
ORIGINATION FORM

Proposed Revisions to a Standard Plans Index
(Please provide all information — Incomplete forms will be returned)

Contact Information:

Date: January 14, 2021

Originator: Malcolm Tomatani

Phone: (850) 921-7305

Email: malcolm.tomatani@dot.state.fl.us

Standard Plans:

Index Number: 700-120

Sheet Number (s): All Sheets

Index Title: Enhanced Highway Signing Assemblies

Summary of the changes:

All Sheets: Re-numbered.

Sheet 1: Deleted the ground wire from the FRONT VIEW in the POWER CONFIGURATON 'B' - WITHOUT AUXILIARY POLE.

Sheet 2: Deleted the ground wire and strain relief fitting from DETAIL "B".

Sheet 9 - Change "Point to Point Microwave" to "Wireless" from the FRONT VIEW and from Note 2.
Remove "Microwave" from the FRONT VIEW and from Note 2.

Sheet 10: Renumbered Sheet 11.

New Sheet 10 - New sheet for Roadside Sign Assembly-8, Blank Out Signs.

Commentary / Background:

See additional sheet.

Other Affected Offices / Documents: (Provide name of person contacted)

- | Yes | No | |
|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other Standard Plans – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | FDOT Design Manual – |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Basis of Estimates Manual – Missy Hollis |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Standard Specifications – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Approved Product List – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Construction – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Maintenance – |

Origination Package Includes:

(Email or hand deliver package to Rick Jenkins)

- | Yes | N/A | |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Proposed Standard Plan Instruction (SPI) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Revised SPI |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other Support Documents |

Implementation:

- | | |
|-------------------------------------|----------------------------------|
| <input type="checkbox"/> | Design Bulletin (Interim) |
| <input type="checkbox"/> | DCE Memo |
| <input type="checkbox"/> | Program Mgmt. Bulletin |
| <input checked="" type="checkbox"/> | FY-Standard Plans (Next Release) |

Contact the Roadway Design Office for assistance in completing this form

ORIGINATION FORM

Proposed Revisions to a Standard Plans Index
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Contact Information:

Date: January 14, 2021

Originator: Malcolm Tomatani

Phone: (850) 921-7305

Email: malcolm.tomatani@dot.state.fl.us

Standard Plans:

Index Number: 700-120

Sheet Number (s): All Sheets

Index Title: Enhanced Highway Signing Assemblies

Additional Information, as needed:

Sheet 2 - A ground wire is not required for a sign assembly without an auxiliary pole. The ground wire will be removed from Detail B on Sheet 2.

Sheet 9 - The manufacturers have been using omnipolar wireless links between assemblies instead of point-to-point microwave links. Agencies have been using other forms of detection instead of microwave. The Wrong Way Vehicle Detection System detectors shall be nonspecific.

New Sheet 11 - Traditionally, Blank Out signs have been installed on traffic signal mast arms. To allow flexibility in installation, the roadside mounting option is being proposed.

ORIGINATION FORM

Proposed Revisions to a Standard Plans Index
(Please provide all information — Incomplete forms will be returned)

Contact Information:

Date: June 6, 2021
Originator: Derwood Sheppard
Phone: (850) 414-4334
Email: derwood.sheppard@dot.state.fl.us

Standard Plans:

Index Number: 700-120
Sheet Number (s): 2
Index Title: Enhanced Highway Signing Assemblies

Summary of the changes:

Sheet 1: Updated General Note 4; Change all references "4" Nominal Aluminum Pole" to "4.5" OD Aluminum Pole; Updated anchor bolts.

Sheet 2: Add new detail to show foundation reinforcement; Change all references "4" Nominal Aluminum Pole" to "4.5" OD Aluminum Pole; Updated anchor bolts.

Sheets 3 through 11: Updated callouts to point to both details; Change all references "4" Nominal Aluminum Pole" to "4.5" OD Aluminum Pole; Updated anchor bolts; Added Note "Foundation reinforcement not shown".

Commentary / Background:

The foundations within Indexes 646-001, 654-001, 695-001, and 700-120 are being updated to be more consistent between applications. A structural analysis was completed to determine if the foundations could be revised to provide a more consistent design between the various applications.

Other Affected Offices / Documents: (Provide name of person contacted)

Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other Standard Plans – Andre Pavlov
<input type="checkbox"/>	<input checked="" type="checkbox"/>	FDOT Design Manual –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Basis of Estimates Manual –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Standard Specifications –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Approved Product List –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Construction –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Maintenance –

Origination Package Includes:

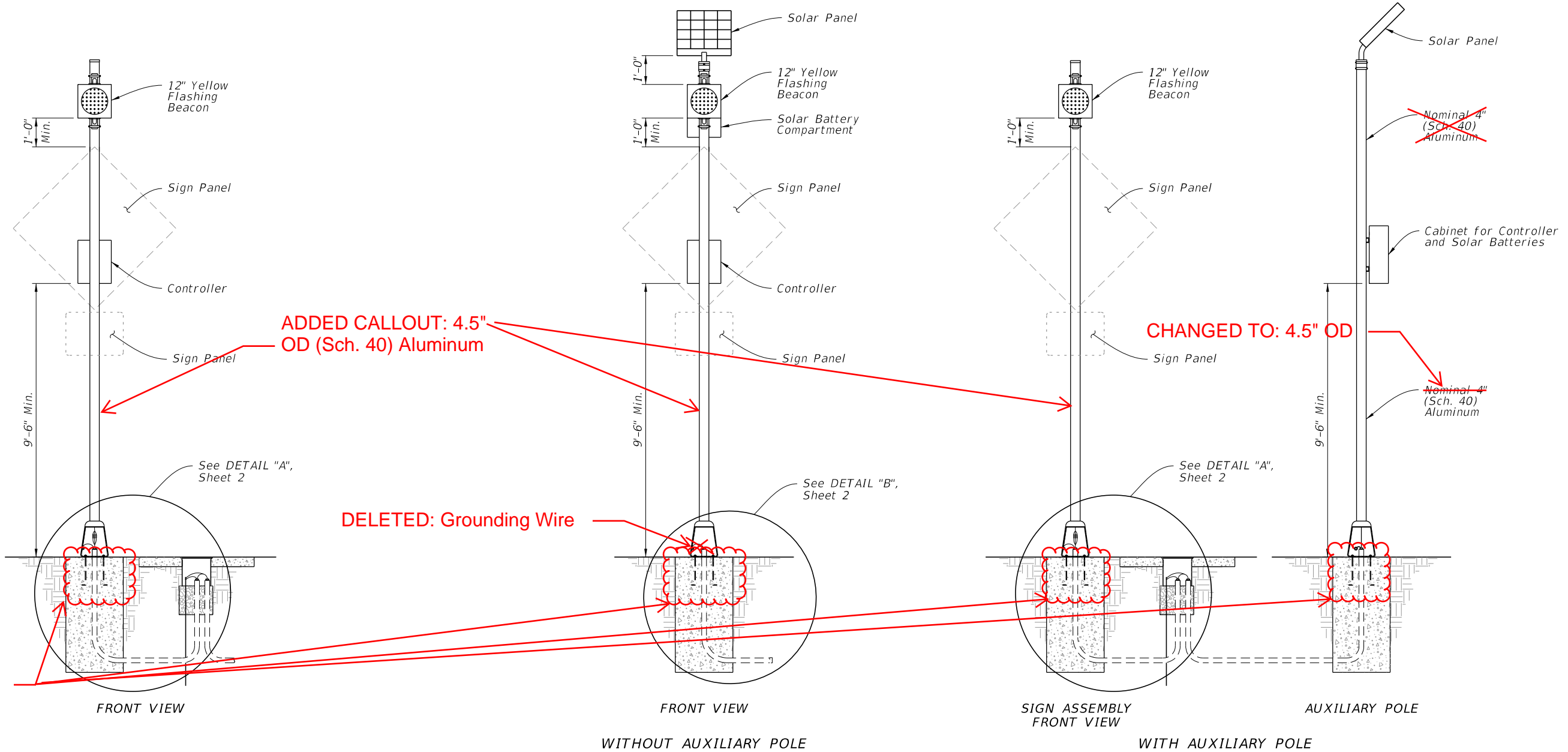
(Email or hand deliver package to Rick Jenkins)

Yes	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Redline Mark-ups
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Proposed Standard Plan Instruction (SPI)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Revised SPI
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other Support Documents

Implementation:

<input type="checkbox"/>	Design Bulletin (Interim)
<input type="checkbox"/>	DCE Memo
<input type="checkbox"/>	Program Mgmt. Bulletin
<input checked="" type="checkbox"/>	FY-Standard Plans (Next Release)

Contact the Roadway Design Office for assistance in completing this form



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

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

GENERAL NOTES:

1. Install sign assemblies based on Alpha-Numeric Type designation shown in the Plans (e.g., Type A1). Assembly Type is based on Power Configuration 'Alpha' Identification shown above and Numerical Identification shown on Sheet 3 thru 8.
2. Install sign panel and wind beam in accordance with Index 700-010 and Specification 700.
3. Engage all threads on the transformer base and post unless the aluminum post is fully seated into base.
4. ~~Meet the requirements of Specification 646 for aluminum poles and transformer bases.~~ **UPDATED NOTE 4**
5. 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".
6. 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.

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7	Roadside Sign Assembly-5
8	Roadside Sign Assembly-6
9	Roadside Sign Assembly-7
10	Overhead Sign Assembly

