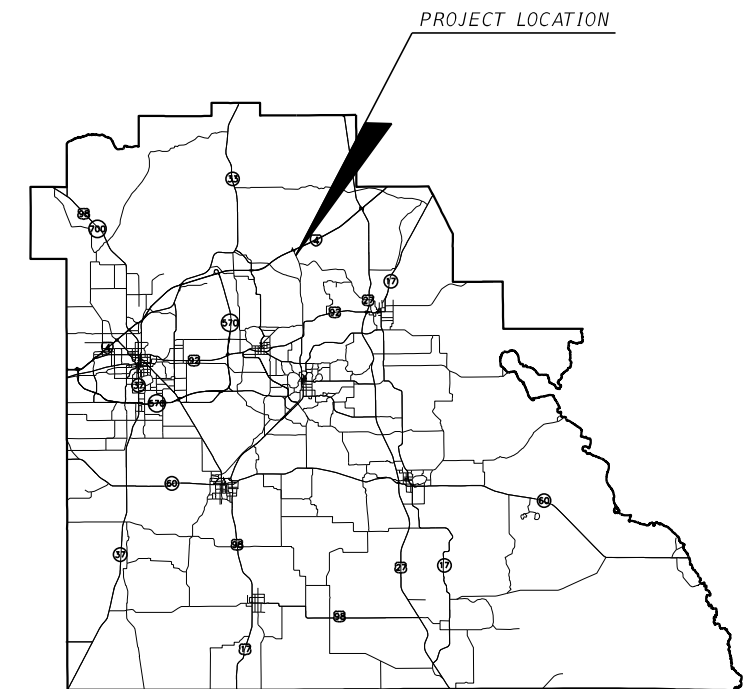


*POLK COUNTY
ROADS AND DRAINAGE DIVISION*

CONTRACT PLANS

*POLK COUNTY
COUNTY ROAD NO. 557
PROJECT NO. 18-73*

STRUCTURE PLANS



INDEX OF STRUCTURE PLANS

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<i>B1-3</i>	<i>REINFORCING BAR LIST (2 OF 2)</i>

*THIS DOCUMENT HAS BEEN DIGITALLY
SIGNED AND SEALED BY:*

*PRINTED COPIES OF THIS DOCUMENT ARE
NOT CONSIDERED SIGNED AND SEALED.
THE SIGNATURE MUST BE VERIFIED
ON THE ELECTRONIC DOCUMENTS.*

*STRUCTURE PLANS
ENGINEER OF RECORD:*

*MARYBETH MORIN , P.E.
P.E. LICENSE NO.: 57547
DEWBERRY ENGINEERS INC.
800 NORTH MAGNOLIA AVENUE, SUITE 1000
ORLANDO, FLORIDA 32803
321-354-9668*

*POLK COUNTY PROJECT MANAGER:
AUSTIN POTTS, P.E.*

*90% SUBMITTAL
JANUARY 2023*

*PRELIMINARY NOT
FOR CONSTRUCTION*

*SHEET
NO.*

B-1

BOX CULVERT DATA TABLES

BOX, HEADWALL AND CUTOFF WALL DATA TABLE (inches unless shown otherwise)																				Table Date 7-01-09
LOCATION	STRUCTURE /BRIDGE NUMBER	BOX									HEADWALL AND CUTOFF WALL									
		Wc(ft)	Hc(ft)	Tt	Tw	Tb	Ti	#cells	Lc(ft)	Cover	Blhw	Hlhw	Brhw	Hrhw	Blcw	Hlcw	Brcw	Hrcw	SL(deg)	SR(deg)
STA. 1357+70	CD-04	10	3	10	10	10	10	1	156	2	12	21	12	18	12	24	12	24	0	0

LEFT SIDE WINGWALLS DATA TABLE (inches unless shown otherwise)																		Table Date 01-01-11
STRUCTURE /BRIDGE NUMBER	LEFT END WINGWALL									LEFT BEGIN WINGWALL								
	Rt	Rw	Rh	Rd	SW(deg)	β (deg)	He(ft)	Hs(ft)	Lw(ft)	Rt	Rw	Rh	Rd	SW(deg)	β (deg)	He(ft)	Hs(ft)	Lw(ft)
CD-04	14	12	36	10	90	12.1	4.75	4.75	14	14	12	36	10	90	12.1	4.75	4.75	14

