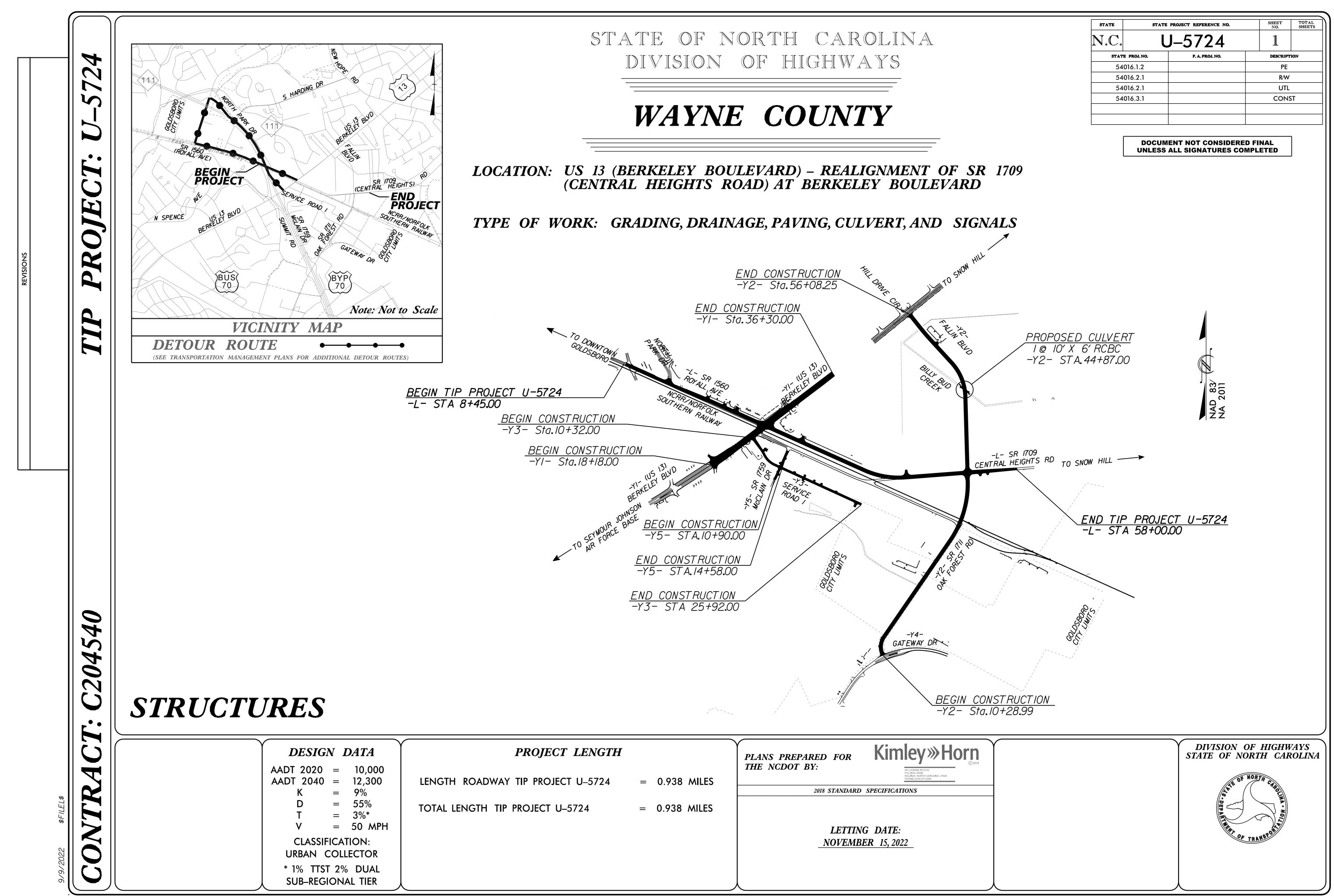
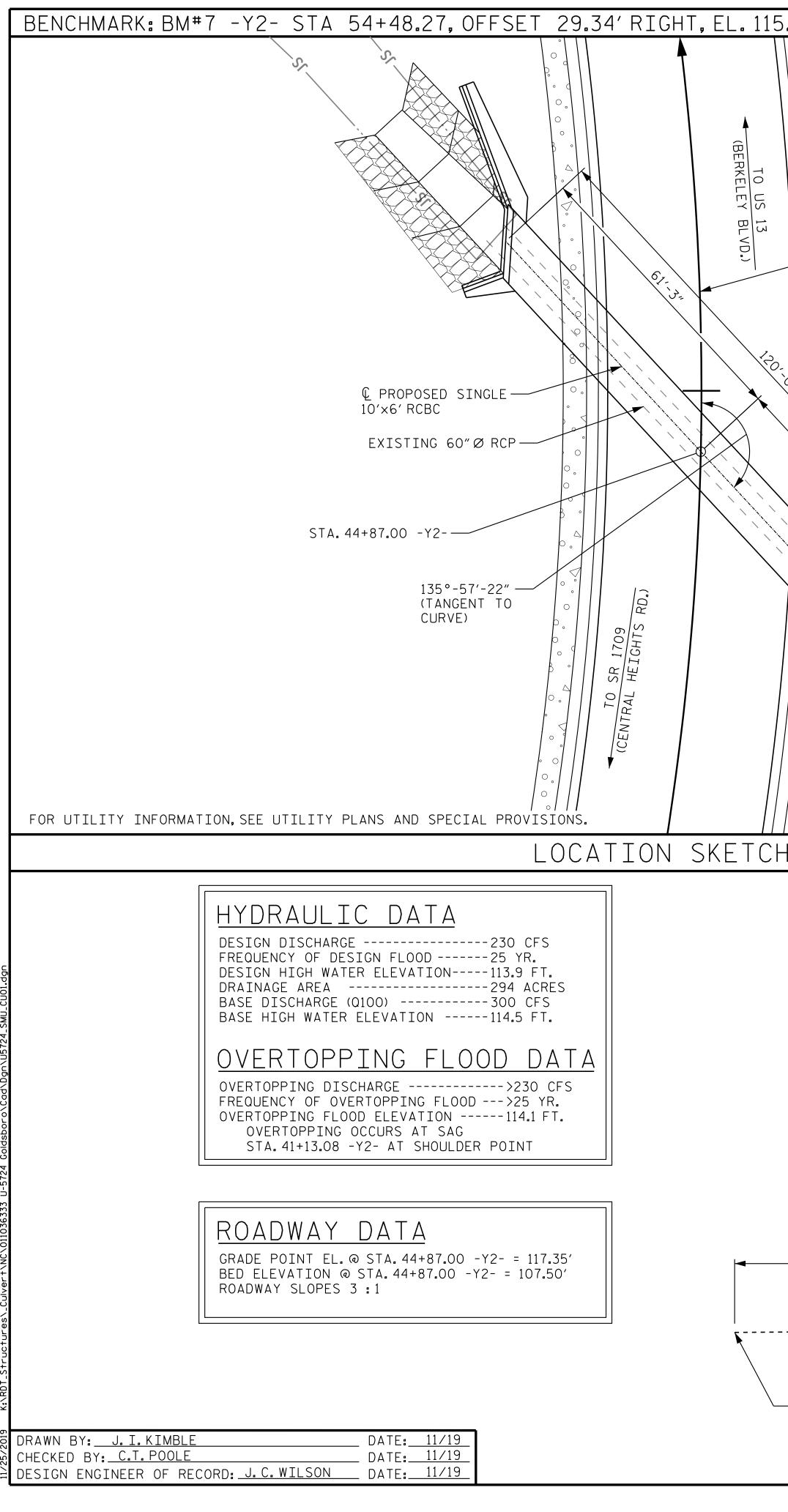
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