UPDATED: Anchor Bolts

DELETED: Grounding Wire

ADDED CALLOUT: 4.5" OD (Sch. 40) Aluminum

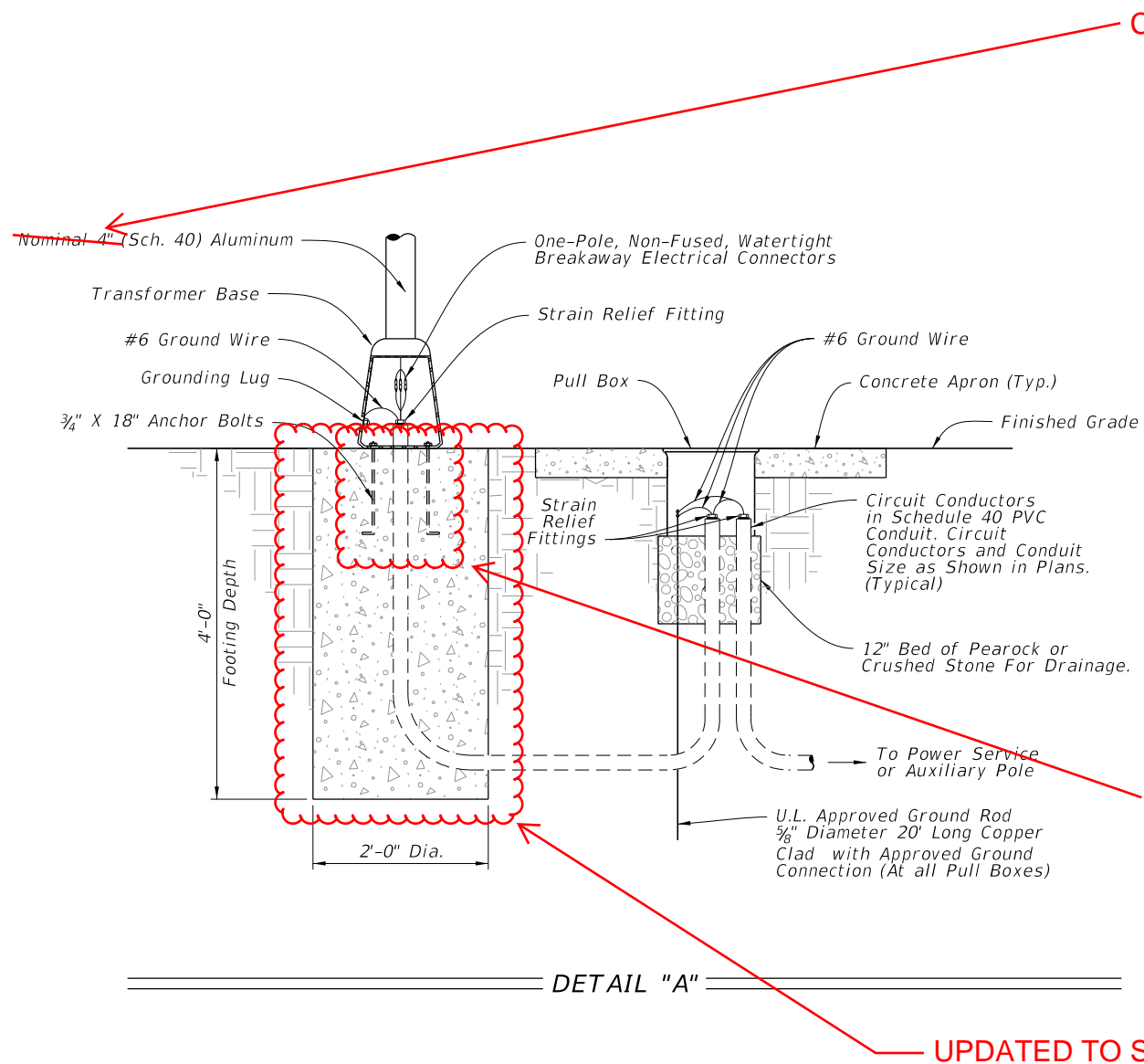
CHANGED TO: 4.5" OD

~~Nominal 4" (Sch. 40) Aluminum~~

Nominal 4" (Sch. 40) Aluminum

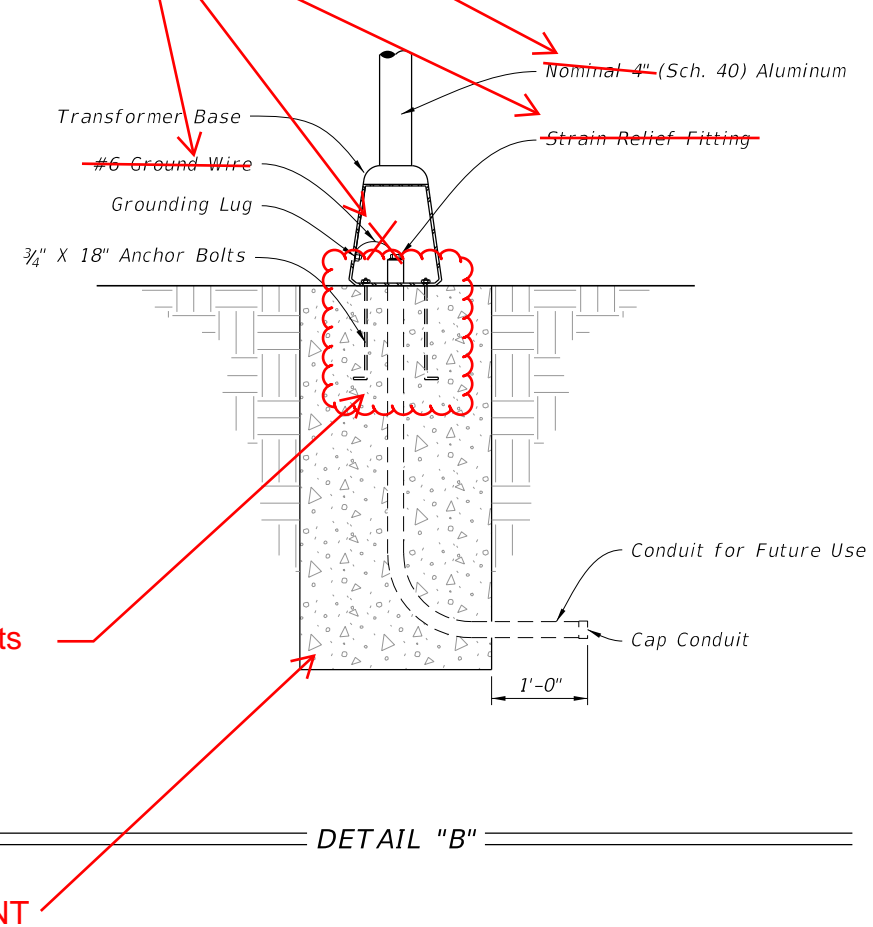
10/12/2020 9:08:49 AM

10/12/2020 9:08:54 AM



CHANGE TO: 4.5" OD

DELETED:



UPDATED: Anchor Bolts

UPDATED TO SHOW REINFORCEMENT

DETAIL "A"

DETAIL "B"

CONDUIT, WIRING, AND FOUNDATION DETAILS

LAST REVISION	DESCRIPTION:
07/01/19	11/01/21

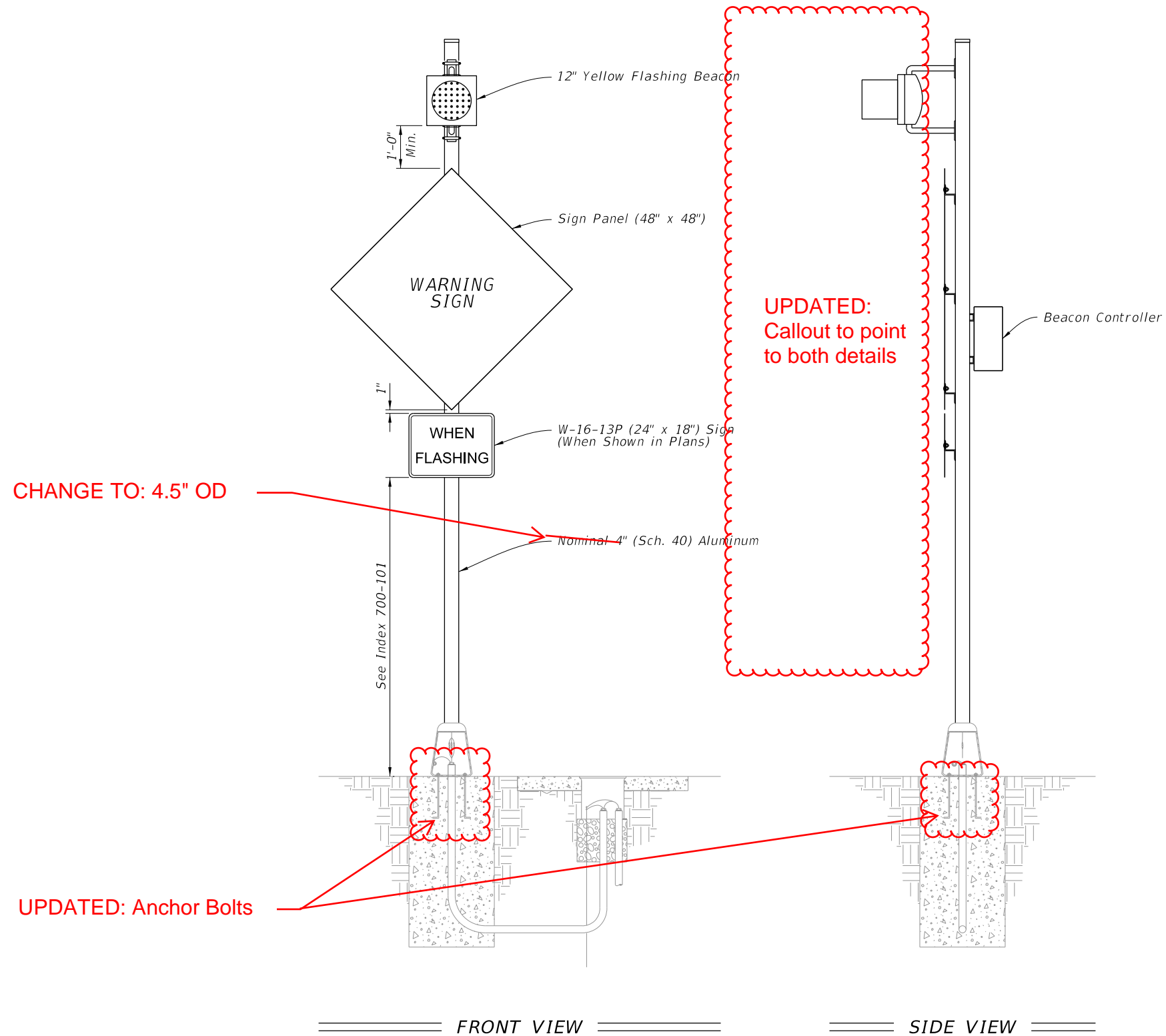


FY 2021-22
STANDARD PLANS

ENHANCED HIGHWAY SIGNING ASSEMBLIES

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700-120

SHEET 11
2 of 10



NOTE:
 Type A1 Assembly (conventionally-powered) is shown.
 Type B1 Assemblies (solar-powered) similar.

ADDED NOTE:
 Foundation reinforcement not shown.

10/12/2020 9:08:56 AM

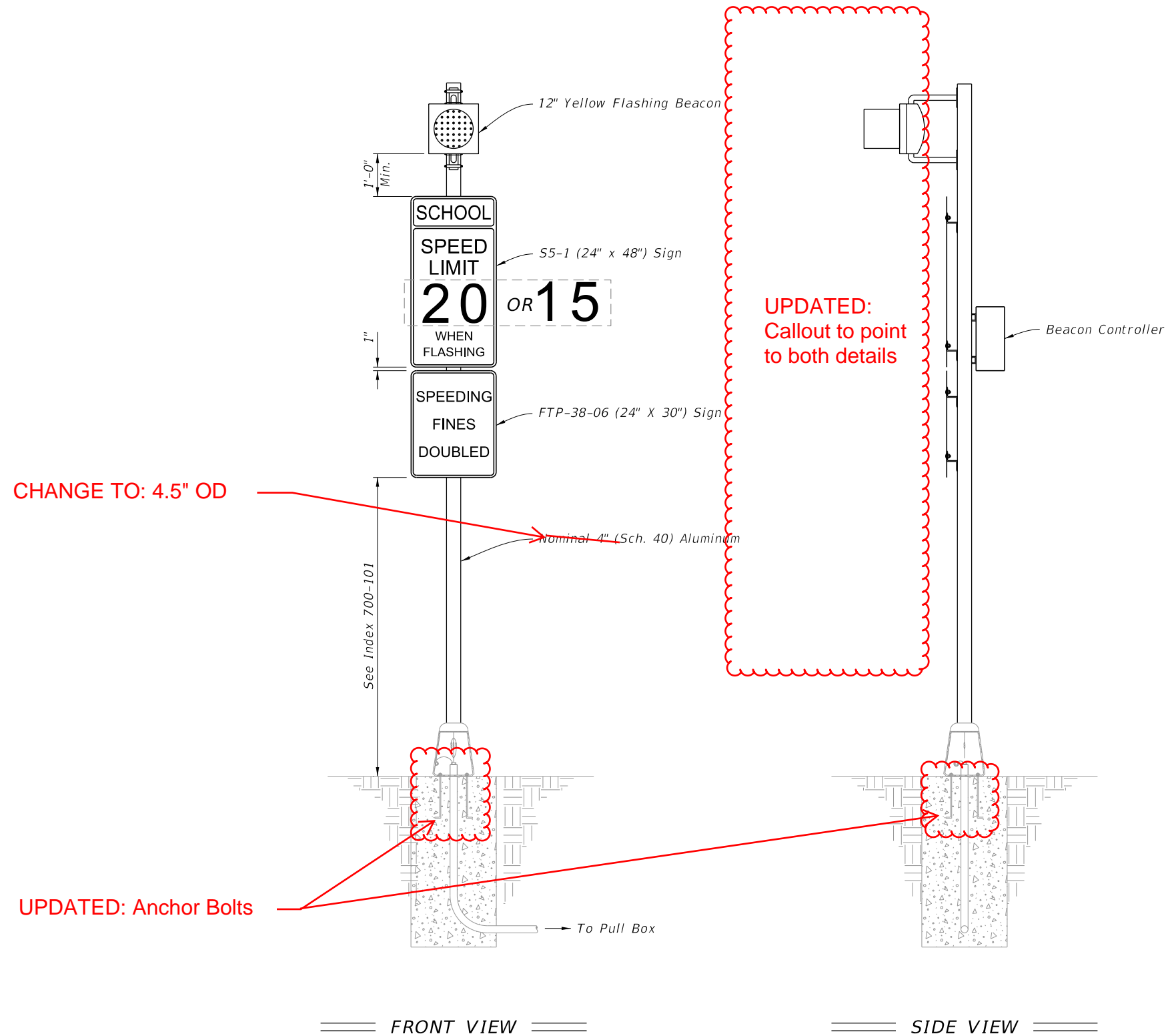
ROADSIDE SIGN ASSEMBLY-1

LAST REVISION	DESCRIPTION:
07/01/19	11/01/21


**FY 2021-22
 STANDARD PLANS**

ENHANCED HIGHWAY SIGNING ASSEMBLIES


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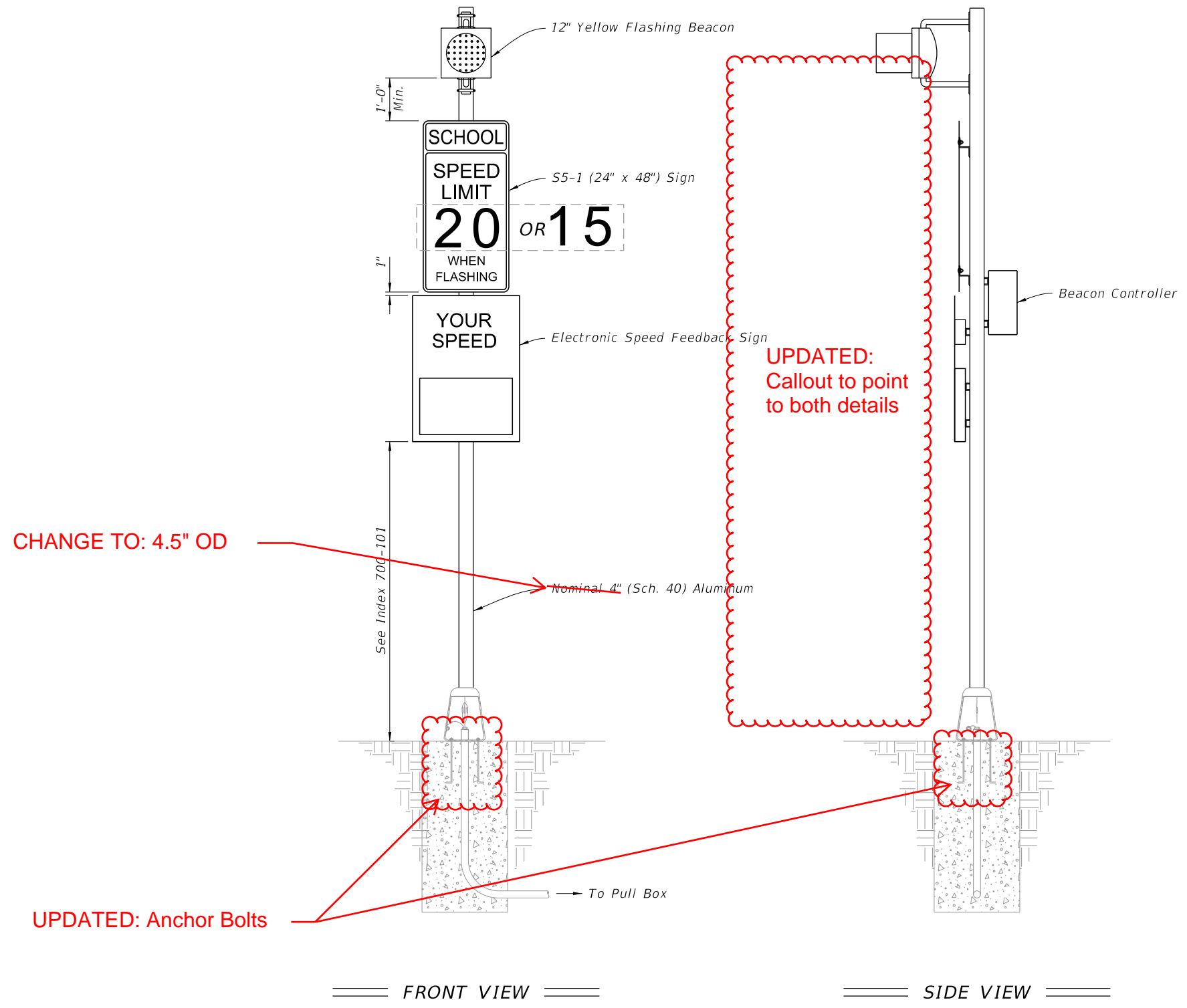


