

Origination Form
Proposed Revisions to a Standard Plans Index

Originator:	Behring, Zachary	Index Number:	455-500
Date:	7/8/2026	Sheet Number(s):	2
E-mail:	zachary.behring@dot.state.fl.us	Index Title:	Temporary Steel Sheet Pile Wall

Summary of the changes:

New Standard Plan Index for temporary steel sheet pile wall.

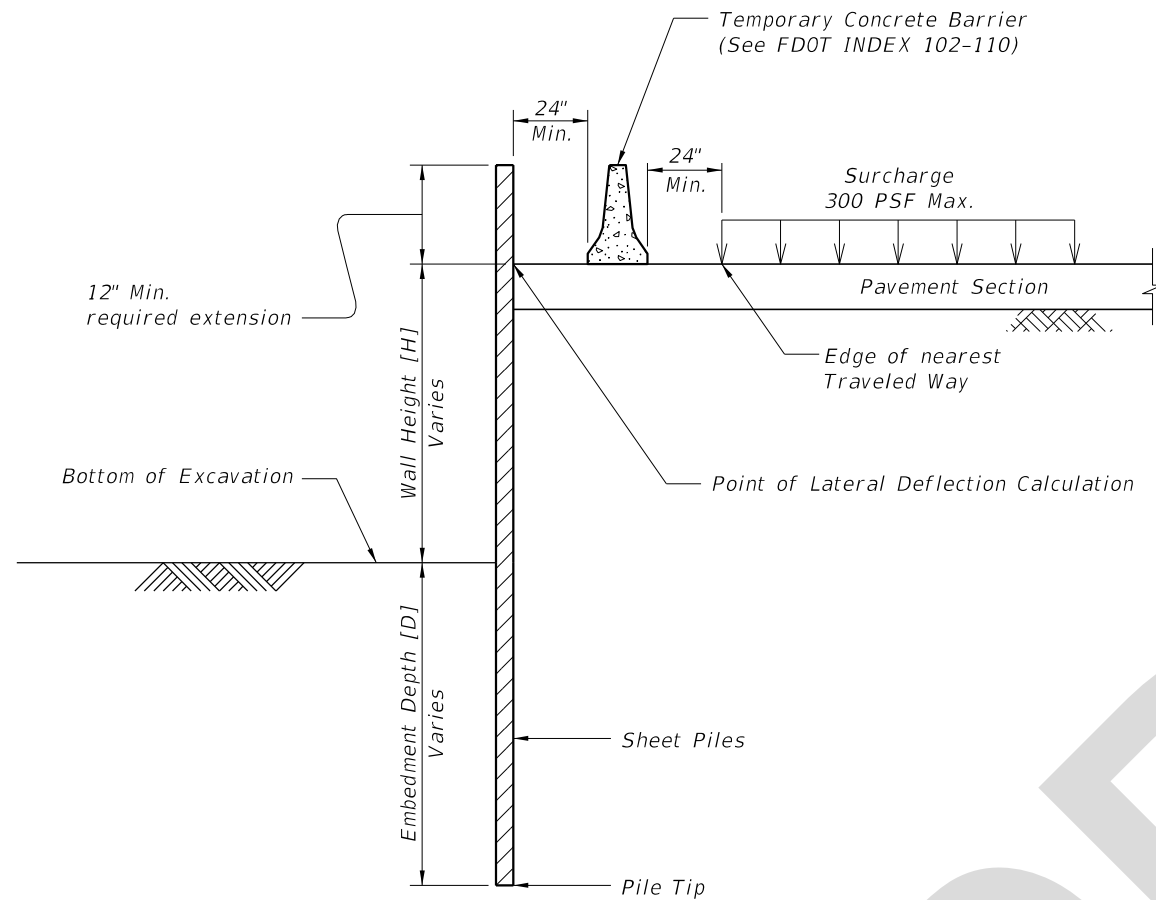
Commentary/Background:

Index is expected to be used by contractors in unforeseen need of temporary walls.