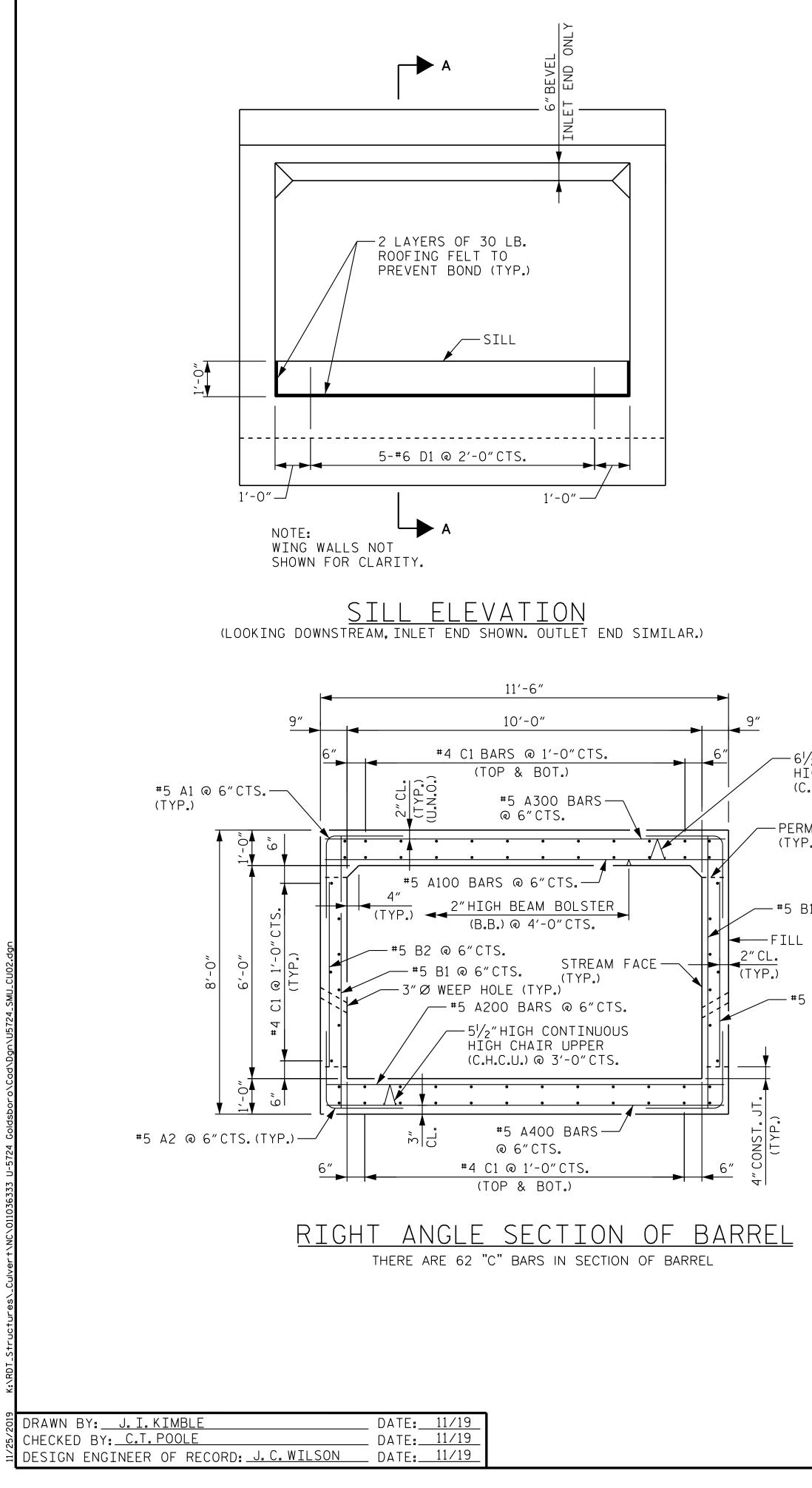


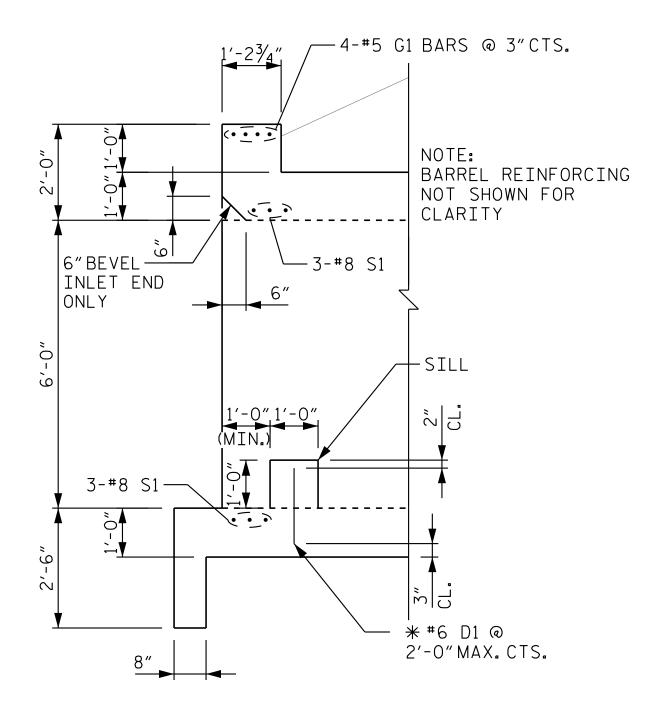


5.14', (RIGHT SCRIBE ON FH BONNET BOLT)		
	ASSUMED LIVE LOAD HL-93 OR	
o B °	DESIGN FILL 3'-10 (MA	
	FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.	