NOTE:
 Type A2 Assembly (conventionally-powered) is shown.
 Type B2 Assemblies (solar-powered) similar.

ADDED NOTE:
 Foundation reinforcement not shown.

10/12/2020 9:08:59 AM

LAST REVISION	REVISION	DESCRIPTION: 11/01/21	 FY 2021-22 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	INDEX 700-120	SHEET 11 4 of 10
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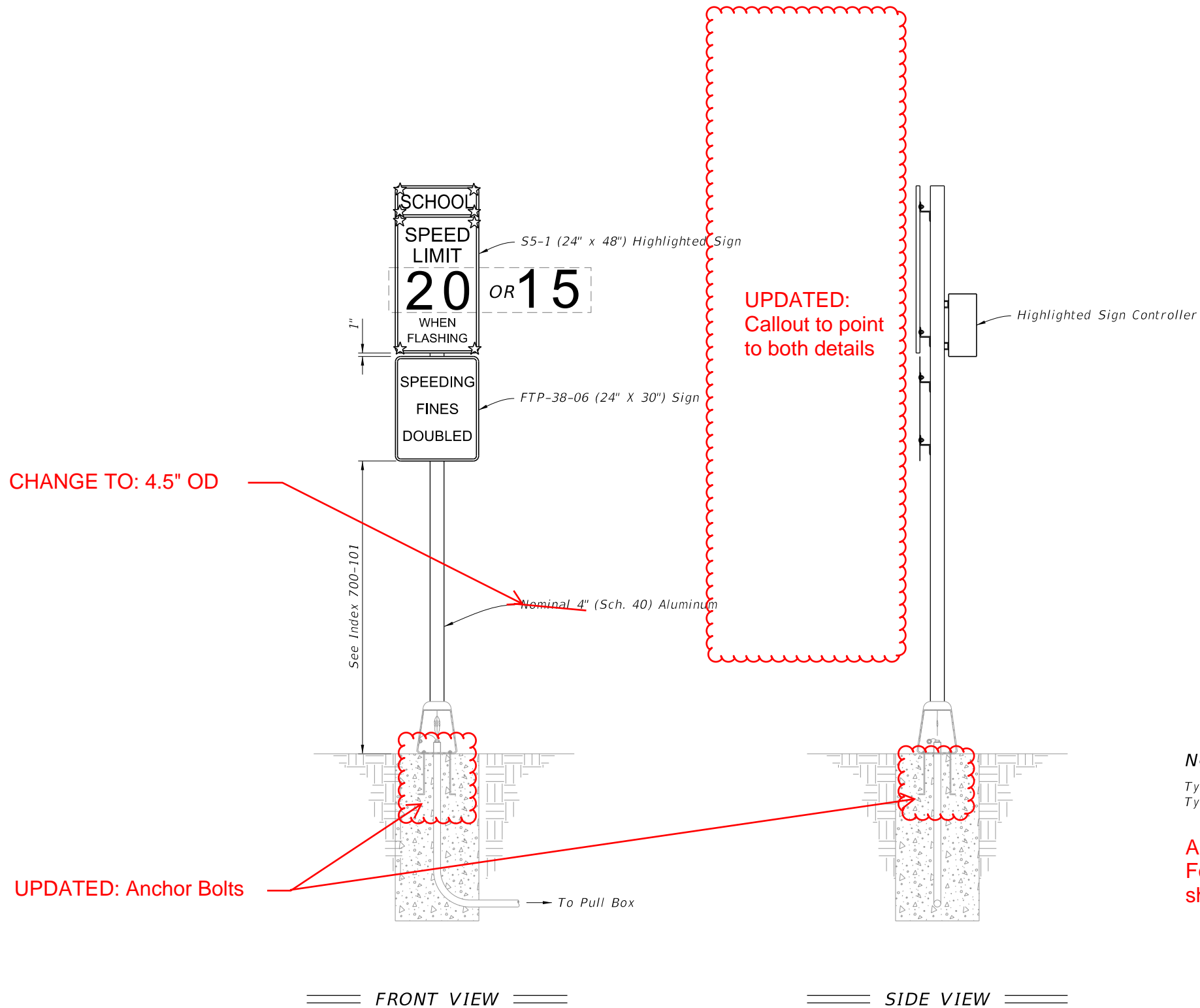
- NOTES:**
1. Type A3 Assembly (conventionally-powered) is shown. Type B3 Assemblies (solar-powered) similar.
 2. Use electronic speed feedback sign with 15" high numerals for posted speed of 45 mph or less, and 18" high numerals for posted speeds greater than 45 mph.

ADDED NOTE:
Foundation reinforcement not shown.

10/12/2020 9:09:02 AM

LAST REVISION	REVISION	DESCRIPTION:		FY 2021-22 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	INDEX 700-120	SHEET 11 5 of 10
		07/01/19 → 11/01/21					

10/12/2020 9:09:05 AM



NOTE:
 Type A4 Assembly (conventionally-powered) is shown.
 Type B4 Assemblies (solar-powered) similar.

ADDED NOTE:
 Foundation reinforcement not shown.

LAST REVISION	DESCRIPTION:
07/01/19	11/01/21

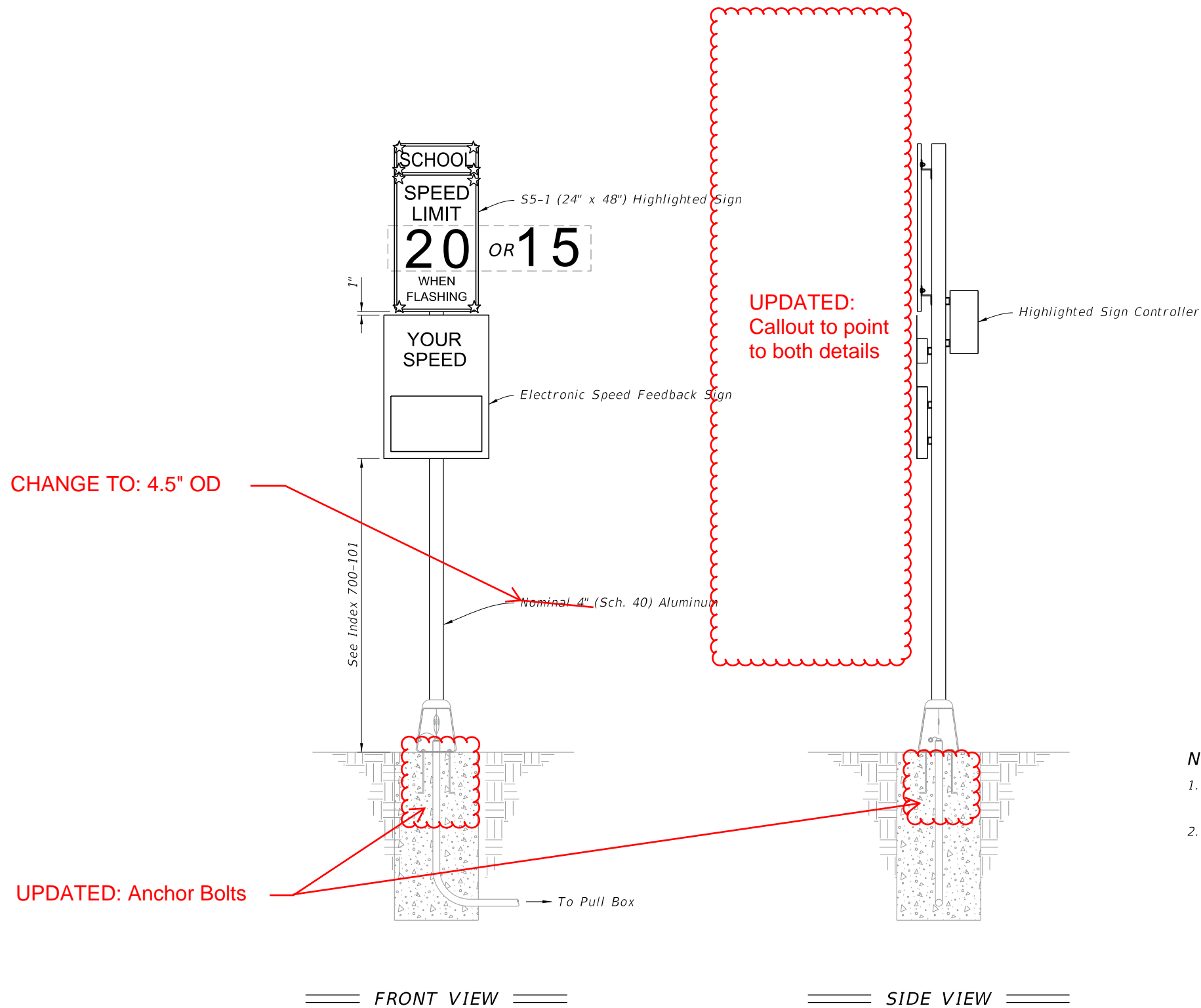
FDOT FY 2021-22
 STANDARD PLANS

ENHANCED HIGHWAY SIGNING ASSEMBLIES

INDEX SHEET **11**
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ROADSIDE SIGN ASSEMBLY-4

10/12/2020 9:09:07 AM



NOTES:

1. Type A5 Assembly (conventionally-powered) is shown. Type B5 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.

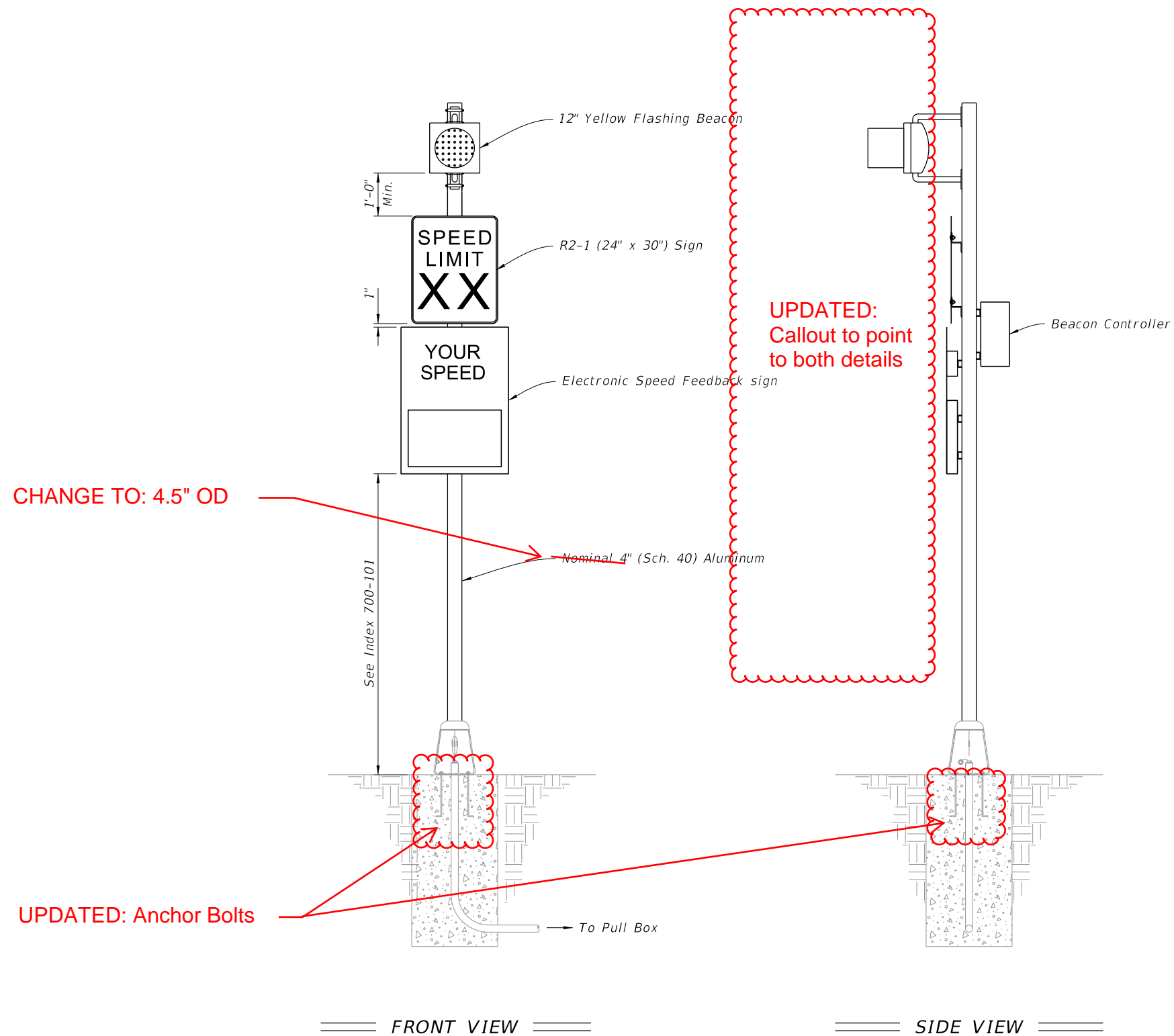
ADDED NOTE:

Foundation reinforcement not shown.

