NOTES

- 1. Work this Index with the Noise Wall Data Tables, and Wall Control Drawings in the Plans
- 2. Construct Noise Walls in accordance with the requirements of Specification Section 534, and Augers Cast Piles in accordance with Specification Section 455.
- 3. Field verify the location of all overhead and underground services shown in the Wall Control Drawings.
- 4. Wall Height is the nominal height of the walls above finished grade. The Wall Embedment Depth for design is 1'-0". The actual embedment depth may vary plus or minus 6" along the length of the wall.
- 5. Post Spacing in this Index are nominal, and are measured from centerline to centerline of the auger cast piles. Actual post spacing may vary as shown in the Wall Control Drawings.

6. Panels:

- A. The sum of the individual stacked panel heights is the Wall Height plus 1'-0" (embedment depth).
- B. Where special graphics are required, locate the horizontal panel joints outside of the graphics. Where possible, hold horizontal panel joints at a constant elevation.
- C. Side Installed Panels are only permitted when reduced overhead clearance between posts prohibits installing panels from the top.
 - 1. For Flush Face panels, install panel into posts from the roadway (front face) of the wall. Recessed panels may be installed from the back face of the wall.
 - 2. After panels are installed and centered between posts, grout between both panel ends and the adjoining posts (see Sheets 4 and 5 for details).
- D. Individual panel heights should be between 6'-0" and 12'-0" tall. The minimum panel height is 4'-0" and may be used where overhead clearance is limited, or where graphic panels are required on shorter walls.
- 7. Concrete And Grout:
 - A. Concrete Class and Compressive Strength for:
 - 1. Precast Panels, Posts, and Post caps: Class IV (fc' = 5500 psi)
 - 2. Cast-In-Place Collars: Class IV (fc' = 5500 psi)
 - B. Minimum Compressive Strength for form removal and handling of posts and panels: 1. 2,500 psi for horizontally cast post and panels

 - 2. 2,000 psi for vertically cast panels or when tilt-up tables are used for horizontally cast panels.
 - A. Grout for Auger Cast Piles:
 - 1. Maximum Working Compressive Strength = 2,000 psi
 - 2. Minimum 28 day strength = 5,000 psi
- 8. Reinforcing Steel:
 - A. In addition to the requirements of Specification Section 415, tie post and pile stirrups at the following locations as a minimum:
 - 1. Post Stirrups Tie at all four corner bars and at every third interior bar intersection.
 - 2. Pile Stirrups Tie to the main vertical reinforcing at alternate intersections for circular configurations and at the four corners and at every third interior bar intersection for rectangular configurations.
 - B. Provide 2" concrete cover unless noted otherwise.
- 9. Casting Tolerances for precast panels and posts:
 - A. Overall Height and Width: $+/-\frac{1}{4}$ "
 - B. Thickness: +/- 1/4"
 - C. Plane of side mold: +/- 1/16"
 - D. Openings: +/- 1/3"
 - E. Out of Square: 1/8" per 6 ft., but not more than 3/8" total along any side
 - F. Warping: 1/16"per foot distance to nearest corner
 - G. Bowing: 1/240 panel dimension
 - H. Surface Smoothness for Type "A"Smooth Surface Texture Option: +/- 1/16"

- 10. Provide Fiber Reinforced Neoprene pads with a Durometer Hardness between Grade 50 and 80; or Plain Neoprene Pads with a minimum Durometer Hardness of Grade 50 in accordance with Specification Section 932.
 - A. For Collar Bearing Points provide:
 - 1. 4"x 4"x ¹/₂" Fiber Reinforced Pads;
 - 2. Plain Pads with a may be substituted for Fiber Reinforced Pads when sufficient bearing area is available on the concrete collar for the following:
 - a. 10' Post Spacing: $4''x 4''x \frac{1}{2}''$
 - b. 20' Post Spacing and Wall Height < 17 feet: $4''x 4''x \frac{1}{2}''$
 - c. 20' Post Spacing and Wall Height \geq 17 feet: 4"x 5"x $\frac{1}{2}$ "
 - B. At panel bearing points between stacked panels, use Plain or Fiber Reinforced Neoprene Pads.

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•	ION	DESCRIPTION:
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		2016
FDUI	DESIGN	STANDARDS

GENERAL NOTES

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DESCRIPTION:

FDOT DESIGN STANDARDS

2016

PRECAST NOISE WALLS

TEXTURE OF	PTIONS
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PRECAST NOISE WALLS

Single layer flat surface attached to form liner for casting smooth areas of wall design. See plans for project specific graphic drawings. Joints between flat surface and form liner

GRAPHICS & TEXTURE DETAILS

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Typical Post See Detail "E" See Detail "E"

CASE 2 (Exterior Angle)

TYPICAL PANEL DETAILS

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PRECAST NOISE WALLS

1" Interior Cap

1" Corner Cap

 $\frac{3}{4}$ " Chamfer (Typ.)

