

Origination Form
Proposed Revisions to a Standard Plans Index

Originator:	Turley, Joshua	Index Number:	400-010
Date:	4/22/2025	Sheet Number(s):	all
E-mail:	Joshua.Turley@dot.state.fl.us	Index Title:	CANTILEVER RETAINING WALL (C-I-P)

Summary of the changes:

Redeveloped Index (General cleanup and rearrangement of details).
 Sheet 1: Updated Notes to General Notes; Added new Note1 "Work with Specifications 400 and 415. See the Retaining Wall Control Drawings and Data Tables in the Plans"; Added Isometric View; Updated Bar M to match VIEW A-A detail.
 Sheet 2: Added an alternate footing step detail "Option II; Updated Notes formatting".

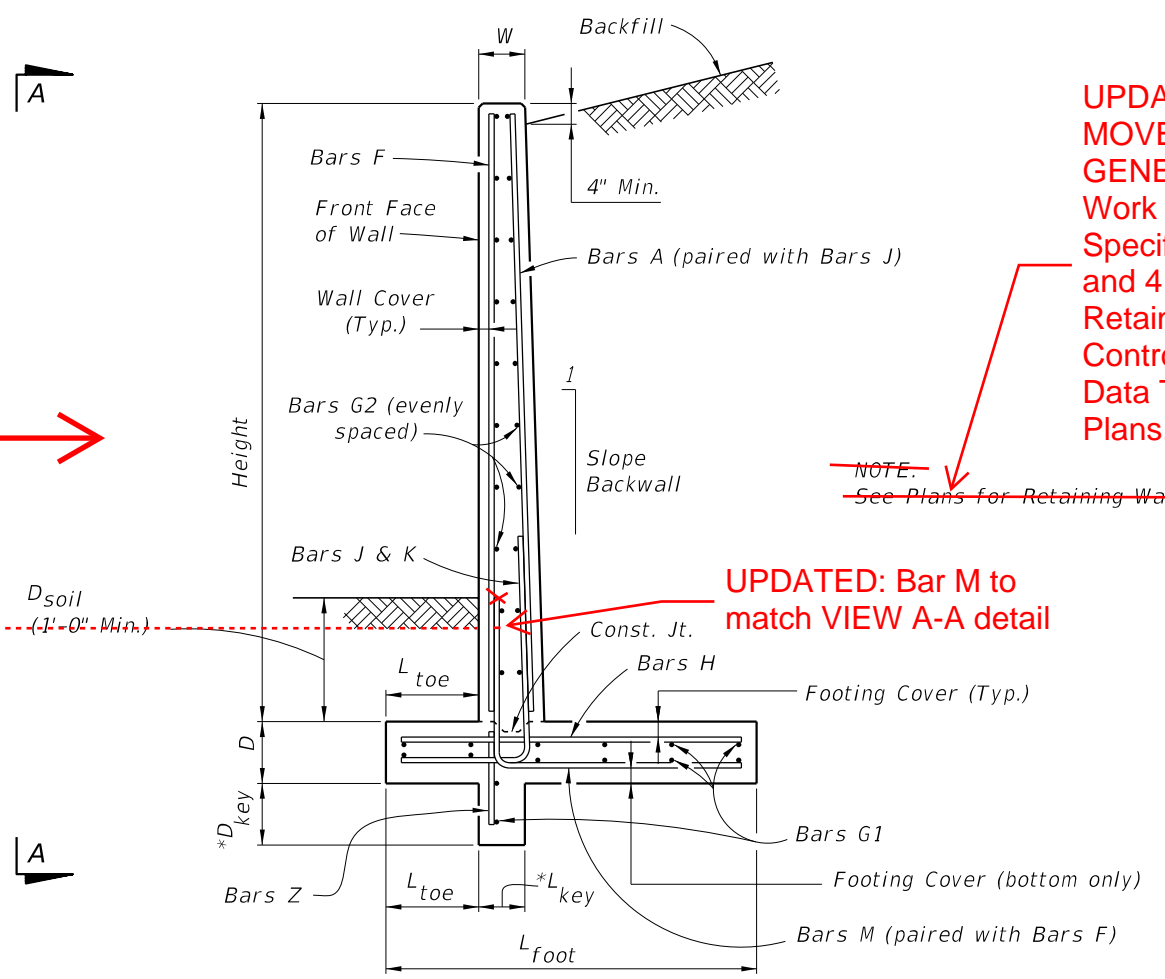
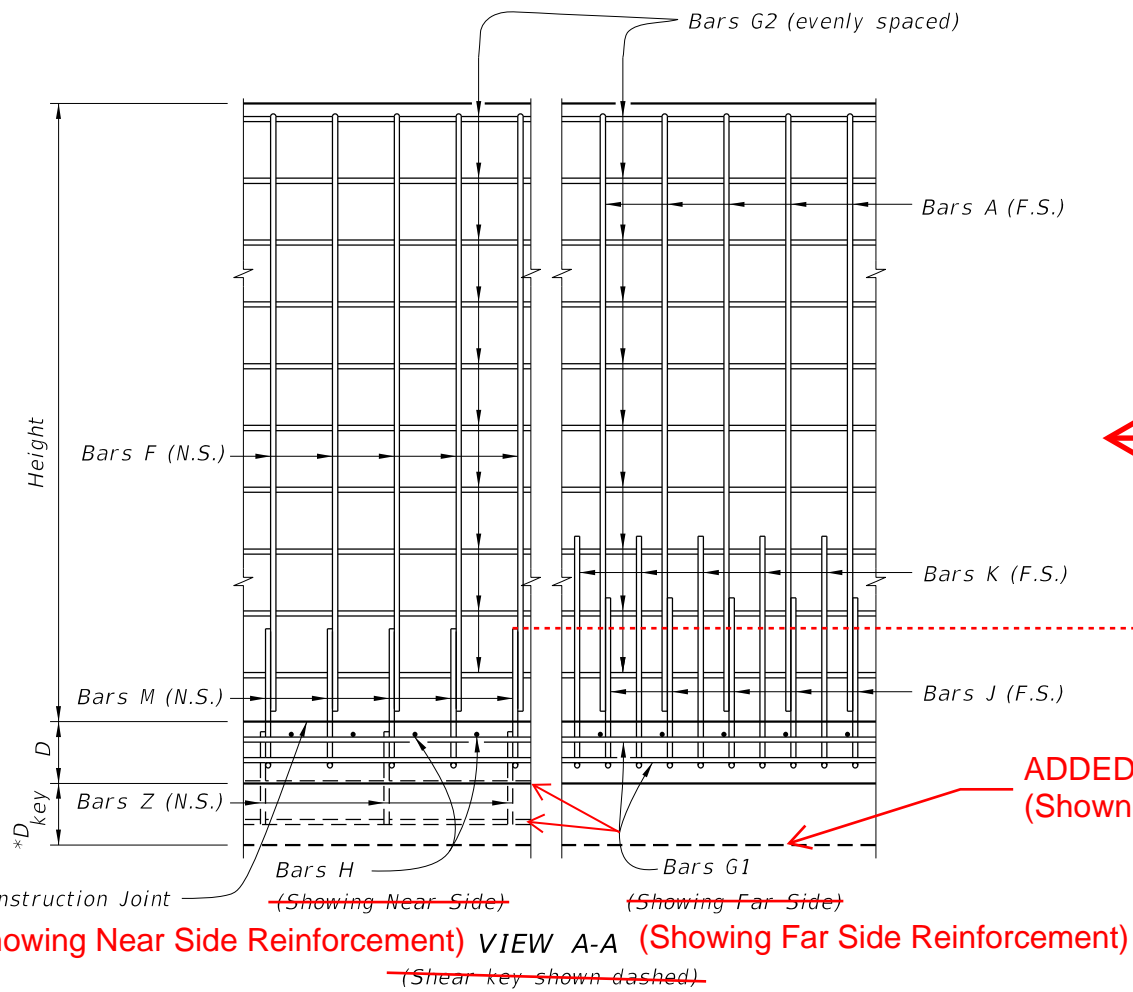
Commentary/Background:

Contractors requested an option to pour the footing over top of the lower footing. This detail was previously in the 2017-2018 book but was changed to the newer detail to manage potential cracking better. However, the new detail is more difficult to construct because its hard to maintain a vertical slope on the soil in order to cast the concrete. We've never had reports the older detail failed so we are adding it back in a a more constructible option.

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)"]



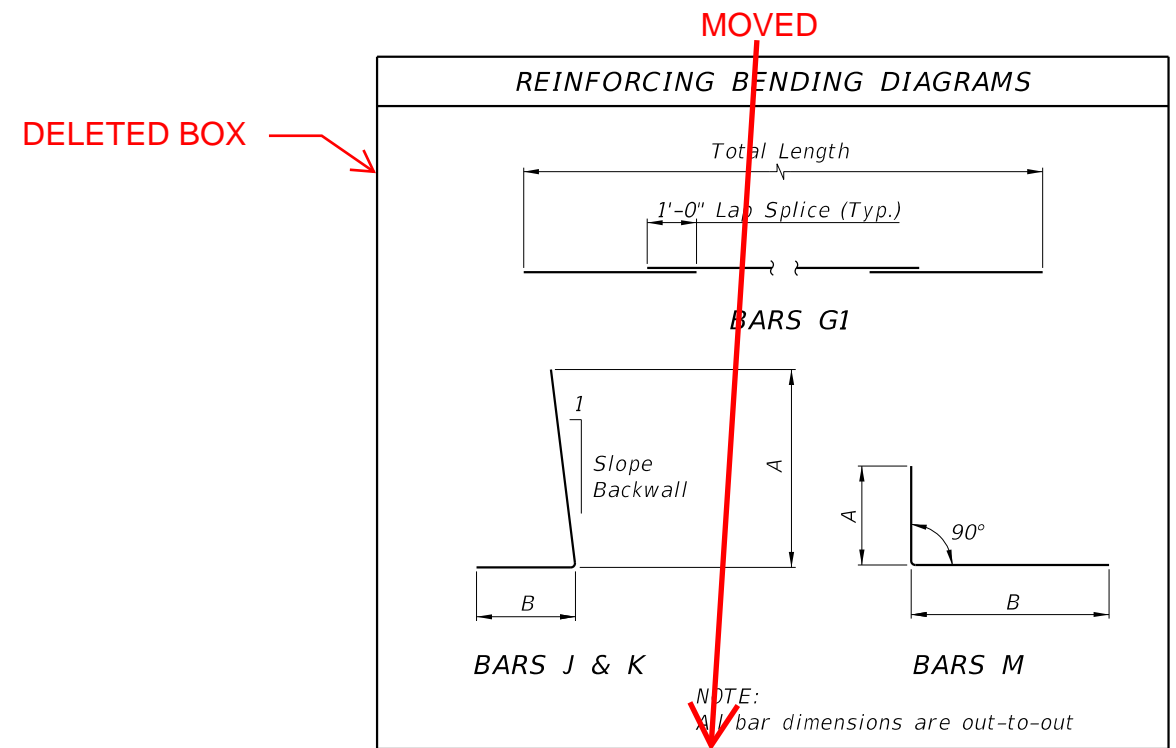
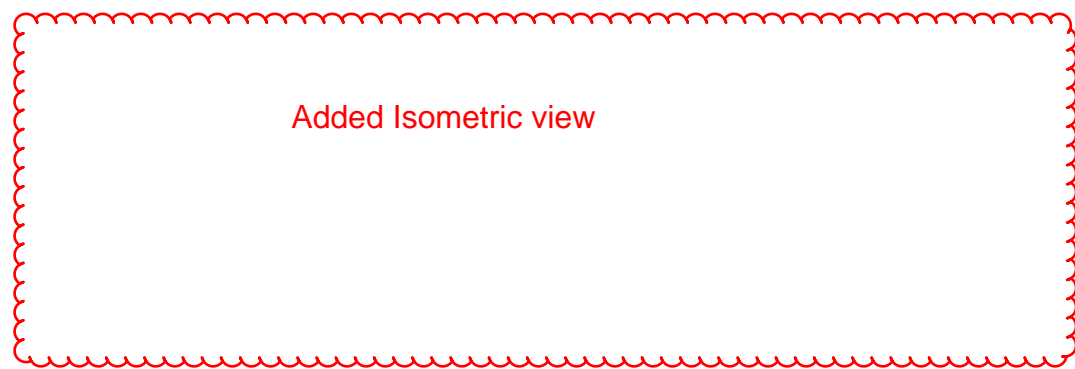
* Shear Key is required only when specified in the Plans.