LAST REVISION	DESCRIPTION:
07/01/19	11/01/21



10/12/2020 9:09:10 AM



NOTES:

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.

ADDED NOTE:

Foundation reinforcement not shown.

ROADSIDE SIGN ASSEMBLY-6

LAST REVISION	DESCRIPTION:
07/01/19	11/01/21



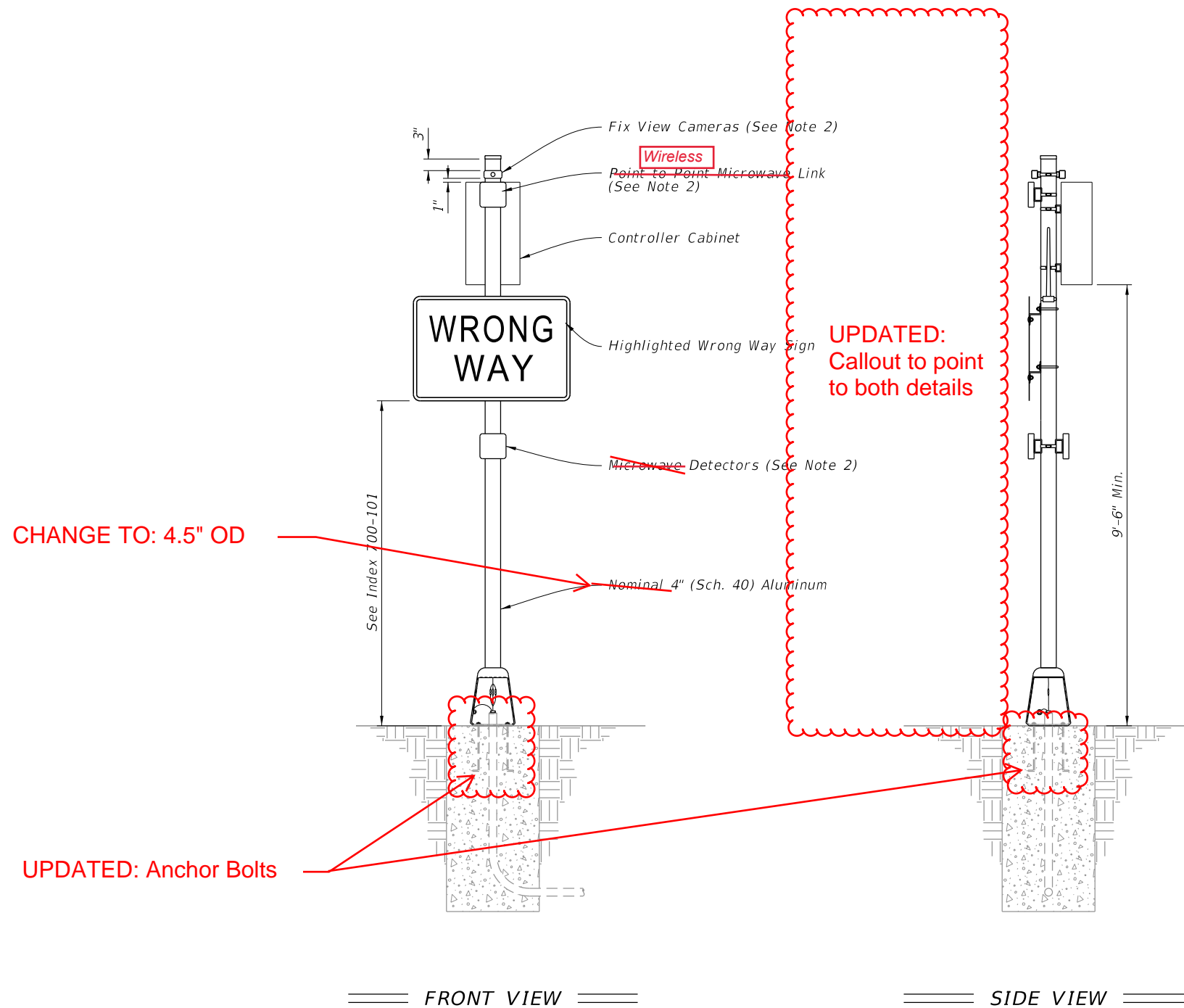
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ENHANCED HIGHWAY SIGNING ASSEMBLIES

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11/20/2020 10:11:53 AM



NOTES:

1. Type A7 Assembly (Conventionally-Powered) is shown.
2. Install cameras, **wireless** ~~point to point microwave link~~, ~~microwave~~ detectors, and antennas in accordance with the manufacturer's instructions.
3. For solar powered assemblies, install controller and batteries in the same ground mounted cabinet. Install a separate pole for mounting the solar panel. Install the solar panel pole and cabinet as close to the right of way boundary as possible. Orient solar panel to face South.

ADDED NOTE:

Foundation reinforcement not shown.

ROADSIDE SIGN ASSEMBLY-7

LAST REVISION	DESCRIPTION:
11/01/20	
11/01/21	



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STANDARD PLANS

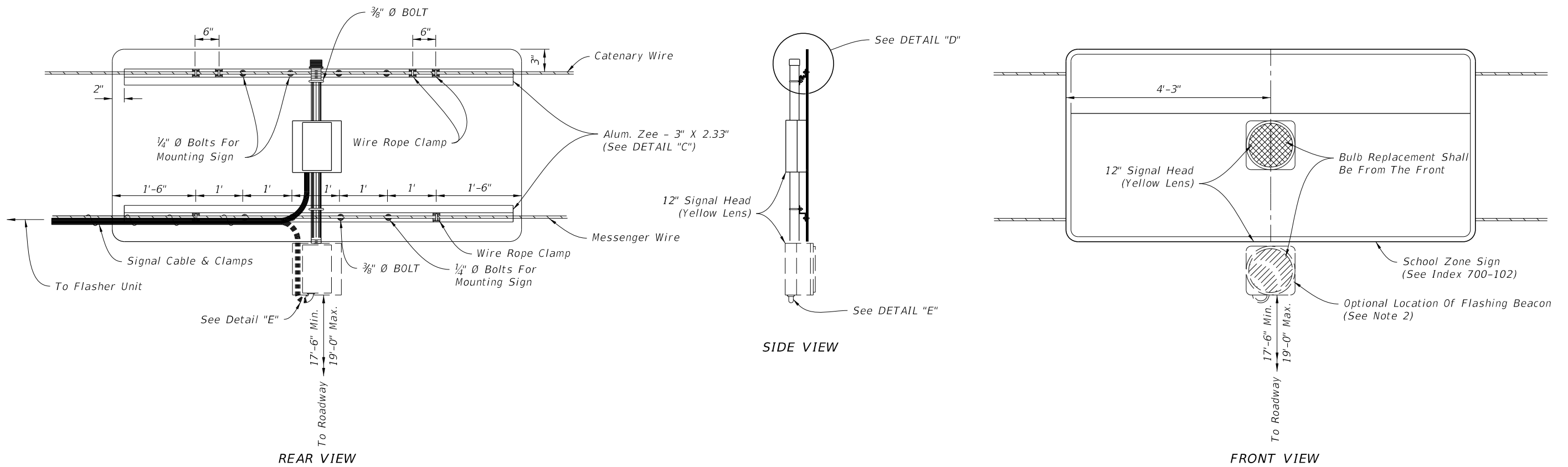
ENHANCED HIGHWAY SIGNING ASSEMBLIES

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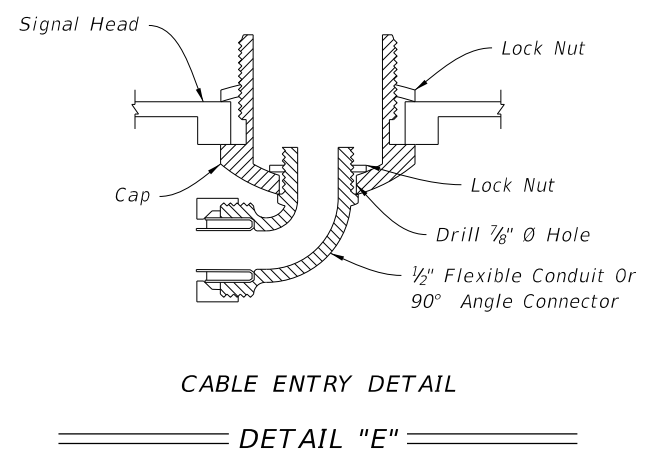
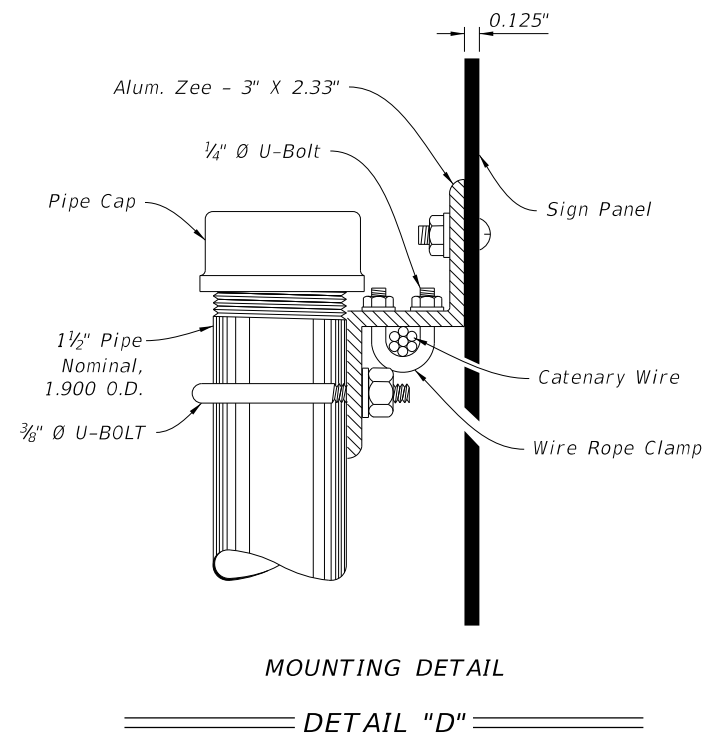
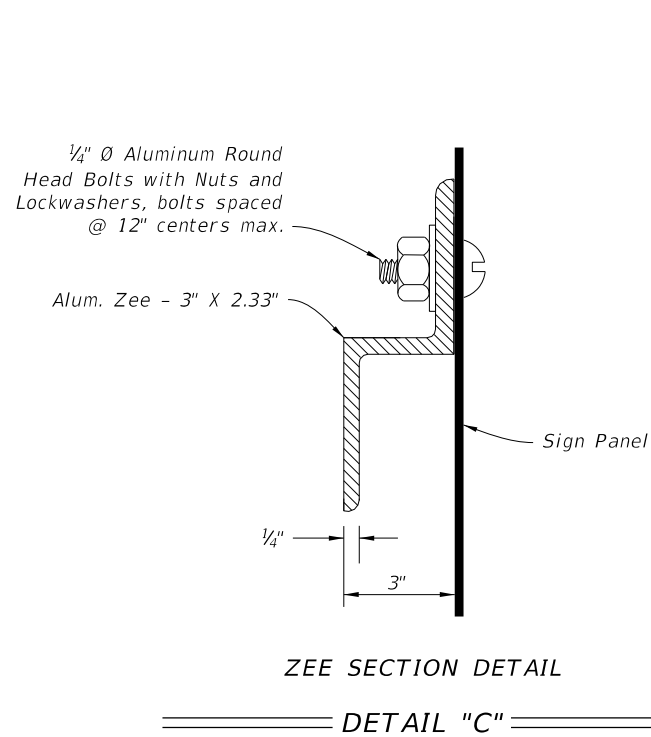
SHEET 11
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NEW SHEET 10

Roadside Sing Assembly-7



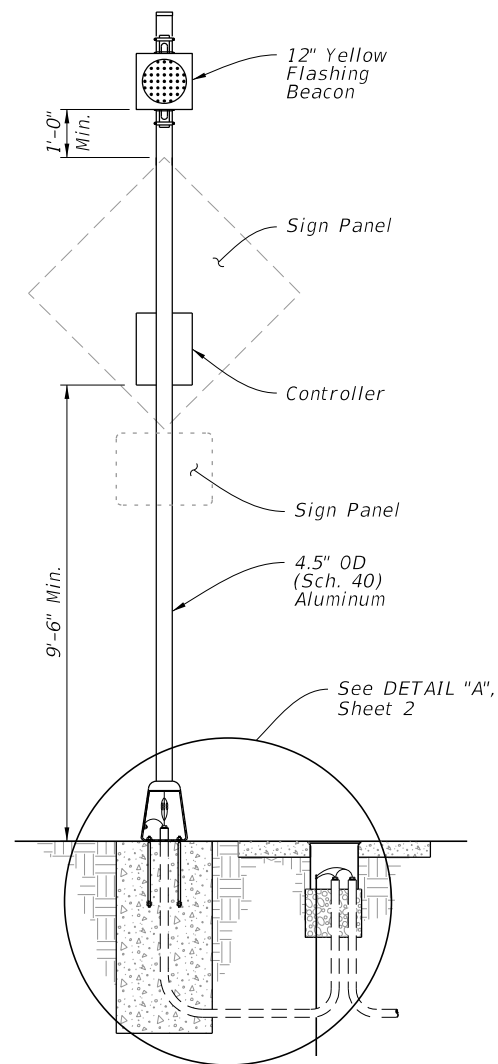
OVERHEAD SCHOOL SIGN ASSEMBLY



- 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.