	3"Ø WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH NCDOT	STANDARD SPECIFICATIONS.
	THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF CULVERT THAT IT WILL PROPERLY TAKE CARE OF THE FILL.	BEFORE STAKING IT OUT TO MAKE CERTAIN
-Y2-	CONCRETE IN THE CULVERT TO BE POURED IN THE FOLLOWING O 1.WING FOOTINGS, CURTAIN WALLS AND FLOOR SLAB INCLUDI 2.THE REMAINING PORTIONS OF THE WALLS AND WINGS FULL HEADWALLS.	NG 4" OF ALL VERTICAL WALLS.
	DIMENSIONS FOR WING LAYOUT AS WELL AS ADDITIONAL REINFO SHOWN ON THE WING SHEETS.	DRCING STEEL EMBEDDED IN BARREL ARE
	TRANSVERSE CONSTRUCTION JOINTS SHALL BE USED IN THE BAR OF 70 FEET. LOCATION OF JOINTS SHALL BE SUBJECT TO APPRO	REL, SPACED TO LIMIT POURS TO A MAXIMUM VAL OF THE ENGINEER.
	FOR CULVERT DIVERSION DETAILS AND PAY ITEM, SEE EROSION	CONTROL PLANS.
	A 3 FOOT STRIP OF FILTER FABRIC SHALL BE ATTACHED TO THE ENTIRE LENGTH OF THE EXPANSION JOINT.	E FILL FACE OF THE WING COVERING THE
	AT THE CONTRACTOR'S OPTION HE MAY SUBMIT, TO THE ENGINEE FOR A PRECAST REINFORCED CONCRETE BOX CULVERT IN LIEU O	F THE CAST-IN-PLACE CULVERT SHOWN ON THE
	PLANS. THE DESIGN SHALL PROVIDE THE SAME SIZE AND NUMBER DESIGN. FOR OPTIONAL PRECAST REINFORCED CONCRETE BOX CUL	VERT, SEE SPECIAL PROVISIONS.
	FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIO	NS.
	FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS. FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.	
	FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.	
CLASS I RIP RAP		
(ROADWAY PAY ITEM AND DETAIL) (TYP.)		
		I HEREBY CERTIFY THESE PLANS ARE THE AS-BUILT PLANS.
		ARE THE AS DOLET TEARS.
Υ		
TOTAL STRUCTURE QUANTITIES		
CLASS A CONCRETE		
BARREL @ <u>1.189</u> CY/FT <u>142.7</u> C.Y. WINGS FIC. 27.4 C.Y.		
WINGS ETC. <u>27.4</u> C.Y. SILLS <u>0.7</u> C.Y.		
TOTAL 170.8 C.Y.		
REINFORCING STEEL BARREL 29,550 LBS		
BARREL29,550 LBS. WINGS ETC1,664 LBS.		PROJECT NO. <u>U-5724</u>
TOTAL		WAYNE COUNTY
CULVERT EXCAVATION STA. 44+87.00 -Y2- LUMP SUM FOUNDATION CONDITIONING MATERIAL 132 TONS		STATION: 44+87.00 -Y2-
REMOVAL OF EXISTING STRUCTURE		
STA. 44+87.00 -Y2- Y2-	TH CARO	SHEET 1 OF 8
61'-3" 58'-9"	SEAL 040384	DEPARTMENT OF TRANSPORTATION
	The Conservation of the Co	RALEIGH
0.75%	Jeffrey C. Wilson 11/26/2019	SINGLE 10 FT.X 6 FT.
		- CONCRETE BOX CULVERT
EL.107.50′ ±	EL. 107.94' ± Kinley »Horn	136° SKEW
← EL. 107.04′±	421 Fayetteville Street, Suite 600 Raleigh, NC 27601-1772	REVISIONS SHEET NO.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	PROJECT NO. <u>U-5724</u> <u>WAYNE</u> county Station: <u>44+87.00 - Y2-</u>
WINNIN CARO	SHEET 1 OF 8
DocuSigned by:	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH
Jeffrey C. Wilson 11/26/2019 CDA045FAFCC9416	SINGLE 10 FT.X 6 FT.