TYPICAL SECTION

GENERAL NOTES

TRAFFIC RAILINGS OR PARAPETS:
If there is a Traffic Railing or Parapet on the wall, align Wall Joints with V-Grooves, and Wall Expansion Joints with Barrier Open Joints.

FOUNDATION:
Prepare the soil below the footing in accordance with the requirements for spread footings in Specification Section 455.



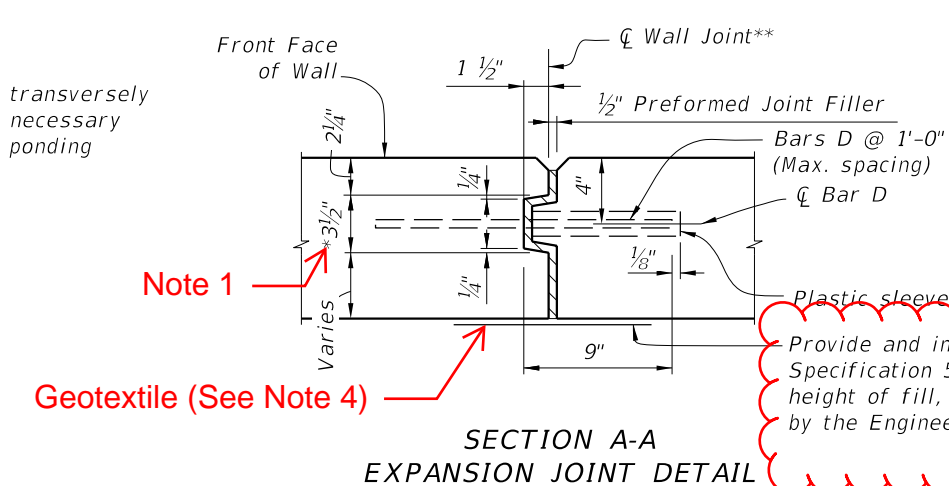
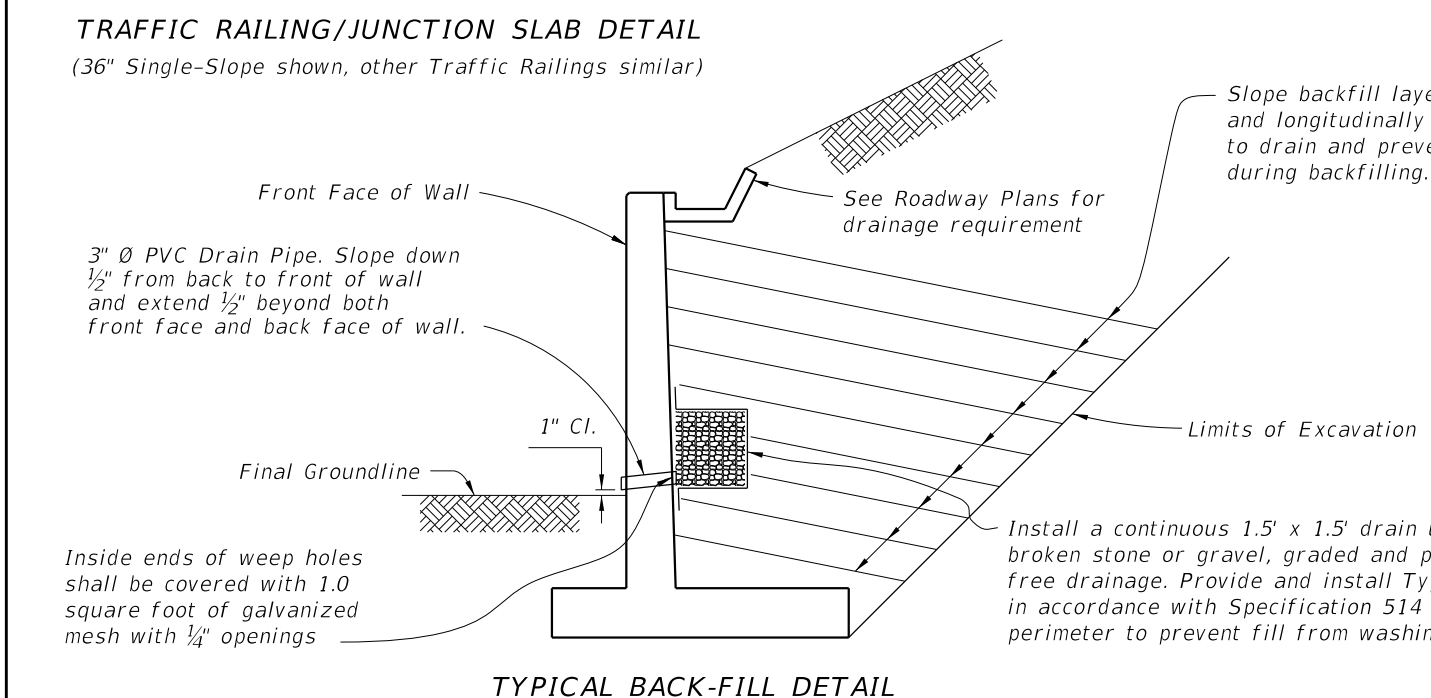
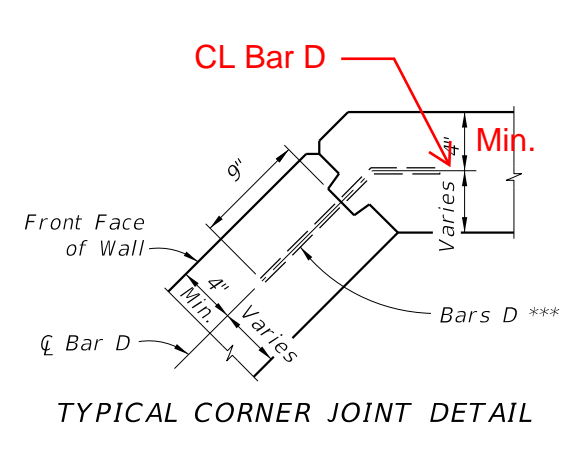
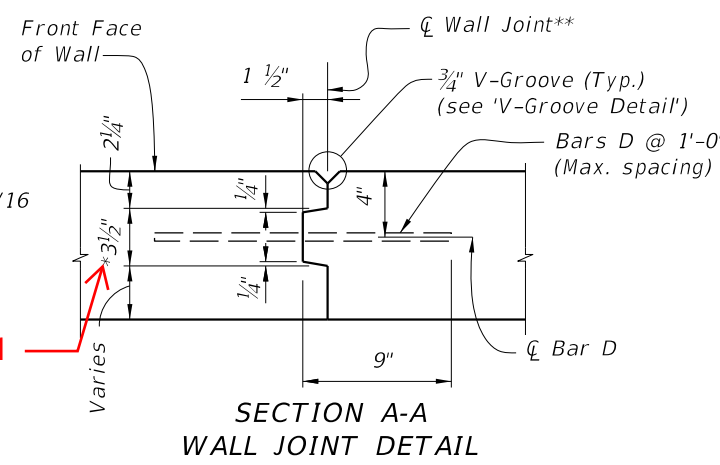