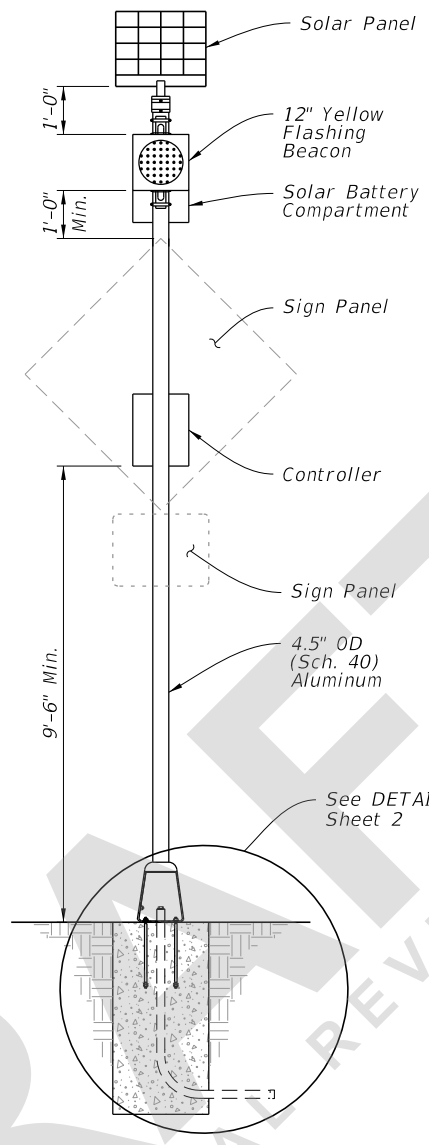
10/12/2020 9:09:15 AM

LAST REVISION 07/01/19	DESCRIPTION: 11/01/19 11/01/21	 FY 2021-22 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES OVERHEAD SIGN ASSEMBLY	INDEX 700-120	11 SHEET 11 10 of 10
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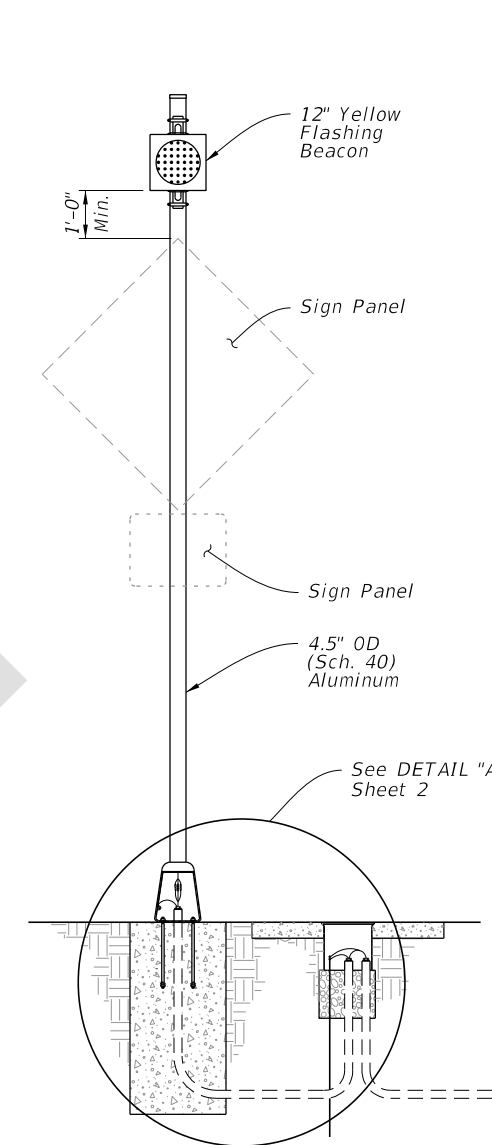
FRONT ELEVATION

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



FRONT ELEVATION

WITHOUT AUXILIARY POLE



SIGN ASSEMBLY
 FRONT ELEVATION

AUXILIARY POLE
 ELEVATION

WITH AUXILIARY POLE

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

GENERAL NOTES:

1. Install sign assemblies based on Alpha-Numeric Type designation shown in the Plans (e.g., Type A1). Assembly Type is based on Power Configuration 'Alpha' Identification shown above and Numerical Identification shown on Sheet 3 thru 8.
2. Install sign panel and wind beam in accordance with Index 700-010 and Specification 700.
3. Engage all threads on the transformer base and post unless the aluminum post is fully seated into base.
4. Meet the material requirements of Specification 646.
5. 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".
6. 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.

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7	Roadside Sign Assembly-5
8	Roadside Sign Assembly-6
9	Roadside Sign Assembly-7
10	Roadside Sign Assembly-8
11	Overhead Sign Assembly

8/6/2021 2:51:27 PM

LAST REVISION	DESCRIPTION:
11/01/21	



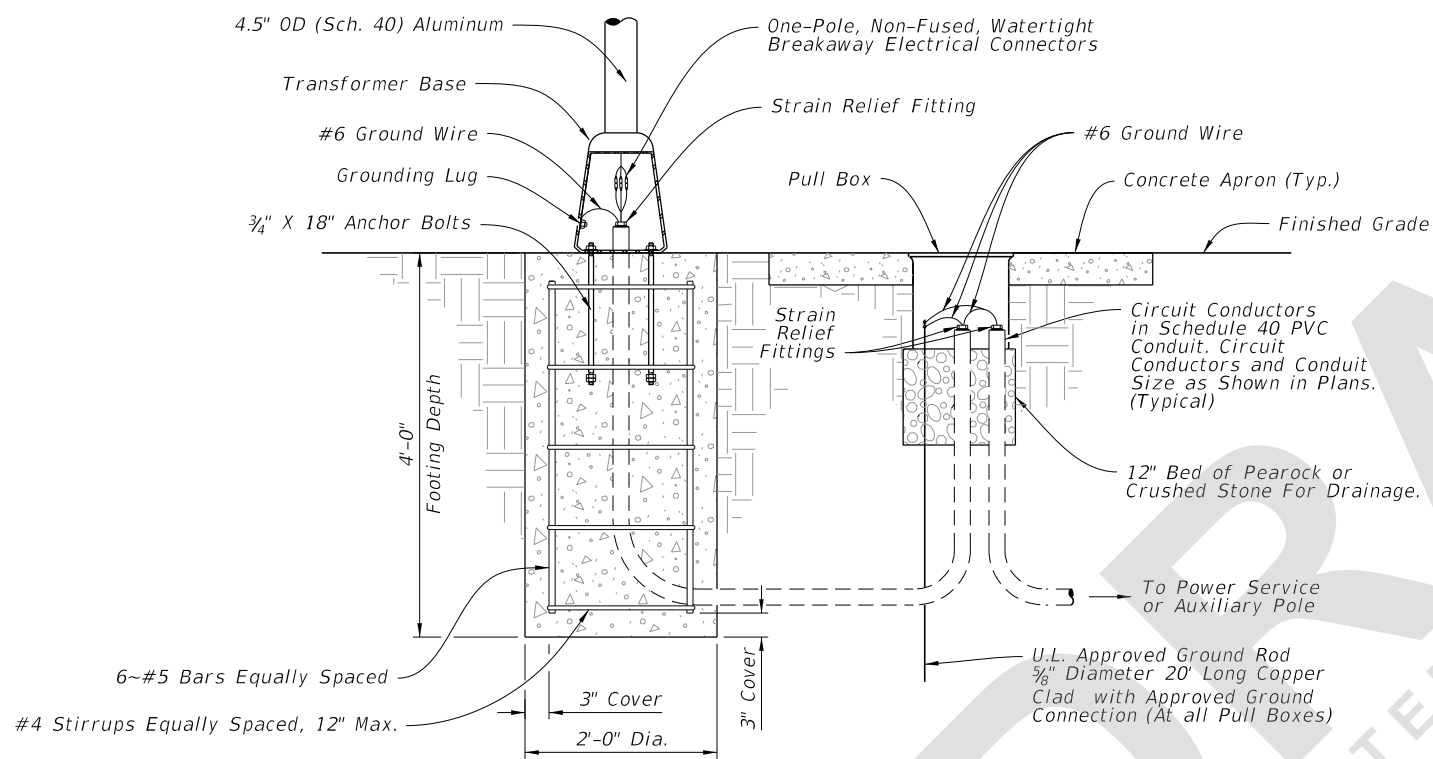
FY 2022-23
 STANDARD PLANS

ENHANCED HIGHWAY SIGNING ASSEMBLIES

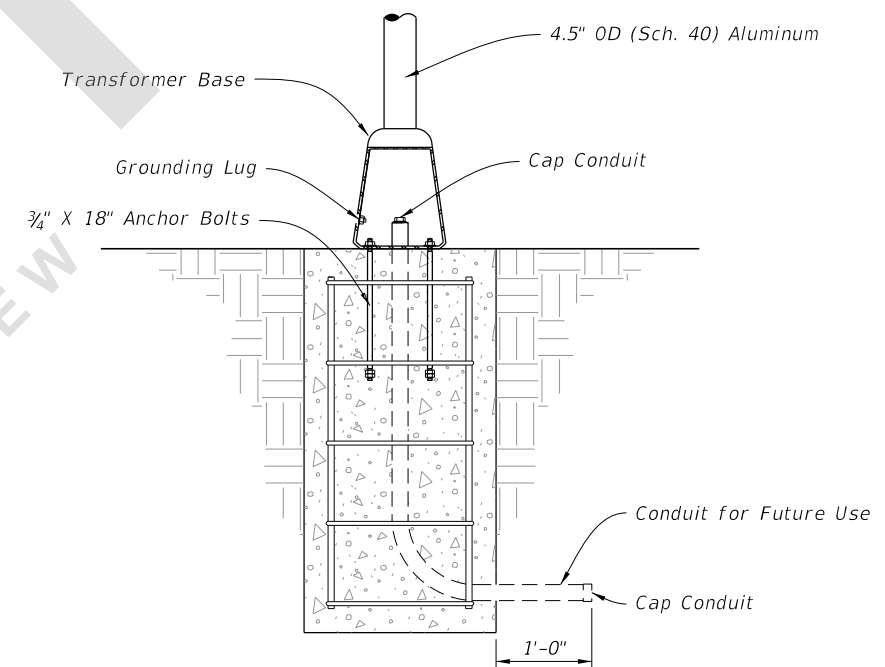
INDEX
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11:14:40 AM
8/3/2021



DETAIL "A"



DETAIL "B"