Other Affected Documents/Offices	Person Contacted	Affected (Yes/No)
Other Standard Plans		
FDOT Design Manual	Mark Musselman	Yes
Standard Specifications		
Basis of Estimates Manual		
Approved Product List		
Construction Office	Not contacted	Yes
Maintenance Office		

Implementation

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DETAIL "A" - SHEET PILE WALL

NOTES

DESCRIPTION:

This Index provides the steel sheet pile section and embedment requirements for temporary cantilever steel sheet pile walls.

MATERIALS:

Steel sheet pile shall conform to the requirements of the Standard Specifications for Road and Bridge Construction, Section 962.

REQUIREMENTS FOR USE:

Refer to SPI 455-500 for Subsurface Exploration requirements.
The project Geotechnical Engineer shall verify all the design parameters have been satisfied prior to construction.

CONSTRUCTION:

Construct sheet pile walls in accordance with the Standard Specifications for Road and Bridge Construction, Section 455.

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LAST REVISION 11/01/26	REVISION	DESCRIPTION:	 FY 2027-28 STANDARD PLANS	TEMPORARY STEEL SHEET PILE WALL	INDEX 455-500	SHEET 1 of 2
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Case 1: Groundwater at Excavation Elevation with 3 feet of Head Differential					
Wall Height H (ft.)	Minimum Embedment D (ft.)	Minimum Plastic Section Modulus (in ³ ./ft.)		Minimum Moment of Inertia (in ⁴ ./ft.)	
		A-328 (Fy-39 ksi)	A-572 (Fy-50 ksi)	1.5" Lateral Deflection	3.0" Lateral Deflection
6	15.5	6	5	14	7
7	17.5	9	7	25	13
8	19	13	10	43	21
9	21	18	14	70	35
10	23	24	19	112	57
11	24.5	31	24	170	84
12	26.5	38	30	252	127
13	28	48	37	365	182
14	30	58	45	503	252
15	31.5	70	55	694	348

Case 2: Groundwater at 2 feet Below Bottom of Excavation					
Wall Height H (ft.)	Minimum Embedment D (ft.)	Minimum Plastic Section Modulus (in ³ ./ft.)		Minimum Moment of Inertia (in ⁴ ./ft.)	
		A-328 (Fy-39 ksi)	A-572 (Fy-50 ksi)	1.5" Lateral Deflection	3.0" Lateral Deflection
6	8	3	2	4	2
7	9.5	4	3	7	4
8	11.5	6	5	14	8
9	13	9	7	25	13
10	15	13	10	43	22
11	16.5	17	14	69	34
12	18.5	23	18	112	57
13	20	30	23	170	85
14	22.5	38	30	251	125
15	24	47	37	360	181

Case 3: Groundwater at 4 feet Below Bottom of Excavation					
Wall Height H (ft.)	Minimum Embedment D (ft.)	Minimum Plastic Section Modulus (in ³ ./ft.)		Minimum Moment of Inertia (in ⁴ ./ft.)	
		A-328 (Fy-39 ksi)	A-572 (Fy-50 ksi)	1.5" Lateral Deflection	3.0" Lateral Deflection
6	7	3	2	3	2
7	8.5	4	3	6	4
8	9.5	5	4	12	7
9	11	8	6	20	10
10	12.5	11	8	35	18
11	14	14	11	58	30
12	15.5	19	15	90	46
13	17	24	19	135	68
14	18.5	31	24	199	100
15	20.5	38	30	284	140

Case 4: Groundwater at 8 feet Below Bottom of Excavation					
Wall Height H (ft.)	Minimum Embedment D (ft.)	Minimum Plastic Section Modulus (in ³ ./ft.)		Minimum Moment of Inertia (in ⁴ ./ft.)	
		A-328 (Fy-39 ksi)	A-572 (Fy-50 ksi)	1.5" Lateral Deflection	3.0" Lateral Deflection
6	7	3	2	3	2
7	8	4	3	6	4
8	9.5	5	4	12	7
9	10.5	8	6	20	10
10	11.5	10	8	33	17
11	12.5	14	11	54	27
12	14	17	14	82	41
13	15	22	17	121	61
14	16.5	28	22	175	88
15	17.5	34	26	249	125

- Notes:
- Minimum Plastic Section Modulus requirements are for hot-rolled sections. For cold-rolled sections, increase the Minimum Section Modulus by 20%.
 - Refer to SPI 455-500 for guidance on the selection of the limiting lateral deflection.