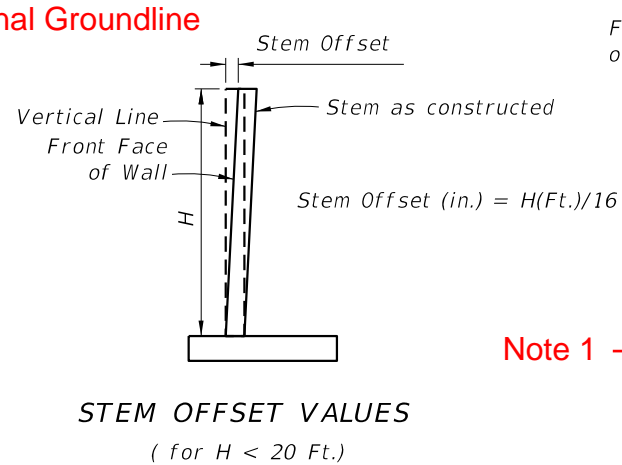
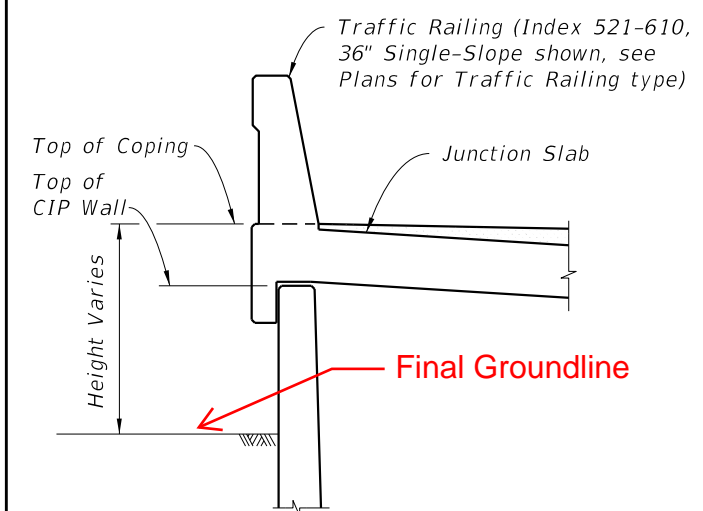
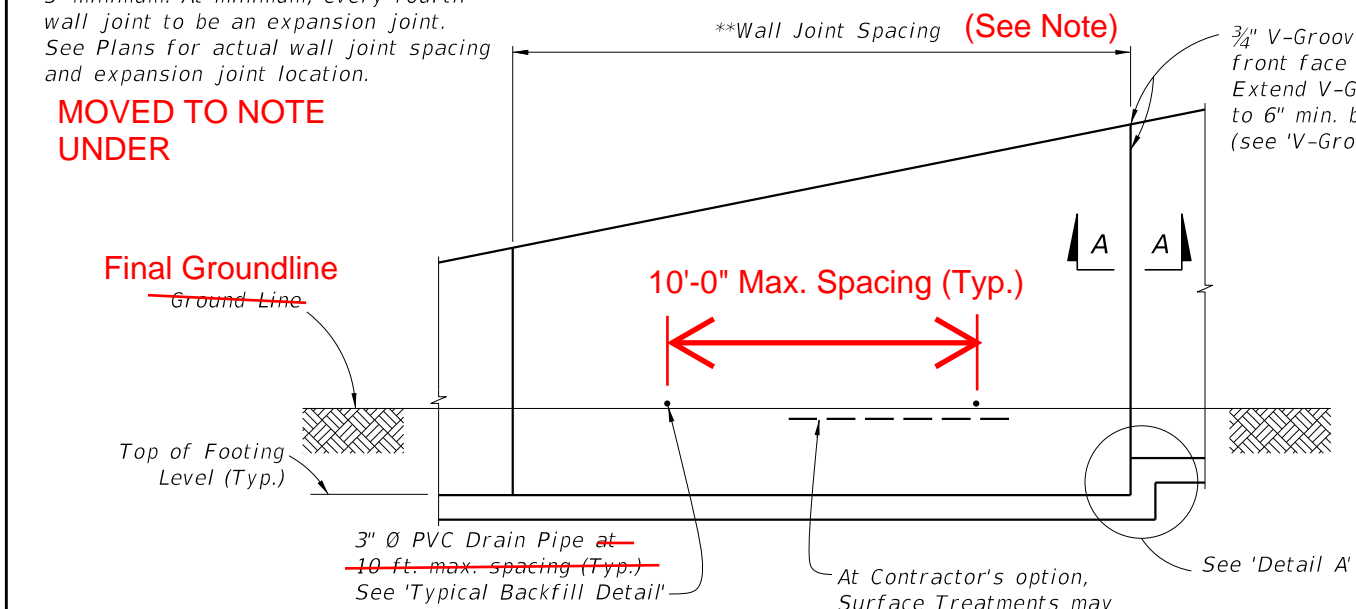
2026-27

9/10/2024 11:26:51 AM

LAST REVISION 11/01/20	DESCRIPTION: 11/01/25	FDOT	FY 2025-26 STANDARD PLANS	CANTILEVER RETAINING WALL (C-I-P)	INDEX 400-010	SHEET 1 of 2
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**Wall joint spacing 25 ft. maximum and 5' minimum. At minimum, every fourth wall joint to be an expansion joint. See Plans for actual wall joint spacing and expansion joint location.