CONDUIT, WIRING, AND FOUNDATION DETAILS

LAST REVISION	DESCRIPTION:
11/01/21	

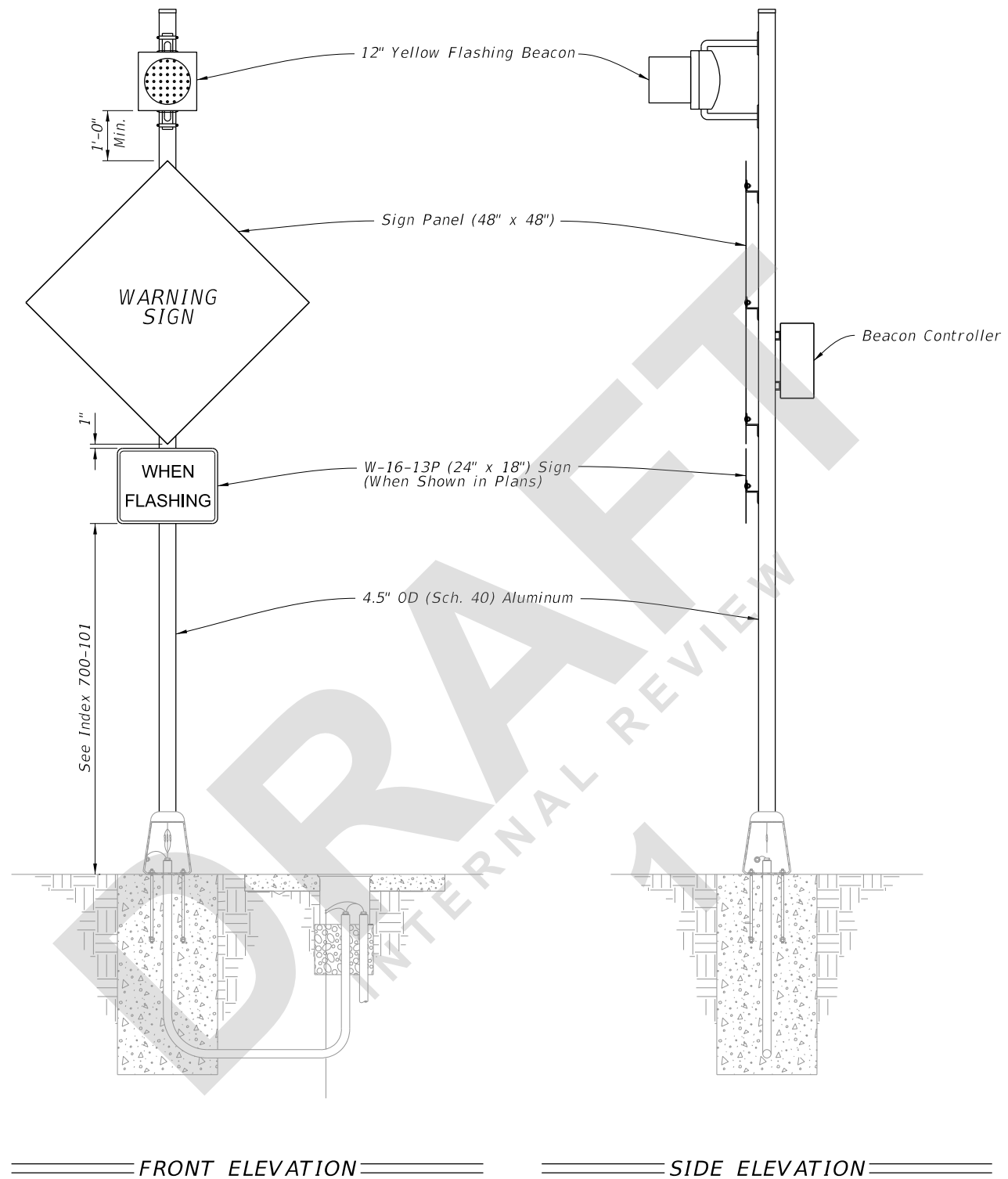


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ENHANCED HIGHWAY SIGNING ASSEMBLIES

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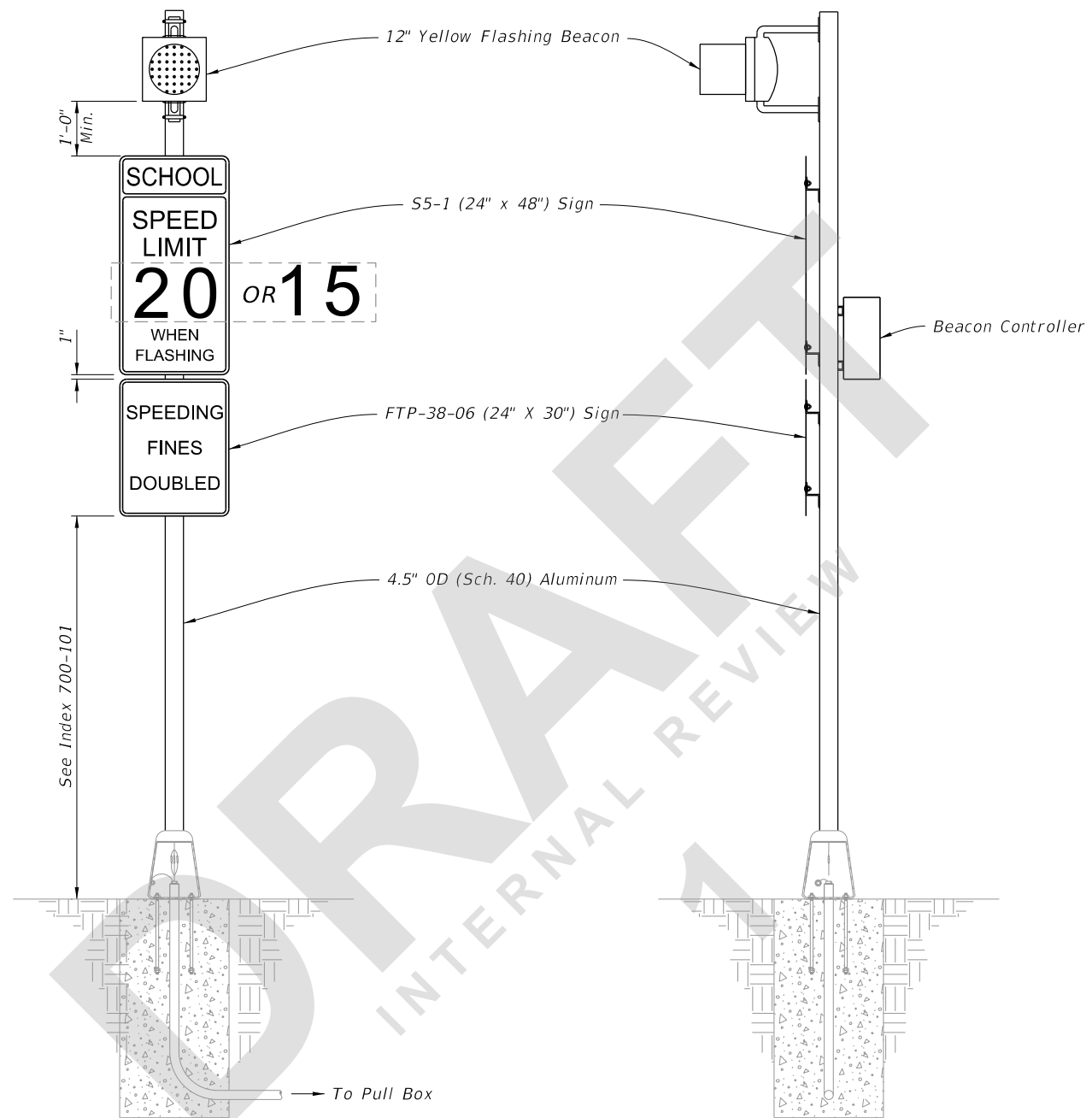
SHEET
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- NOTES:**
1. Type A1 Assembly (conventionally-powered) is shown.
Type B1 Assemblies (solar-powered) similar.
 2. Foundation reinforcement not shown.

8/3/2021 11:14:41 AM

LAST REVISION 11/01/21	REVISION	DESCRIPTION:	 FY 2022-23 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	INDEX 700-120	SHEET 3 of 11
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FRONT ELEVATION

SIDE ELEVATION

NOTES:

- 1. Type A2 Assembly (conventionally-powered) is shown. Type B2 Assemblies (solar-powered) similar.
- 2. Foundation reinforcement not shown.

8/3/2021 11:14:41 AM

ROADSIDE SIGN ASSEMBLY-2

LAST REVISION 11/01/21	REVISION	DESCRIPTION:
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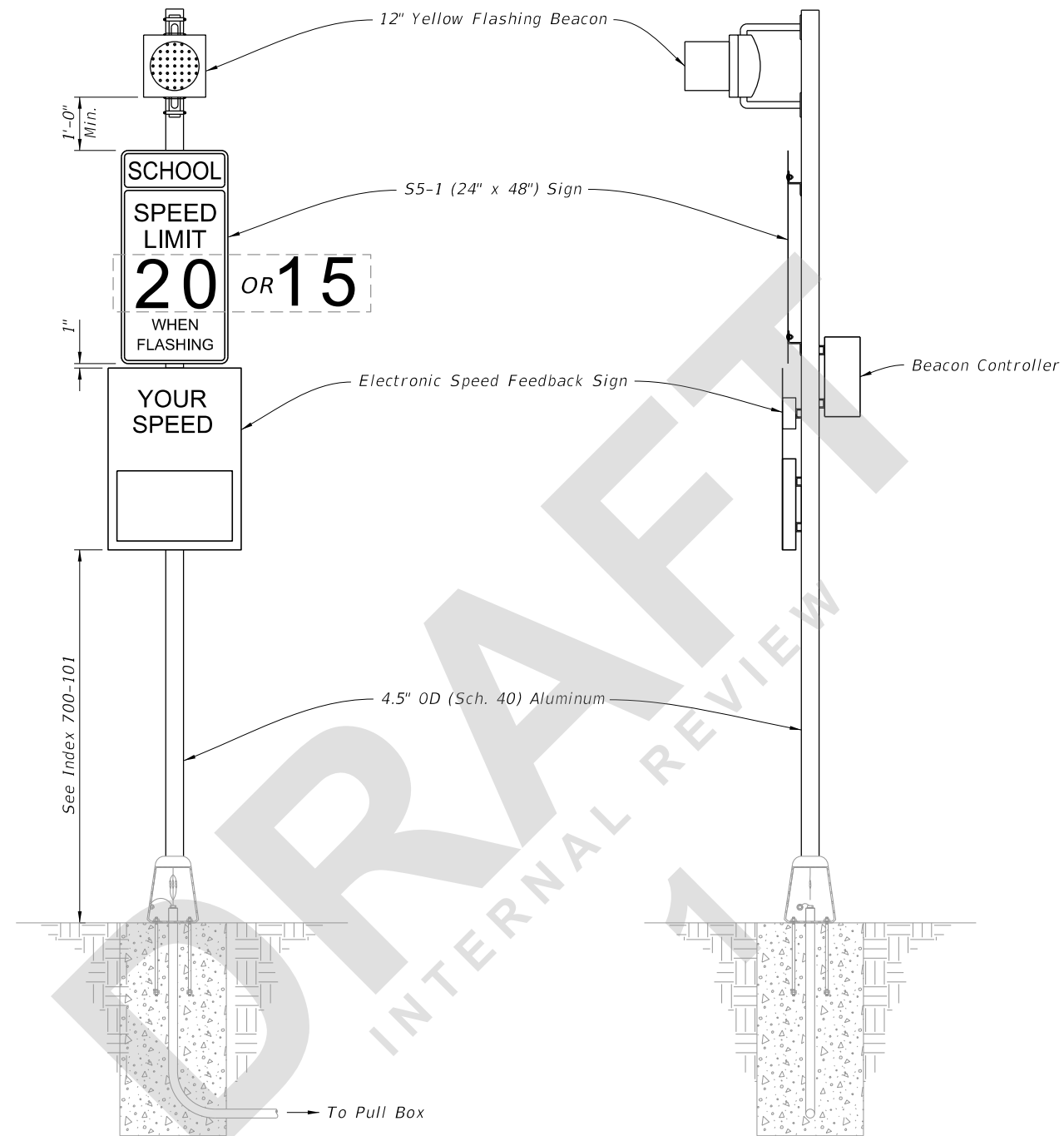


FY 2022-23
STANDARD PLANS

ENHANCED HIGHWAY SIGNING ASSEMBLIES

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FRONT ELEVATION

SIDE ELEVATION

NOTES:

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.