	CONCRETE BOX CULVERT
Kimley Worn	136° SKEW
421 Fayetteville Street, Suite 600 Raleigh, NC 27601-1772 Phone (919) 677-2000 F-0102	REVISIONS SHEET NO. NO. BY: DATE: NO. BY: DATE: C-1
This document, together with the concepts and designs presented herein, as an instrument of services, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance of this document without written authorization and adaption by Kimley-Horn and Associates, inc. shall be without liability to Kimley-Horn and Associates, Inc. Copyright Kimley-Horn and Associates, Inc., 2019	10. DATE: DATE: DATE: DATE: 1 3 TOTAL SHEETS 名 SHEETS 8





SECTION A-A (inlet end shown, outlet similar)

 DOWELS MAY BE PUSHED INTO GREEN CONCRETE AFTER SLAB HAS BEEN FLOAT FINISHED
 NOTE: 1'-O"SILL IS TO BE CAST NORMAL TO CULVERT WALLS.

PERMITTED CONST.JT.
(TYP.)

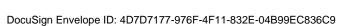
≠5 B1 @ 6″CTS.

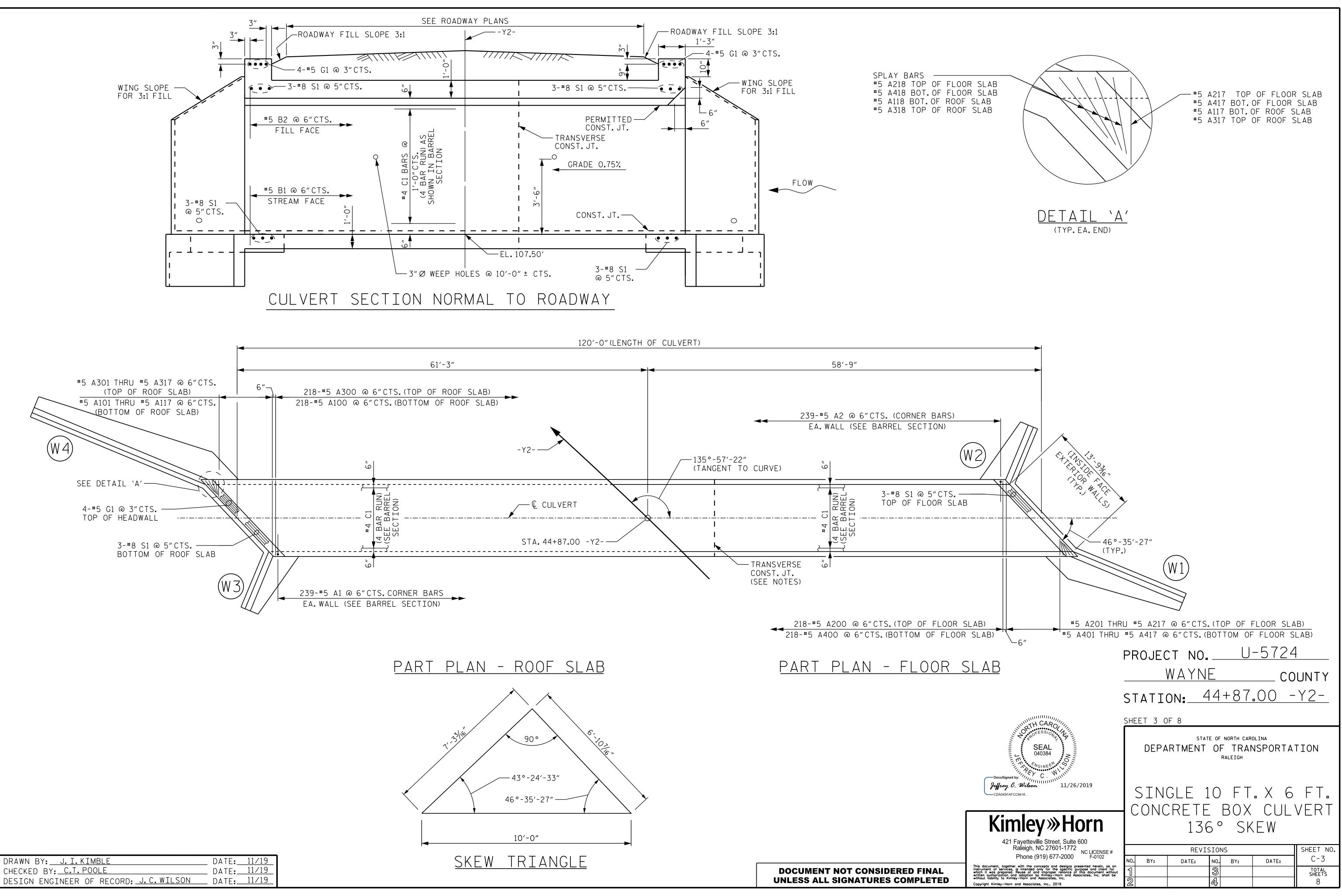
FILL FACE (TYP.)