MOVED TO NOTE UNDER



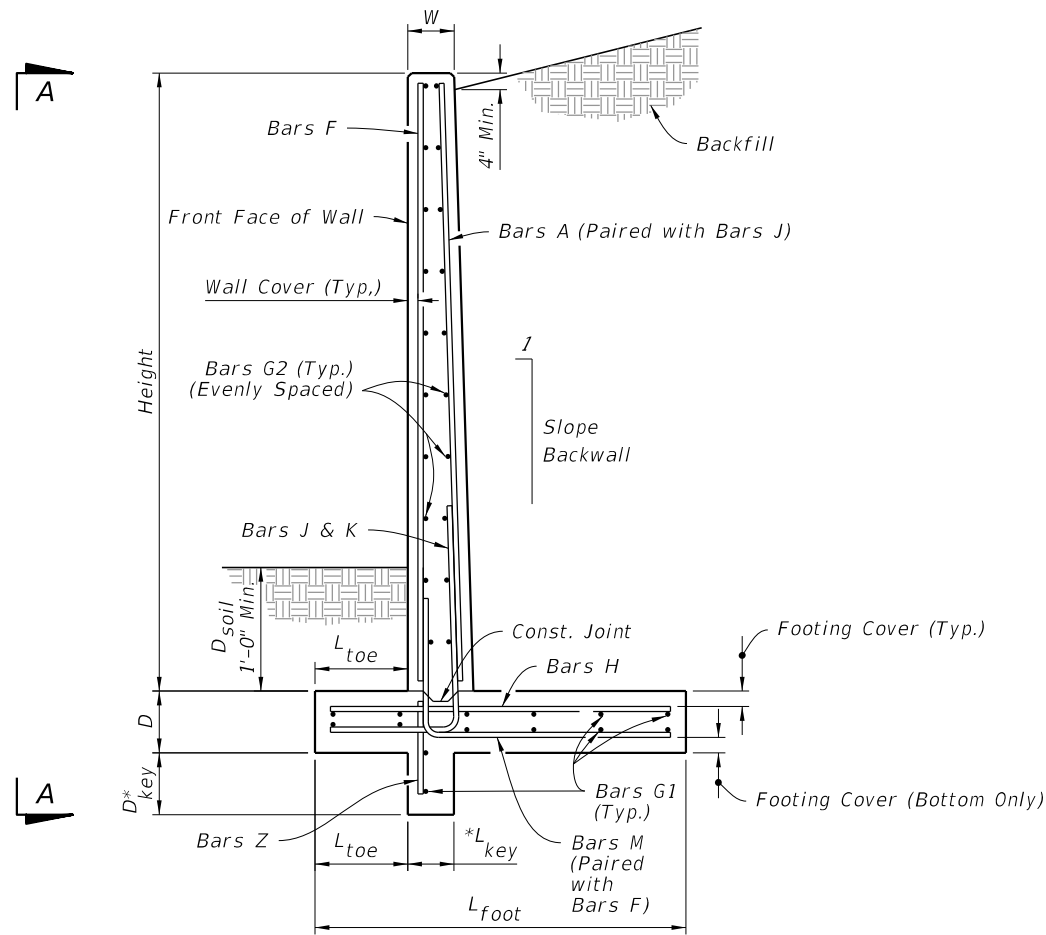
MOVED TO NOTE 4

Provide and install Type D-5 geotextile in accordance with Specification 514. Attach geotextile, 1'-0" wide and full height of fill, to the back of wall with an adhesive approved by the Engineer.

1. Key to stop at top of footing and 6" from top of wall. Joint across footing and top of wall to be a straight line.
2. ** Stay-In-Place Plastic Preformed Bond Beakers are permitted to form joints.
3. *** Bars D: Where a bend is required to maintain clearances, submit bend angle to GFRP supplier; steel reinforcing may be field bent.