8/3/2021 11:14:42 AM

ROADSIDE SIGN ASSEMBLY-3

LAST REVISION 11/01/21	REVISION	DESCRIPTION:
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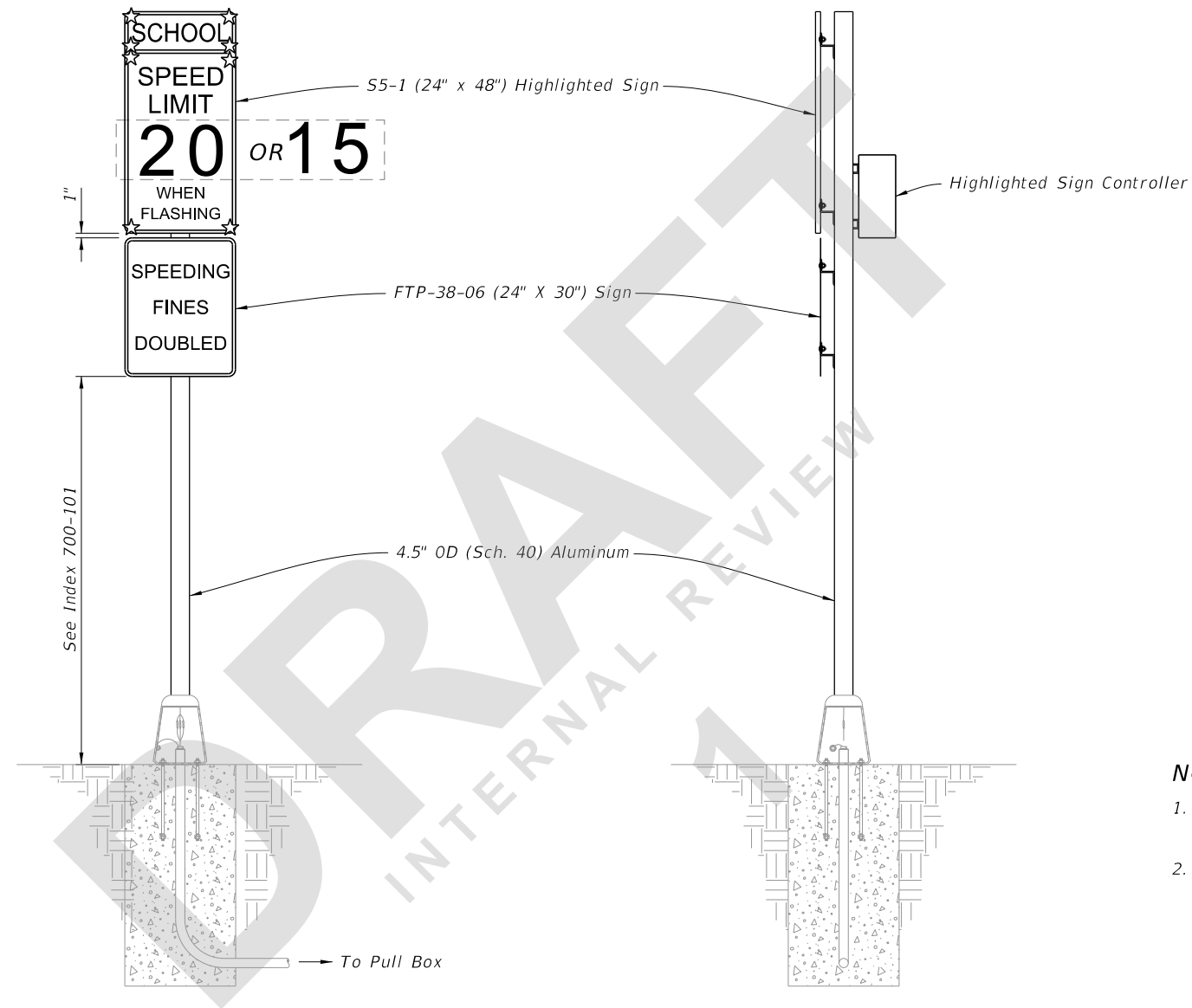
FY 2022-23
STANDARD PLANS

ENHANCED HIGHWAY SIGNING ASSEMBLIES

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11:14:42 AM
8/3/2021



FRONT ELEVATION

SIDE ELEVATION

NOTES:

1. Type A4 Assembly (conventionally-powered) is shown. Type B4 Assemblies (solar-powered) similar.
2. Foundation reinforcement not shown.

ROADSIDE SIGN ASSEMBLY-4

LAST REVISION 11/01/21	DESCRIPTION:
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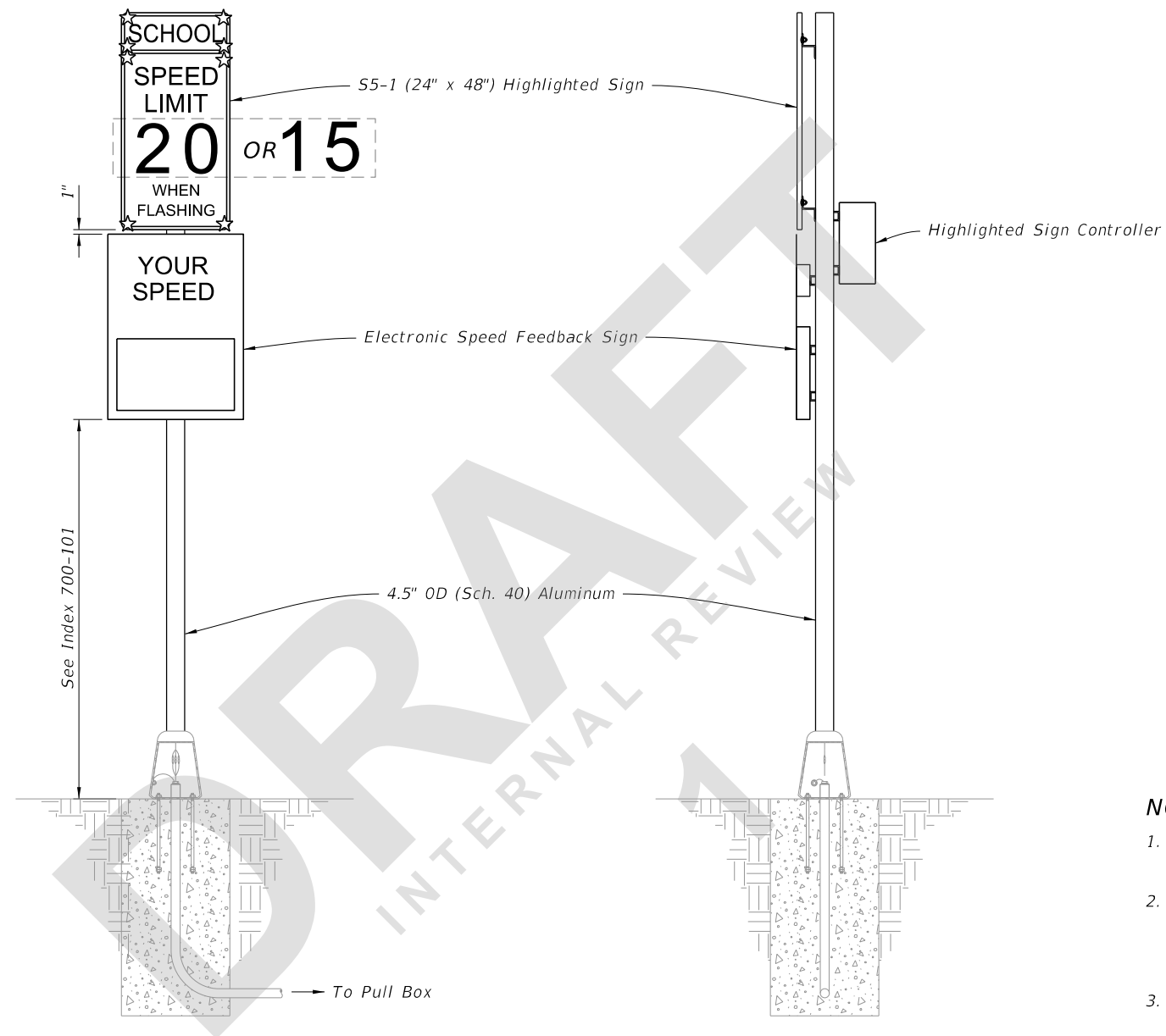


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ENHANCED HIGHWAY SIGNING ASSEMBLIES

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==== FRONT ELEVATION ====

==== SIDE ELEVATION ====

NOTES:

1. Type A5 Assembly (conventionally-powered) is shown. Type B5 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.

11:14:43 AM
8/3/2021

ROADSIDE SIGN ASSEMBLY-5

LAST REVISION 11/01/21	REVISION	DESCRIPTION:
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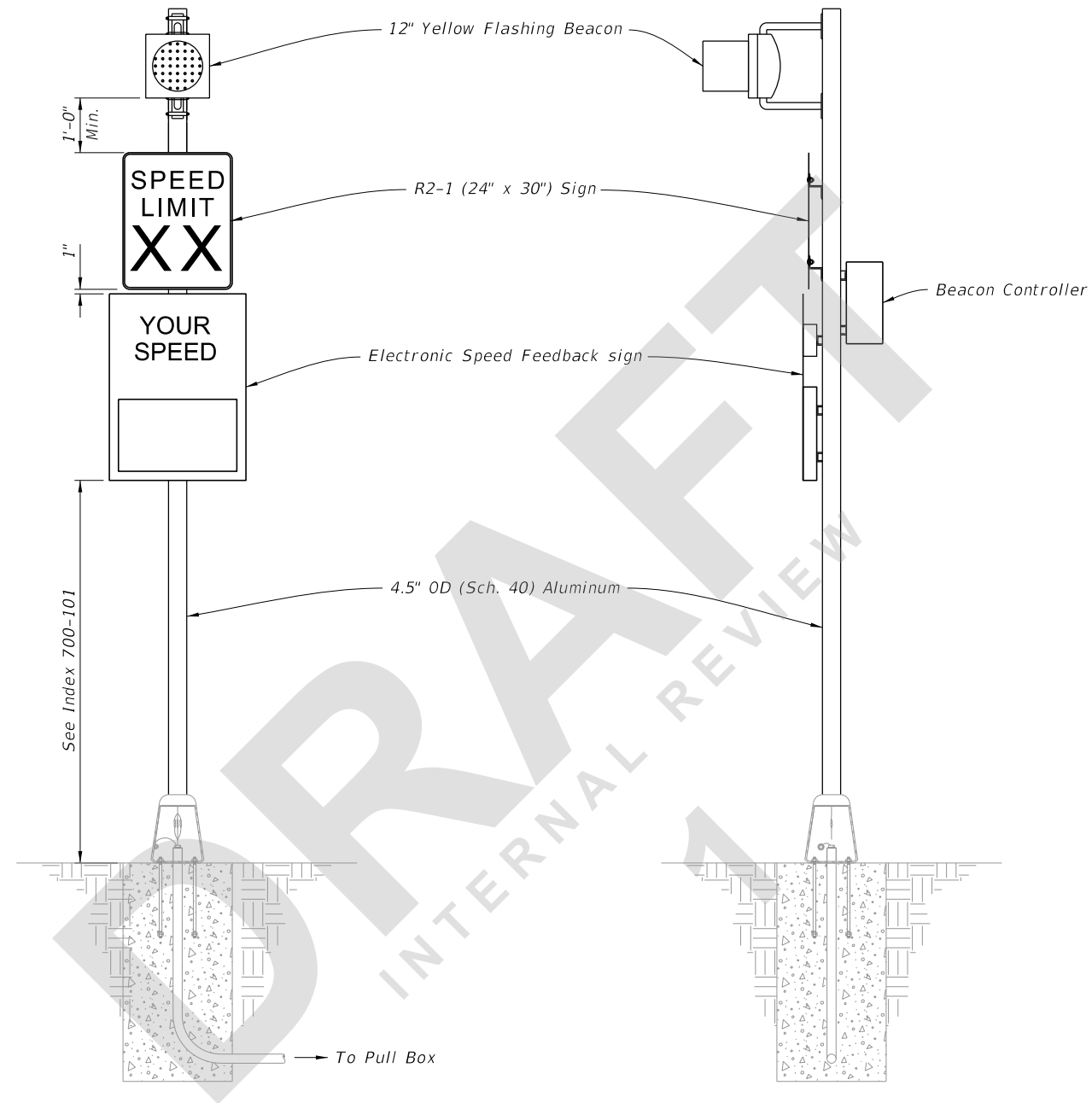


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STANDARD PLANS

ENHANCED HIGHWAY SIGNING ASSEMBLIES

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FRONT ELEVATION

SIDE ELEVATION

NOTES:

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.

8/3/2021 11:14:43 AM

ROADSIDE SIGN ASSEMBLY-6

LAST REVISION 11/01/21	REVISION	DESCRIPTION:
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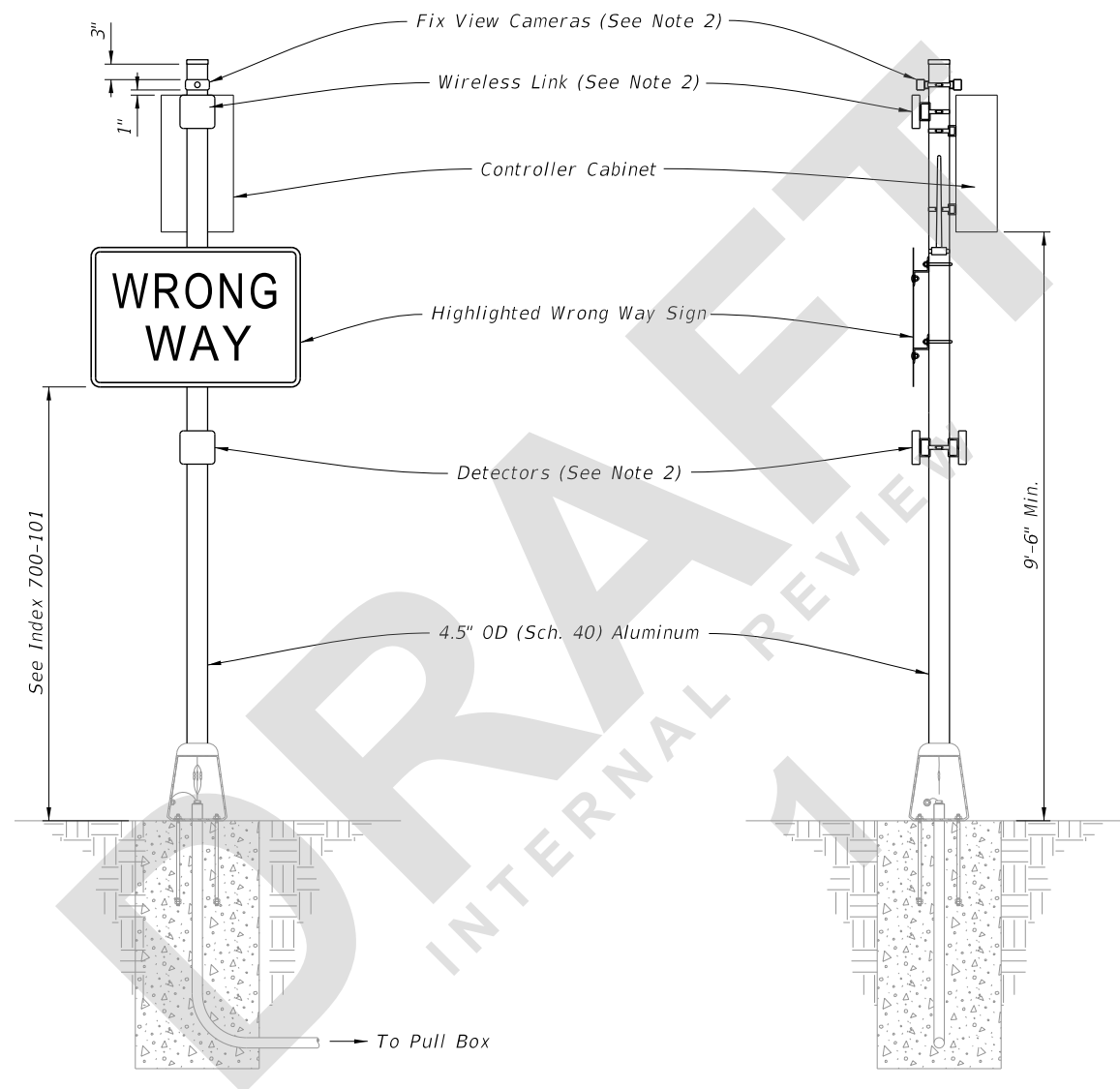