No. 4 Bars

Interior Cap

1" Interior Cap

– ¾" Chamfer (Typ.)

1" Corner Cap

- No. 4 Bars

2" Cover

Interior Cap

1" Interior Cap

1" Corner Cap

No. 4 Bars

Interior Cap

'3" ' Corner Cap

-¾" Chamfer (Typ.)

2" Cover

3"

Corner Cap

12" [']R['] (all <u>sides)</u>

Corner Cap

2" Cover

3"

8''

3"

3"

 $11\frac{1}{2}$ "

1'-11/2"





TABLE 1A - TABLE OF POST REINFORCING STEEL											TA	BLE 1B	- PIL	E LEN	GTHS	(Feet)	- WIN	ID SPE	ED =	110 M	РН										
	POST LI	ENGTHS					WIND	SPEEL	D = 11	0 MPF	1					10'-0" POST SPACING 20'-0" POST SPACING															
WALL HEIGHT					10 POST S	"-0" SPACING					20 POST S	'-0" SPACING			WALL HEIGHT		H-P	OSTS			CORNE	R POSTS			H-P)STS			CORNER	₹ POSTS	
(Feet)	WITHOUT CAP	WITH CAP	BARS A	BA	ARS B	BARS D	B	ARS E	BARS A	Bi	ARS B	BARS D	Bi	ARS E	(Feet)	50	IL 1	501	!L 2	501	IL 1	50.	1L 2	501	'L 1	501	'L 2	50	IL 1	501	IL 2
			SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'		30" ⊘	36" ⊘	30" ⊘	36" ⊘	30" ⊘	36" ⊘	30" ⊘	36" ⊘	30" ©	36" ⊘	30" ⊘	36" ⊘	30" ⊘	36″ ⊘	30" ⊘	36" ⊘
12	13'-0½"	13'-2½"	#3	#3	9'-8"	#4	#4	11'-5"	#5	#5	11'-2"	#5	#5	9'-2"	12	12	11	10	10	11	10	10	9	15	14	14	13	15	14	13	12
13	14'-0½"	14'-2½"	#4	#4	13'-5"	#4	#4	11'-5"	#5	#5	11'-2"	#5	#5	9'-2"	13	12	11	11	10	12	11	10	10	16	15	14	13	15	14	14	13
14	15'-0½"	15'-2½"	#4	#4	13'-5"	#4	#4	11'-5"	#5	#5	11'-2"	#6	#6	10'-9"	14	13	12	11	10	12	11	11	10	17	15	15	14	16	15	14	13
15	16'-0 ¹ /2"	16'-2½"	#4	#4	13'-5"	#4	#4	11'-5"	#6	#6	12'-9"	#6	#6	10'-9"	15	13	12	11	11	13	12	11	10	17	16	15	14	17	15	15	14
16	17'-0½"	17'-2½"	#4	#4	13'-5"	#5	#5	14'-2"	#6	#6	12'-9"	#6	#6	10'-9"	16	13	12	12	11	13	12	12	11	18	17	16	15	17	16	15	14
17	18'-0½"	18'-2½"	#4	#4	13'-5"	#5	#5	14'-2"	#6	#6	12'-9"	#7	#7	12'-4"	17	14	13	12	11	14	13	12	11	19	17	16	15	18	17	16	15
18	19'-0 ¹ /2"	19'-2½"	#5	#5	16'-2"	#5	#5	14'-2"	#7	#7	14'-4"	#7	#7	12'-4"	18	14	13	13	12	14	13	12	12	19	18	17	16	19	17	16	15
19	20'-0 ¹ /2"	20'-2½"	#5	#5	16'-2"	#5	#5	14'-2"	#7	#7	14'-4"	#8	#8	13'-10"	19	15	14	13	12	14	13	13	12	20	18	17	16	19	18	17	16
20	21'-0 ¹ /2"	21'-2½"	#5	#5	16'-2"	#6	#6	15'-9"	#8	#8	16'-10"	#8	#8	13'-10''	20	15	14	14	13	15	14	13	12	20	19	18	17	20	18	17	16
21	22'-0 ¹ / ₂ "	22'-2 ¹ / ₂ "	#5	#5	16'-2"	#6	#6	15'-9"	#8	#8	16'-10"	#8	#8	13'-10"	21	16	15	14	13	15	14	14	13	21	19	18	17	20	19	18	17
22	23'-0 ¹ /2"	23'-2½"	#6	#6	18'-9"	#6	#6	15'-9"	#8	#8	16'-10"	#8	#9	13'-3"	22	16	15	14	13	16	15	14	13	21	20	19	17	21	19	18	17

DESCRIPTION: LAST REVISION 07/01/15

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TABLE NOTE:

1. Bars D and Bars E are for 45° Corner Posts only. 2. See Contract Plans for project wind speed.

3. Soil 1 = Loose Granular Soil, N = 4 to 9.

Soil 2 = Medium Dense Granular Soil, N = 10 to 40.

