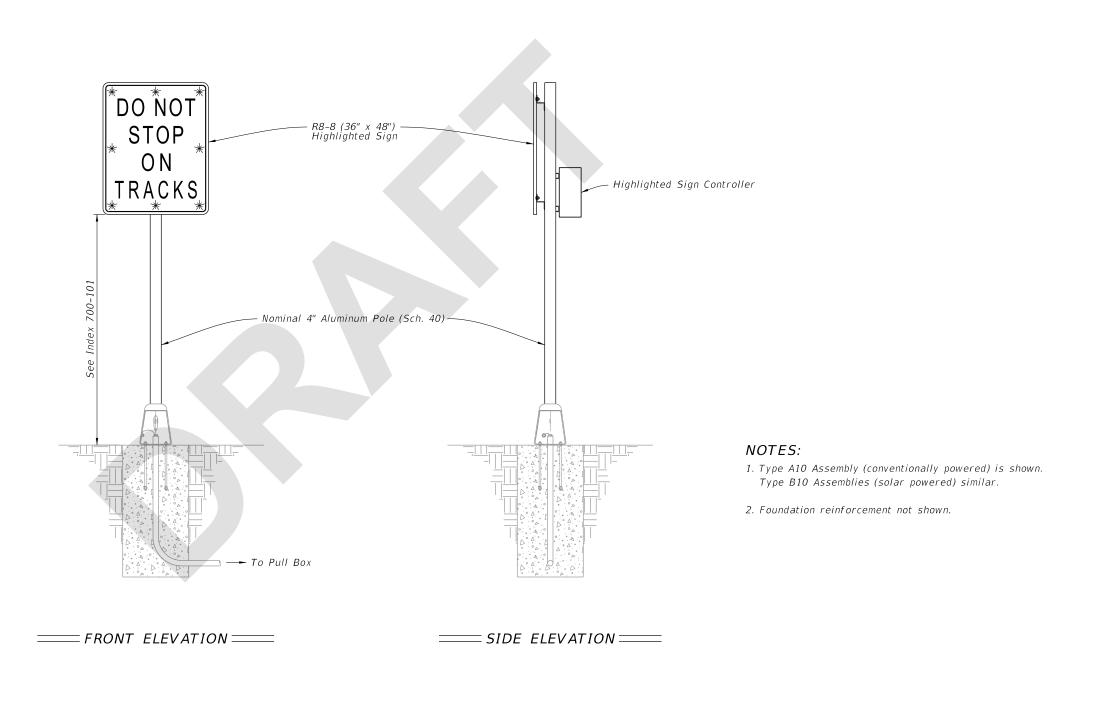
LAST O DESCRIPTION:
REVISION 11/01/24



ROADSIDE SIGN ASSEMBLY-7

Type B9 Assemblies (solar powered) similar.

LAST REVISION 11/01/24

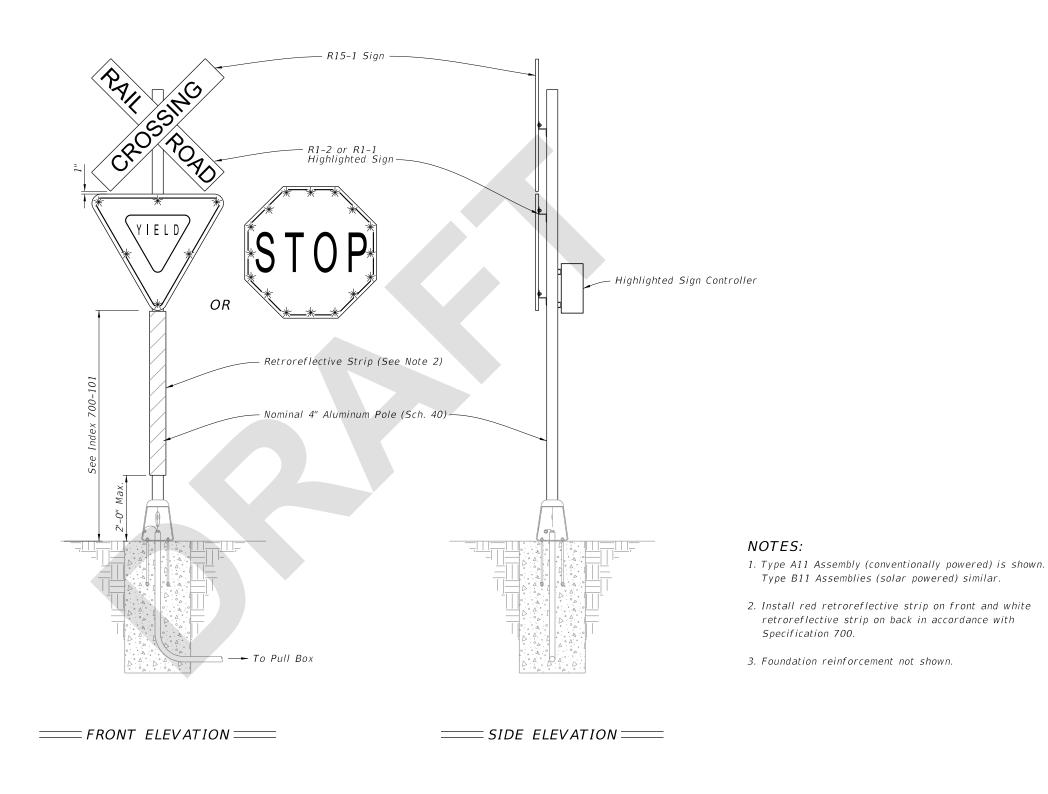


LAST REVISION 11/01/24

DESCRIPTION:

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ROADSIDE SIGN ASSEMBLY-8

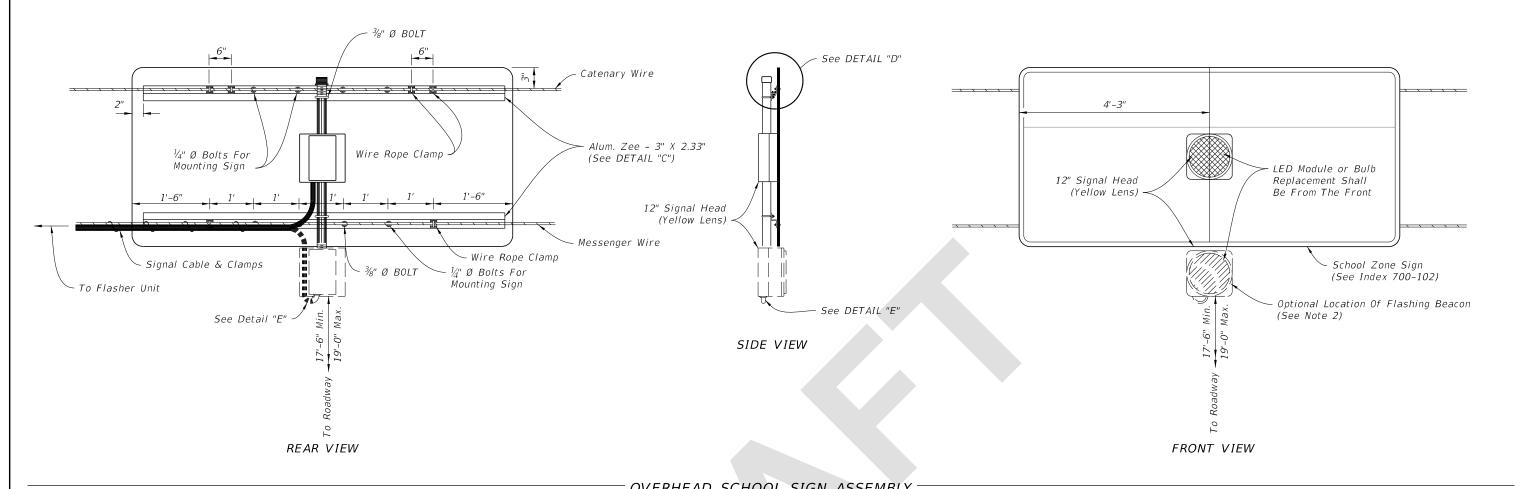


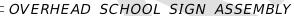
ROADSIDE SIGN ASSEMBLY-9

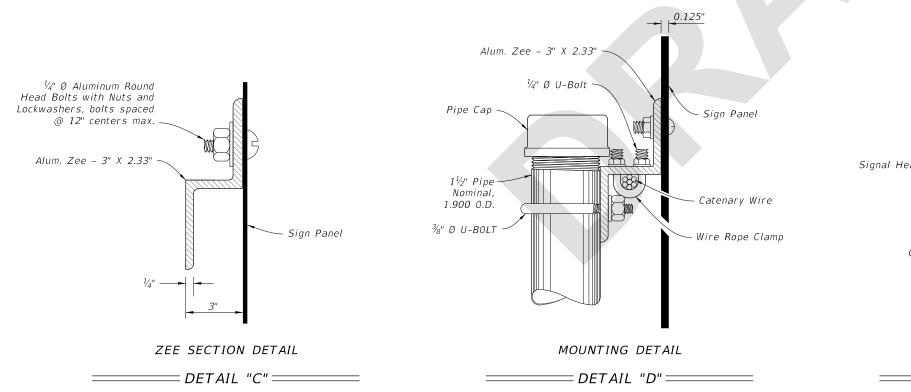
REVISION 11/01/24

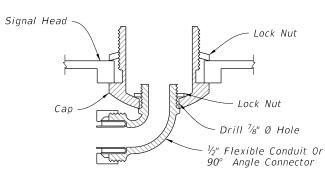
DESCRIPTION:

FDOT









CABLE ENTRY DETAIL

NOTES:

- 1. Flasher unit and cabinet to be placed on the strain pole supporting overhead sign assembly or on service pole. The flasher unit not to overhang private property or sidewalk.
- 2. Optional flashing beacon will be called for in the Plans. They may be placed within or below the panel, or face to the rear.

OVERHEAD SIGN ASSEMBLY

REVISION 11/01/24

DESCRIPTION:

FDOT

FY 2025-26 STANDARD PLANS

ENHANCED HIGHWAY SIGNING ASSEMBLIES

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