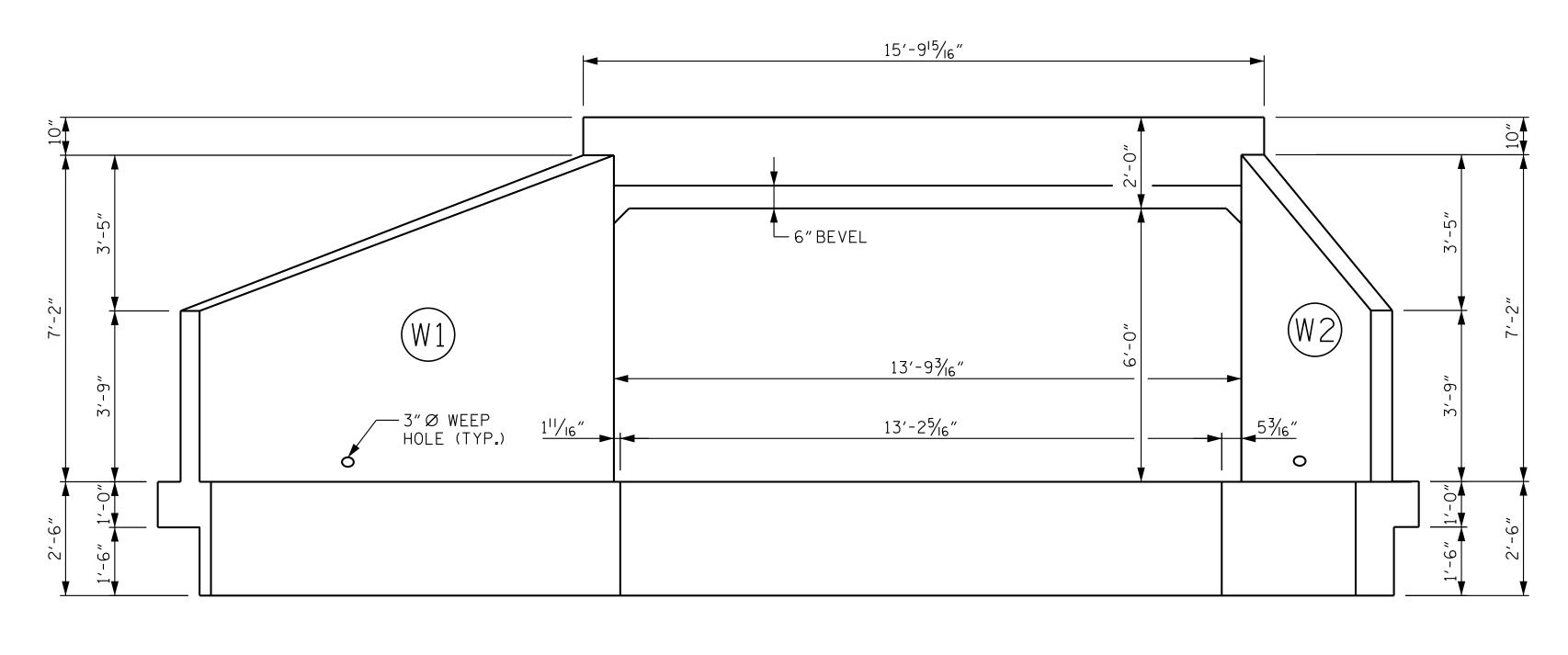
— #5 B2 @ 6″CTS.