PILE	DEPTH	&	REINFORCING	SUMMARY
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	TABLE 2A - TABLE OF POST REINFORCING STEEL															ТАВ	BLE 2B	- PIL	E LEN	GTHS	(Feet)	- WIN	ID SPI	EED =	130 M	1PH					
	POST LENGTHS WIND SPEED = 130 MPH										10	'-0" P05	T SPACI	'NG					20	'-0" P05	T SPACI	ING									
WALL HEIGHT					10'-0" POST SPACING					20 POST S				WALL HEIGHT	H-POSTS			CORNER POSTS				H-POSTS			CORNER POSTS			5			
(Feet)	WITHOUT CAP	WITH CAP	BARS A	BA	IRS B	BARS D	BA	ARS E	BARS A	B.	ARS B	BARS D	BA	ARS E	(Feet)	50.	IL 1	501	L 2	501	IL 1	501	L 2	501	IL 1	50.	IL 2	50	IL 1	50	IL 2
			SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'		30" ⊘	36" ⊘	30" Ø	36" Ø	30" ⊘	36" ⊘	30" ⊘	36″ ⊘	30" ⊘	36" ⊘	30" ⊘	36" ⊘	30" ⊘	36″ ⊘	30" Ø	36" Ø
12	13'-0½"	13'-2 ¹ / ₂ ''	#4	#4	10'-5"	#4	#4	9'-5"	#5	#5	9'-2"	#6	#6	8'-9''	12	13	12	12	11	13	12	11	11	18	16	16	14	17	16	15	14
13	14'-0½"	$14' - 2\frac{1}{2}''$	#4	#4	10'-5''	#4	#4	9'-5"	#6	#6	10'-9''	#6	#6	8'-9"	13	14	13	12	11	13	12	12	11	18	17	16	15	18	17	16	15
14	15'-0½"	15'-2½"	#4	#4	10'-5"	#5	#5	12'-2"	#6	#6	10'-9"	#7	#7	10'-4"	14	14	13	12	12	14	13	12	12	19	18	17	16	19	17	16	15
15	16'-0½"	16'-2½"	#5	#5	13'-2"	#5	#5	12'-2"	#7	#7	12'-4"	#7	#7	10'-4"	15	15	14	13	12	14	13	13	12	20	18	17	16	19	18	17	16
16	17'-0½"	17'-2½"	#5	#5	13'-2"	#5	#5	12'-2"	#7	#7	12'-4"	#8	#8	11'-10''	16	15	14	13	13	15	14	13	12	21	19	18	17	20	18	18	16
17	18'-0½"	18'-2½"	#5	#5	13'-2"	#6	#6	13'-9"	#7	#7	12'-4"	#8	#8	11'-10''	17	16	15	14	13	15	14	13	13	21	20	19	17	21	19	18	17
18	19'-0½"	19'-2½"	#6	#6	15'-8''	#6	#6	13'-9"	#8	#8	13'-10"	#8	#8	11'-10"	18	16	15	14	13	16	15	14	13	22	20	19	18	21	20	19	17
19	20'-0 ¹ /2"	20'-2½"	#6	#6	15'-8"	#6	#6	13'-9"	#8	#8	13'-10"	#8	#9	11'-3"	19	17	16	15	14	16	15	14	13	22	21	20	18	22	20	19	18
20	21'-0 ¹ /2"	21'-2½"	#6	#6	15'-8"	#7	#7	15'-4"	#8	#9	13'-3"	#9	#9	12'-3"	20	17	16	15	14	17	16	15	14	23	21	20	19	23	21	20	19
21	22'-0 ¹ /2"	22'-2 ¹ / ₂ "	#6	#6	15'-8''	#7	#7	15'-4"	#9	#8	15'-10"	#9	#10	11'-7"	21	18	17	16	15	17	16	15	14	24	22	21	19	23	22	21	19
22	23'-0½"	23'-2½"	#7	#7	18'-4''	#7	#7	15'-4"	#9	#10	14'-7"	#10	#9	14'-3"	22	18	17	16	15	18	17	16	15	24	23	21	20	24	22	21	20