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STANDARD PLANS

ENHANCED HIGHWAY SIGNING ASSEMBLIES

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FRONT ELEVATION

SIDE ELEVATION

NOTES:

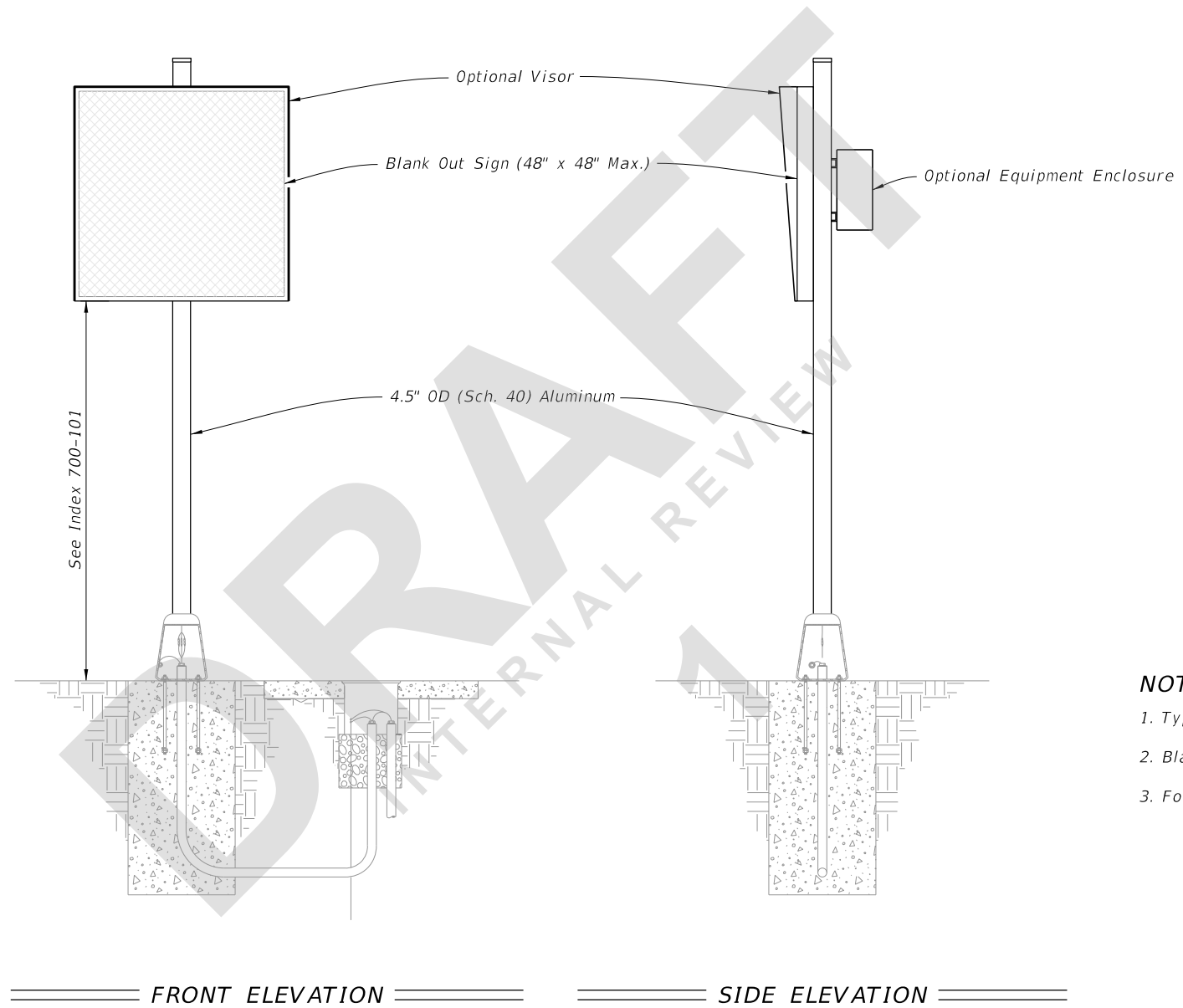
1. Type A7 Assembly (Conventionally-Powered) is shown.
2. Install cameras, wireless link, detectors, and antennas in accordance with the manufacturer's instructions.
3. For solar powered assemblies, install controller and batteries in the same ground mounted cabinet. Install a separate pole for mounting the solar panel. Install the solar panel pole and cabinet as close to the right of way boundary as possible. Orient solar panel to face South.
4. Foundation reinforcement not shown.

8/4/2021 8:52:01 AM

LAST REVISION 11/01/21	REVISION	DESCRIPTION:	 FY 2022-23 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	INDEX 700-120	SHEET 9 of 11
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ROADSIDE SIGN ASSEMBLY-7

11:14:44 AM
8/3/2021



NOTES:

1. Type A1 Assembly (conventionally-powered) is shown.
2. Blank Out Sign visors are optional.
3. Foundation reinforcement not shown.

ROADSIDE SIGN ASSEMBLY-8

LAST REVISION	DESCRIPTION:
11/01/21	

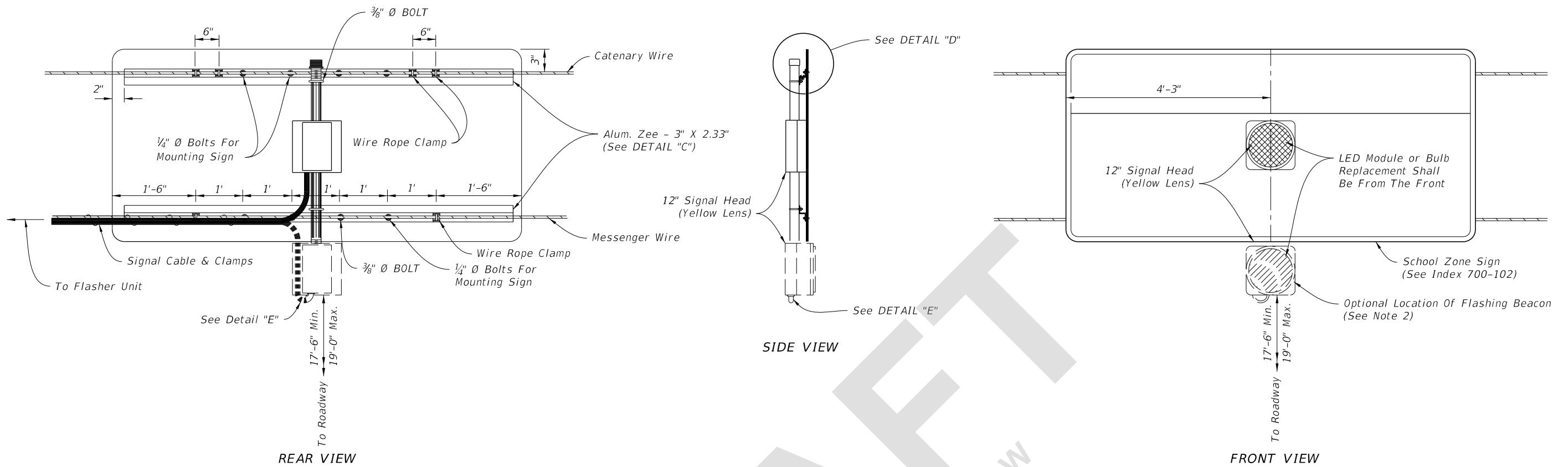


FY 2022-23
STANDARD PLANS

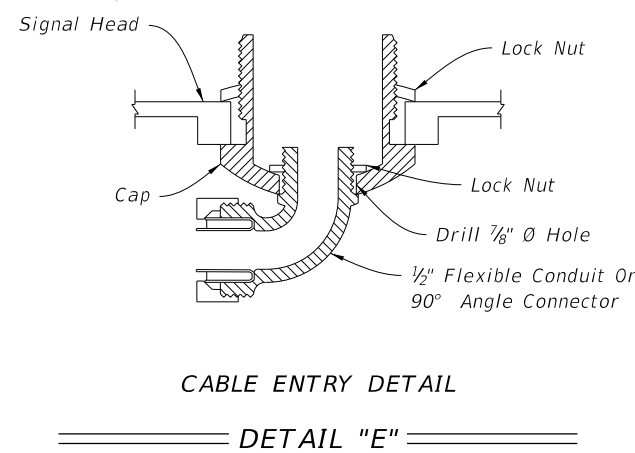
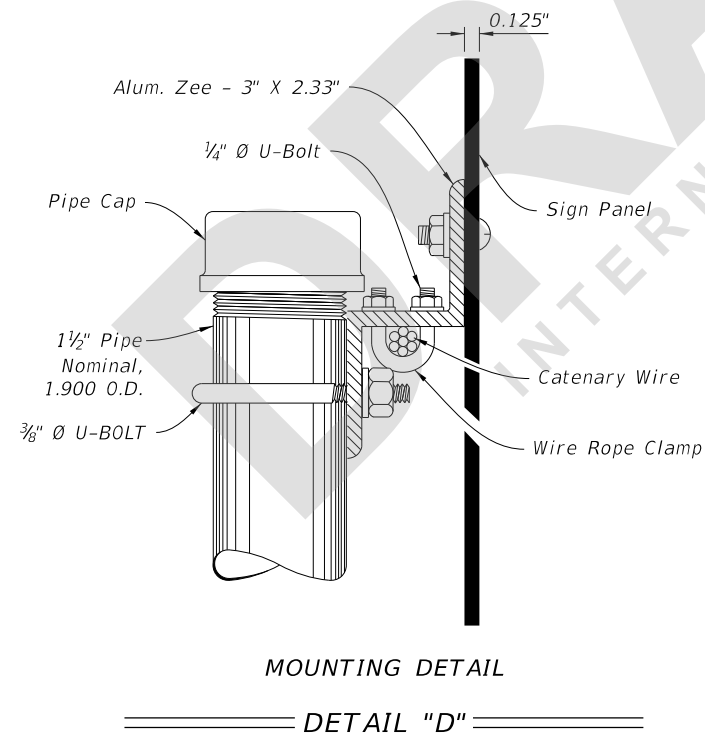
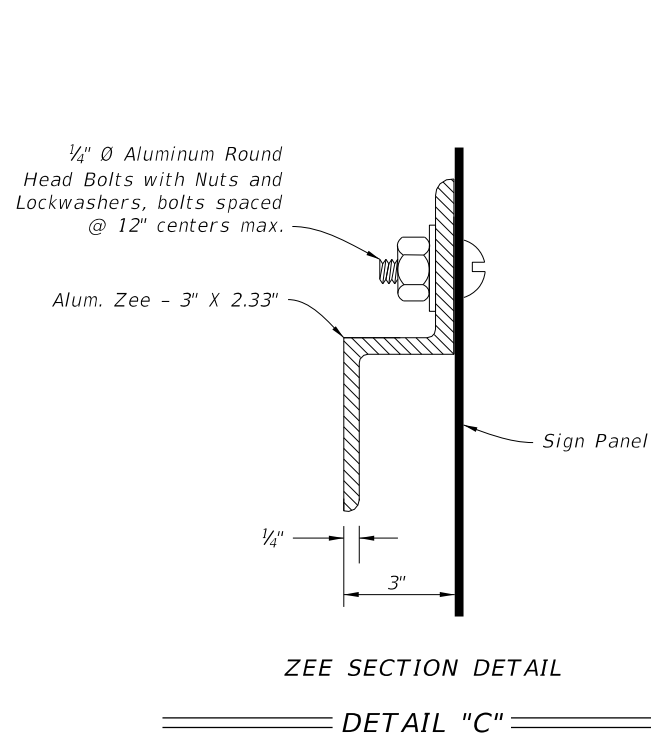
ENHANCED HIGHWAY SIGNING ASSEMBLIES

INDEX
700-120

SHEET
10 of 11



OVERHEAD SCHOOL SIGN ASSEMBLY



- 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

8/3/2021 11:14:45 AM

LAST REVISION 11/01/21	REVISION	DESCRIPTION:		FY 2022-23 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	INDEX 700-120	SHEET 11 of 11
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