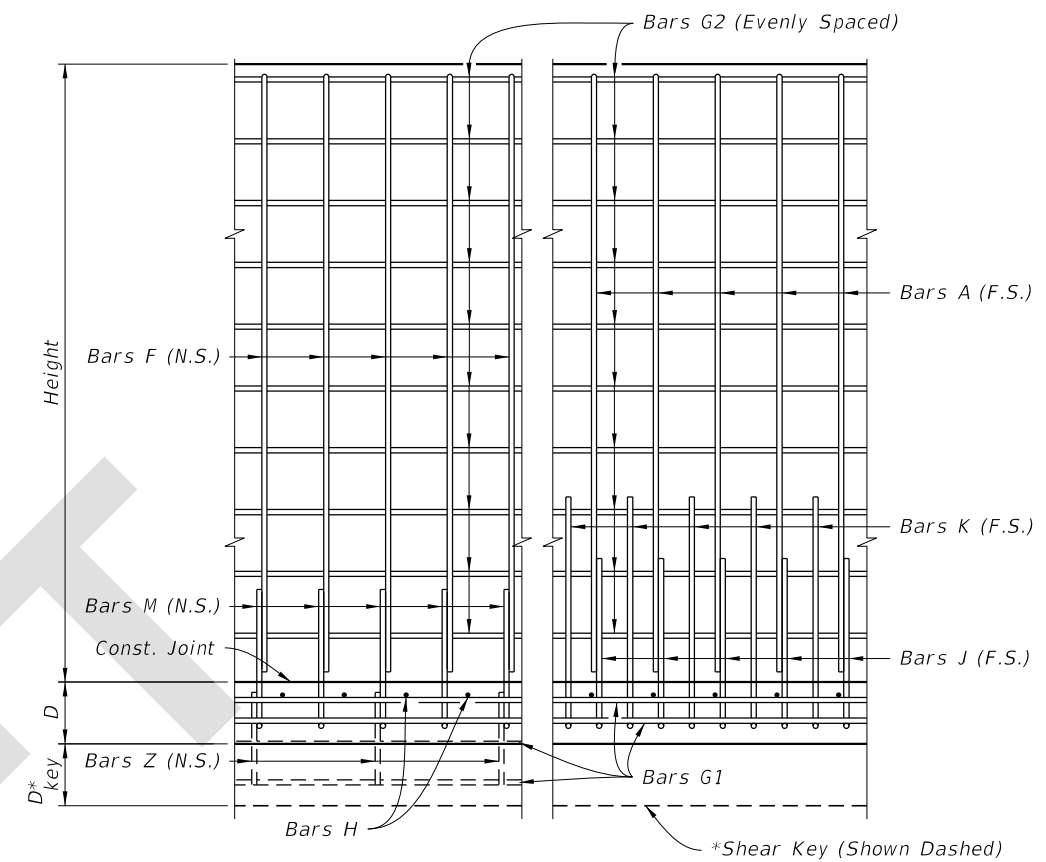
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LAST REVISION 11/01/23	DESCRIPTION: 11/01/25	FDOT	FY 2025-26 STANDARD PLANS	CANTILEVER RETAINING WALL (C-I-P)	INDEX 400-010	SHEET 2 of 2
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*Shear Key is required only when specified in the Plans.

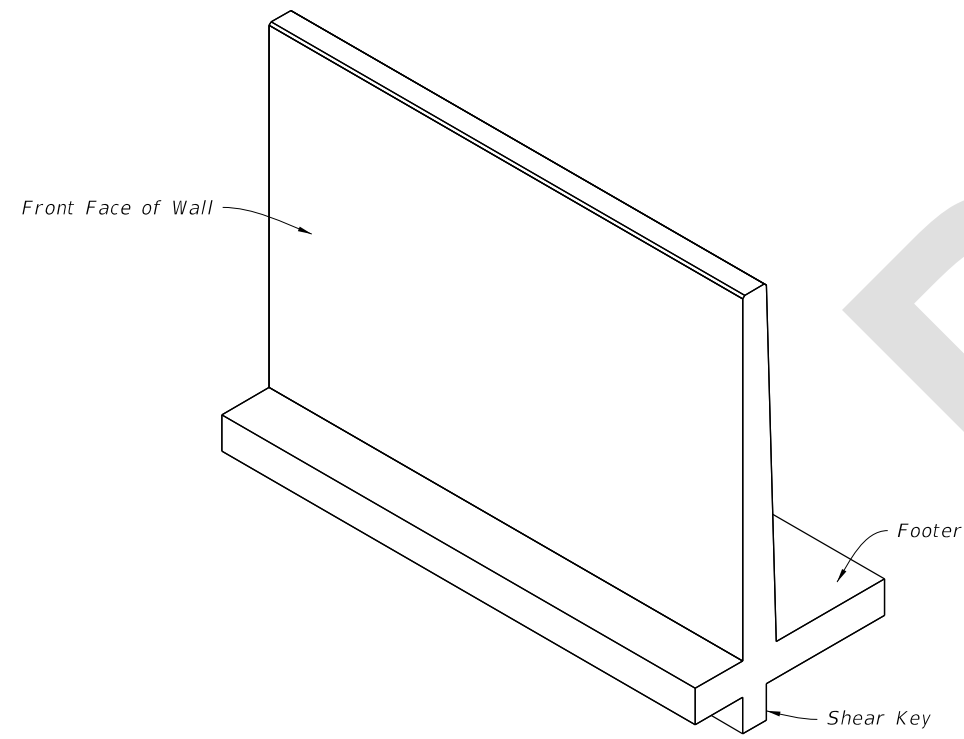
TYPICAL SECTION



(Showing Near Side Reinforcement)

(Showing Far Side Reinforcement)

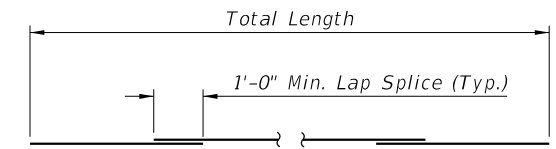
VIEW A-A



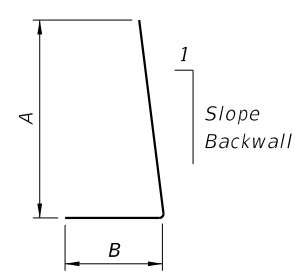
ISOMETRIC VIEW

GENERAL NOTES:

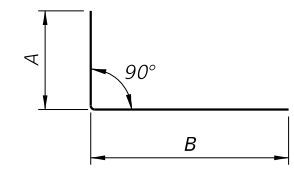
1. Work with Specifications 400 and 415. See the Retaining Wall Control Drawings and Data Tables in the Plans.
2. TRAFFIC RAILINGS OR PARAPETS:
If there is a Traffic Railing or Parapet on the wall, align Wall Joints with V-Grooves, and Wall Expansion Joints with Barrier Open Joints.
3. FOUNDATION:
Prepare the soil below the footing in accordance with the requirements for spread footings in Specification 455.