TABLE 3A - TABLE OF POST REINFORCING STEEL												TABLE 3B - PILE LENGTHS (Feet) - WIN																			
	POST LENGTHS WIND SPEED =									O MPH	1				10'-0" POST SPACING																
WALL HEIGHT		T WITH CAP	10'- POST S			'-0" SPACING			20'-0" POST SPACING					WALL HEIGHT	H-POSTS				CORNER POSTS												
(Feet)	WITHOUT CAP		WITH CAP	WITH CAP	WITH CAP	WITH CAP	WITH CAP	WITH CAP	BARS A	BARS B	.RS B	BARS D	BA	BARS E		BA	BARS B. B		BARS E		(Feet)	SOIL 1		501L 2		SOIL 1		501L 2		SOIL	
					SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'	SIZE	SIZE	DIM 'A'		30" Ø	36" Ø	30" Ø	36" Ø	30" Ø	36" ⊘	30" ⊘	36" ⊘	30" ⊘					
12	13'-0½"	13'-2½"	#4	#4	9'-5"	#5	#5	10'-2"	#7	#7	10'-4"	#7	#7	8'-4"	12	15	14	13	12	14	13	13	12	20							
13	14'-0 ¹ /2"	14'-2½"	#5	#5	11'-2"	#5	#5	10'-2"	#7	#7	10'-4"	#7	#7	8'-4''	13	16	14	14	13	15	14	13	12	21							
14	15'-0½"	15'-2½"	#5	#5	11'-2"	#5	#5	10'-2"	#8	#8	11'-10"	#8	#8	9'-10''	14	16	15	14	13	16	14	14	13	22							
15	16'-0½"	16'-2½"	#5	#5	11'-2"	#6	#6	11'-9"	#8	#8	11'-10"	#8	#8	9'-10''	15	17	15	15	14	16	15	14	13	22							
16	17'-0½"	17'-2½"	#6	#6	13'-9''	#6	#6	11'-9"	#8	#9	11'-3"	#8	#9	9'-3"	16	17	16	15	14	17	16	15	14	23							
17	18'-0½"	18'-2½"	#6	#6	13'-9"	#7	#7	13'-4"	#9	#8	12'-10"	#9	#8	10'-10''	17	18	17	16	15	17	16	15	14	24							
18	19'-0½"	19'-2½"	#6	#6	13'-9''	#7	#7	13'-4"	#9	#10	11'-7"	#9	#10	9'-7"	18	19	17	16	15	18	17	16	15	25							
19	20'-01/2"	20'-2 ¹ / ₂ "	#7	#7	15'-4"	#7	#7	13'-4"	#10	#9	14'-3"	#10	#9	12'-3"	19	19	18	17	16	18	17	16	15	25							
$\langle / / / \rangle$	$\overline{////}$		$\overline{//}$	$\overline{//}$		$\overline{///}$	///		15'-0" POST SPACING						$\langle / / \rangle$	$\overline{//}$	$\overline{777}$	$\overline{//}$	///	$\overline{)}$	$\overline{//}$			I							
20	21'-0 ¹ / ₂ "	21'-2 ¹ ⁄2"	#7	#7	15'-4''	#8	#8	14'-10''	#9	#9	15'-3"	#9	#9	12'-3"	20	20	18	17	16	19	18	17	16	23							
21	22'-0 ¹ / ₂ "	22'-2 ¹ / ₂ "	#7	#8	14'-10''	#8	#8	14'-10"	#10	#9	15'-3"	#10	#9	14'-3"	21	20	19	18	17	20	18	17	16	24							
22	23'-0 ¹ /2"	23'-2½"	#7	#8	14'-10''	#8	#8	14'-10''	#10	#10	16'-7"	#10	#10	13'-7"	22	21	19	18	17	20	19	18	17	24							

TABLE NOTE:

1. Bars D and Bars E are for 45° Corner Posts only.

2. See Contract Plans for project wind speed.

3. Soil 1 = Loose Granular Soil, N = 4 to 9;

Soil 2 = Medium Dense Granular Soil, N = 10 to 40.

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LAST REVISIO	≥ SION	DESCRIPTION:
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VIN	VIND SPEED = 150 MPH												
	20'-0" POST SPACING												
	H-P()STS		CORNER POSTS									
501	'L 1	501	L 2	501	"L 1	501L 2							
0 '' D	36″ ⊘	30" ⊘	36″ ⊘	30" ©	36" ⊘	30" Ø	36" Ø						
0	19	18	16	19	18	17	16						
1	19	18	17	20	19	18	16						
2	20	19	18	21	19	18	17						
2	21	20	18	22	20	19	18						
3	21	20	19	22	21	20	18						
4	22	21	19	23	22	20	19						
5	23	22	20	24	22	21	20						
5	23	22	21	25	23	22	20						

15'-0" POST SPACING

19

19

20

23

24

24

22

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23

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19

20

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23

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21

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PILE DEPTH & REINFORCING SUMMARY

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