RIGHT SIDE WINGWALLS DATA TABLE (inches unless shown otherwise)																		Table Date 01-01-11
STRUCTURE /BRIDGE NUMBER	RIGHT END WINGWALL									RIGHT BEGIN WINGWALL								
	Rt	Rw	Rh	Rd	SW(deg)	β (deg)	He(ft)	Hs(ft)	Lw(ft)	Rt	Rw	Rh	Rd	SW(deg)	β (deg)	He(ft)	Hs(ft)	Lw(ft)
CD-04	14	12	36	10	90	10.4	4.5	4.5	14	14	12	36	10	90	10.4	4.5	4.5	14

ESTIMATED CONCRETE QUANTITIES (CY)																					Table Date 7-01-13
STRUCTURE /BRIDGE NUMBER	BOX								LEFT END WINGWALL			LEFT BEGIN WINGWALL			RIGHT END WINGWALL			RIGHT BEGIN WINGWALL			
	Left Cutoff Wall	Right Cutoff Wall	Bottom Slab	Walls	Top Slab	Left Head Wall	Right Head Wall	Sub Total	Footing	Wall	Sub Total	Footing	Wall	Sub Total	Footing	Wall	Sub Total	Footing	Wall	Sub Total	
CD-04	0.504	0.504	57.3	28.9	56.2	0.396	0.288	144	2.84	2.46	5.3	2.84	2.46	5.3	2.84	2.33	5.17	2.84	2.33	5.17	

NOTES [Notes Date 7-01-14]:

- Environmental Class Moderately Aggressive
- Reinforcing Steel, Grade 60 Carbon Steel per Specification Section 931.
- Concrete Class IV $f'c = 5.5$ ksi
- Soil Properties:
Friction Angle 30°
Modulus of Subgrade Reaction 60 pci
Nominal Bearing Resistance 2000 psf
- Work this Drawing with Standard Plans Index 400-289 and Sheets B1-2 to B1-3.
- Settlement criteria for Precast Box Culvert option (Index 400-291):
Long Term Differential Settlement (ΔY) = 0.04167 ft.
Effective Length for Settlement (L) = 20 ft.

MAIN STEEL REINFORCEMENT SPACING (inches)																		Table Date 7-01-09	
STRUCTURE /BRIDGE NUMBER	BOX															HEADWALLS		CUTOFF WALLS	
	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115, 116...	803	806	809	812
CD-04	6	6	6	6	6	6	6	6	12	12	12	12	12	12	12	6	6	12	12

WINGWALL STEEL REINFORCEMENT SPACING (inches)																											Table Date 7-01-09	
STRUCTURE /BRIDGE NUMBER	LEFT END WINGWALL							LEFT BEGIN WINGWALL							RIGHT END WINGWALL							RIGHT BEGIN WINGWALL						
	401 (407(8))	402 (403)	404 (405)	406	409	410	411	501 (507(8))	502 (503)	504 (505)	506	509	510	511	601 (607(8))	602 (603)	604 (605)	606	609	610	611	701 (707(8))	702 (703)	704 (705)	706	709	710	711
CD-04	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12

WINGWALL NOTE: Bar designations in "()" are only required for variable height wingwalls.

REVISIONS				MARYBETH MORIN, P.E. P.E. LICENSE NUMBER 57547 DEWBERRY ENGINEERS INC. 800 NORTH MAGNOLIA AVENUE, STE. 1000 ORLANDO, FL 32803	OSCEOLA COUNTY TRANSPORTATION AND TRANSIT			BOX CULVERT DATA TABLES CR 557	SHEET NO. B1-1
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	PROJECT NO.		
					CR 557	POLK	1873		