BARS G1 & G2



BARS J & K



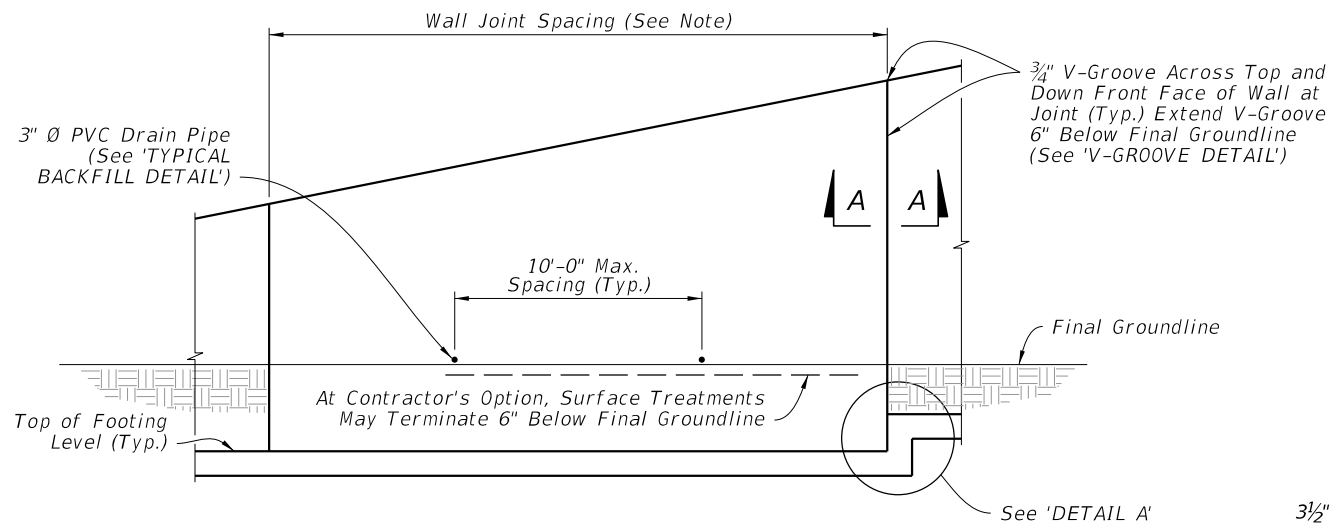
BARS M

NOTE: All bar dimensions are out-to-out

REINFORCING BENDING DIAGRAMS

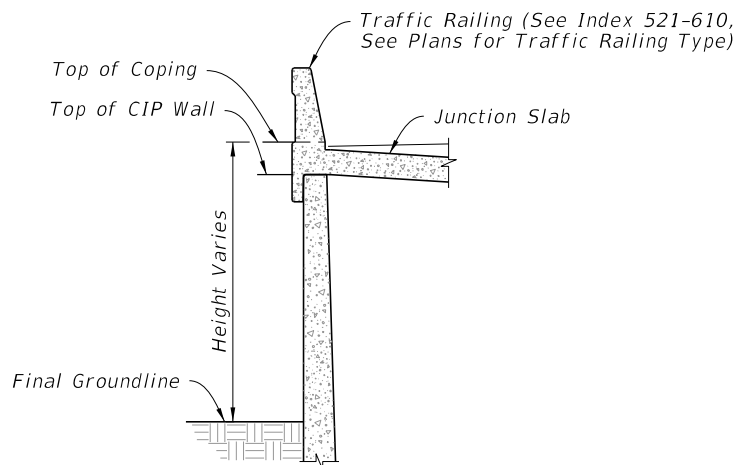
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LAST REVISION 11/01/25	REVISION	DESCRIPTION:		FY 2026-27 STANDARD PLANS	CANTILEVER RETAINING WALL (C-I-P)	INDEX 400-010	SHEET 1 of 2
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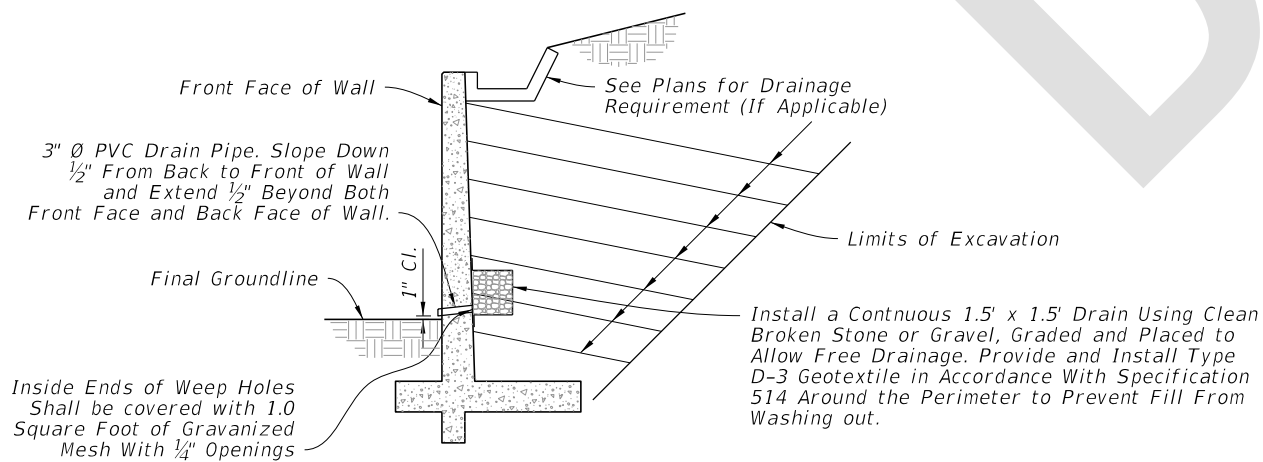


NOTE: Wall joint spacing 25' maximum and 5' minimum. At Minimum, every fourth wall joint to be an expansion joint. See plans for actual wall joint spacing and expansion joint locations.