MARK	LENGTH	NO	TYP	STY	B	C	D	E	F	H	J	K	N	Ø										
SIZE	DES	FT	IN	BARS	BAR	A	G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	NO	ANG
LOCATION		MAIN BOX													NO. REQUIRED = 1									
5	101	11- 4		313	1			11- 4																
5	102	11- 4		313	1			11- 4																
5	103	11- 4		319	1			11- 4																
5	104	11- 4		319	1			11- 4																
5	105	4-10		624	10			1- 9	3- 0 1/2															
5	106	4-10		624	10			1- 9	3- 0 1/2															
5	108	4- 4		624	1			4- 4																
4	109	161- 7		13	2			1- 5	158- 8 1/2															2
4	110	158- 7		13	2			1- 5	155- 8 1/2															2
4	111	157-10		13	2			1- 5	155- 0															2
4	112	161- 7		13	2			1- 5	158- 8 1/2															2
4	113	158- 7		8	2			1- 5	155- 8 1/2															2
4	114	158- 7		8	2			1- 5	155- 8 1/2															2
LOCATION		LEFT END WINGWALL													NO. REQUIRED = 1									
4	401	4- 6		15	1			4- 6																
4	402	13- 8		6	1			13- 8																
4	404	13- 8		6	1			13- 8																
4	406	4- 6		15	1			4- 6																
4	407	3-11		15	10			1-10	2- 1															
4	409	4-10		15	1			4-10																
4	410	4-10		15	1			4-10																
4	411	13- 8		12	1			13- 8																
5	412	2- 0		8	1			2- 0																
LOCATION		LEFT BEGIN WINGWALL													NO. REQUIRED = 1									
4	501	4- 6		15	1			4- 6																
4	502	13- 8		6	1			13- 8																
4	504	13- 8		6	1			13- 8																
4	506	4- 6		15	1			4- 6																
4	507	3-11		15	10			1-10	2- 1															
4	509	4-10		15	1			4-10																
4	510	4-10		15	1			4-10																
4	511	13- 8		12	1			13- 8																
5	512	2- 0		8	1			2- 0																
LOCATION		RIGHT END WINGWALL													NO. REQUIRED = 1									
4	601	4- 3		15	1			4- 3																
4	602	13- 8		6	1			13- 8																
4	604	13- 8		6	1			13- 8																
4	606	4- 3		15	1			4- 3																
4	607	3-11		15	10			1-10	2- 1															
4	609	4-10		15	1			4-10																
4	610	4-10		15	1			4-10																
4	611	13- 8		12	1			13- 8																
5	612	2- 0		8	1			2- 0																
LOCATION		RIGHT BEGIN WINGWALL													NO. REQUIRED = 1									
4	701	4- 3		15	1			4- 3																
4	702	13- 8		6	1			13- 8																
4	704	13- 8		6	1			13- 8																
4	706	4- 3		15	1			4- 3																
4	707	3-11		15	10			1-10	2- 1															
4	709	4-10		15	1			4-10																
4	710	4-10		15	1			4-10																

<table border="1"> <thead> <tr> <th colspan="2">REVISIONS</th> </tr> <tr> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>				REVISIONS		DATE	DESCRIPTION							MARYBETH MORIN, P.E. P.E. LICENSE NUMBER 57547 DEWBERRY ENGINEERS INC. 800 NORTH MAGNOLIA AVENUE, STE. 1000 ORLANDO, FL 32803			OSCEOLA COUNTY TRANSPORTATION AND TRANSIT ROAD NO. COUNTY PROJECT NO. CR 557 POLK 1873			REINFORCING BAR LIST (1 OF 2) CR 557			SHEET NO. B1-2
REVISIONS																							
DATE	DESCRIPTION																						

MARK	LENGTH	NO	TYP	STY	B	C	D	E	F	H	J	K	N	Ø										
SIZE	DES	FT	IN	BARS	BAR	A	G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	NO	ANG
4	711	13- 8		12	1			13- 8																
5	712	2- 0		8	1			2- 0																
LOCATION		LEFT HEADWALL										NO. REQUIRED = 1												
4	801	11- 4		2	1			11- 4																
4	802	11- 4		2	1			11- 4																
4	803	4- 2		24	27			1- 4 1/2	0- 6	0- 2	0- 5	0-11 1/2	0- 6	0- 6										
LOCATION		RIGHT HEADWALL										NO. REQUIRED = 1												
4	804	11- 4		2	1			11- 4																
4	805	11- 4		2	1			11- 4																
4	806	3- 8		24	27			1- 1 1/2	0- 6	0- 2	0- 5	0- 8 1/2	0- 6	0- 6										
LOCATION		LEFT CUTOFF WALL										NO. REQUIRED = 1												
4	807	11- 4		2	1			11- 4																
4	808	11- 4		2	1			11- 4																
4	809	4-11		12	7			1- 7 1/2	0- 8	0- 6	0- 6													
LOCATION		RIGHT CUTOFF WALL										NO. REQUIRED = 1												
4	810	11- 4		2	1			11- 4																
4	811	11- 4		2	1			11- 4																
4	812	4-11		12	7			1- 7 1/2	0- 8	0- 6	0- 6													

END OF LIST

REVISIONS				MARYBETH MORIN, P.E. P.E. LICENSE NUMBER 57547 DEWBERRY ENGINEERS INC. 800 NORTH MAGNOLIA AVENUE, STE. 1000 ORLANDO, FL 32803	OSCEOLA COUNTY TRANSPORTATION AND TRANSIT			REINFORCING BAR LIST (2 OF 2) CR 557	SHEET NO. B1-3
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	PROJECT NO.		
					CR 557	POLK	1873		