FRONT ELEVATION



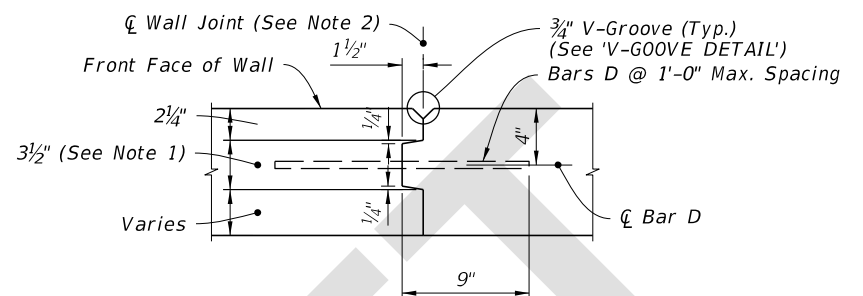
TRAFFIC RAILING/JUNCTION SLAB DETAIL
(36" Single-Slope Shown, Other Traffic Railings Similar)



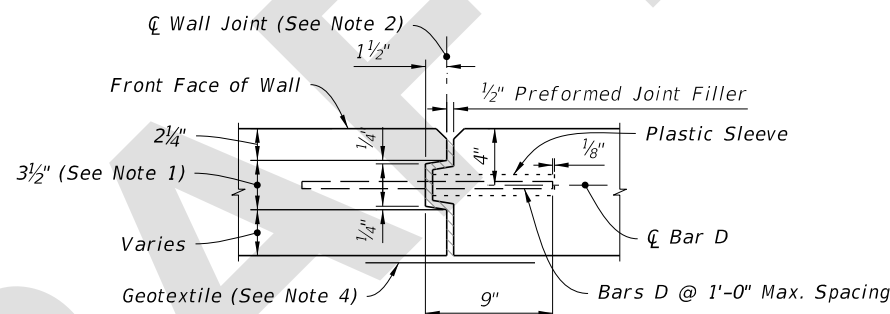
TYPICAL BACK-FILL DETAIL

NOTES:

1. Key to stop at top of footing and 6" from top of wall. Joint across footing and top of wall to be a straight line.
2. Stay-In-Place Plastic Preformed Bond Breakers are permitted to form joints.
3. Bars D: Where a bend is required to maintain clearances, submit bend angle to GFRP supplier; steel reinforcing may be field bent.
4. Provide and install Type D-5 geotextile in accordance with Specification 514. Attach geotextile, 1'-0" wide and full height of fill, to the back of wall with an adhesive approved by the Engineer.

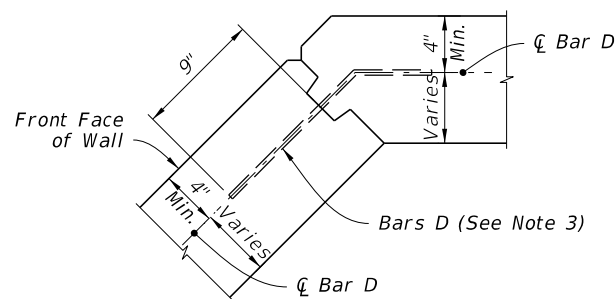


WALL JOINT DETAIL

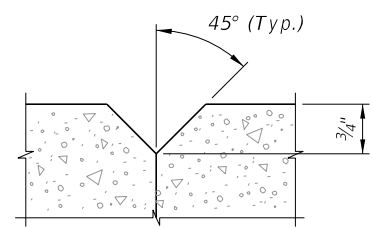


EXPANSION JOINT DETAIL

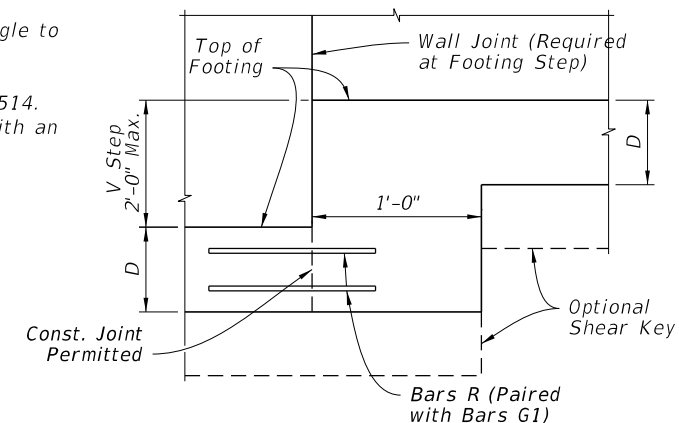
SECTION A-A



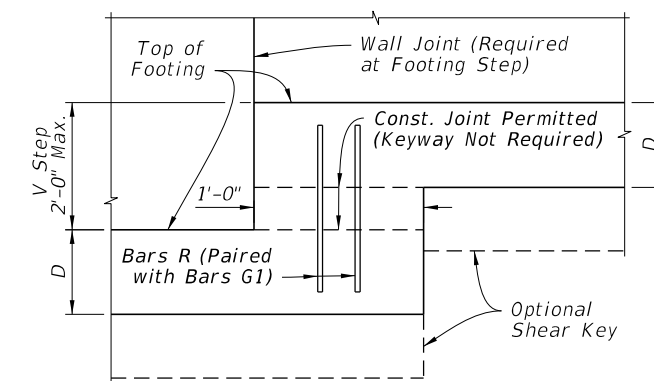
CORNER JOINT DETAIL (TYP.)



V-GROOVE DETAIL

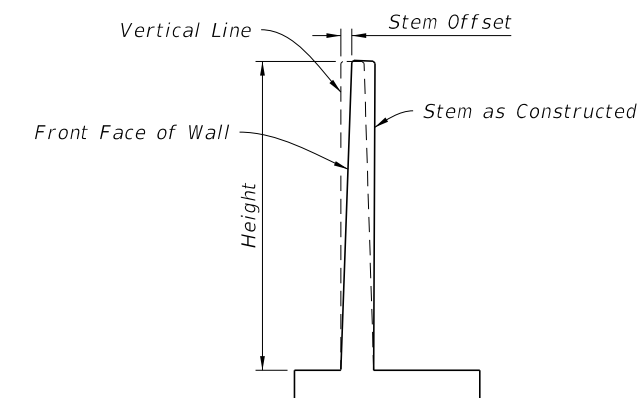


OPTION I



OPTION II

DETAIL A



Stem Offset (in.) = H (ft.) / 16

STEM OFFSET VALUES
(For Height < 20 Ft.)

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LAST REVISION 11/01/25	DESCRIPTION:		FY 2026-27 STANDARD PLANS	CANTILEVER RETAINING WALL (C-I-P)	INDEX	SHEET
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