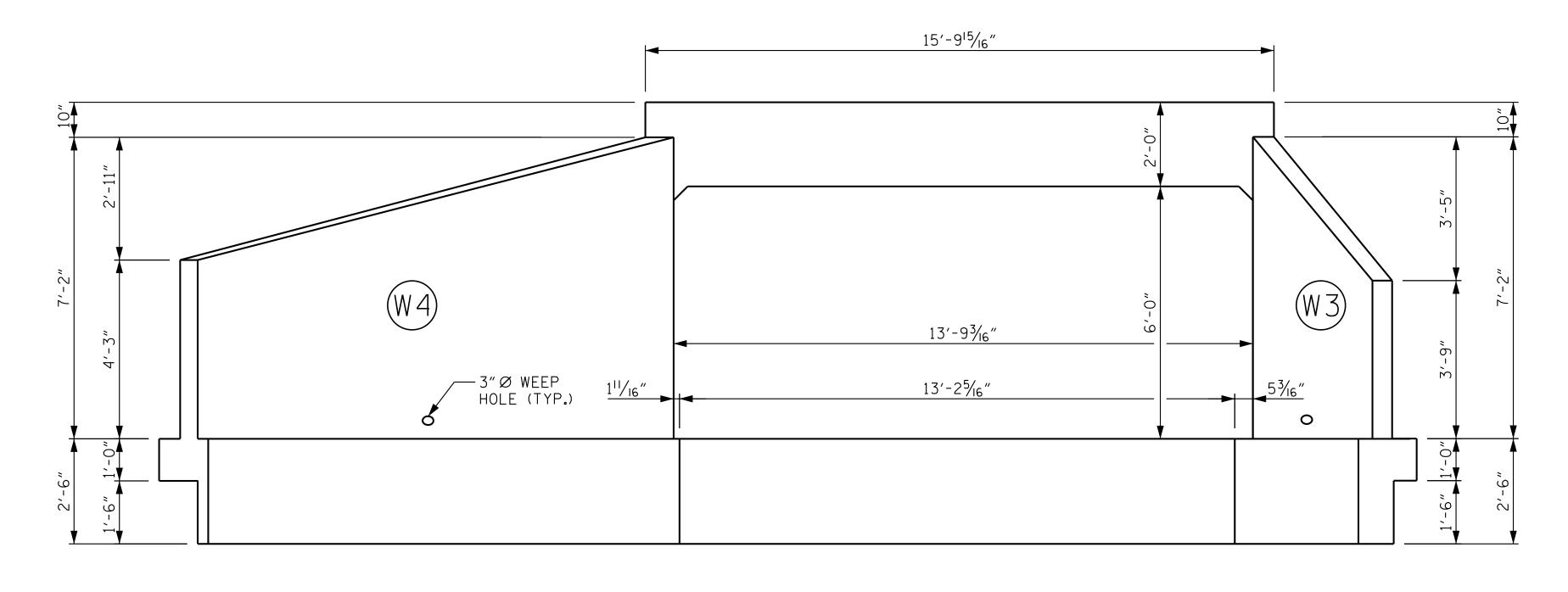
BAR SIZE	SPLICE LENGTH
#4	1'-10"
#5	2'-4"
#6	2'-9"
#7	3'-2"
#8	3′-8″

Size File File <th< th=""><th>T</th><th></th><th></th><th></th><th>РT</th><th>LL OF</th><th></th><th></th><th></th><th></th><th></th><th></th></th<>	T				РT	LL OF							
A1 478 5 1 64* 3.158 4300 2 5 517 67* 14 A2 478 5 1 61* 3.033 3.030 2 5 517 6-1* 13 A100 2.8 5 5 1.7* 12 4310 2 5 517 6'-1* 13 A102 2.5 5 77 0'-1* 22 4.312 2 5 517 0'-7 22 4.312 2 5 517 0'-7 12 A103 2 5 517 2'-7 2 4.313 2 5 517 2'-7 14 4.316 2 5 18 10'-10' 2.5 18 10'-10' 2.5 5 18 10'-10' 2.5 18 10'-10' 2.5 18 10'-10' 2.5 18 10'-10' 2.5 18 112''' 13 4400 2 5<	BAR	NO.	SIZE	TYPE			-			TYPE	LENGTH	WEIGHT	
Inco 216 5 STR 11'-2' 2.53 A310 2 5 STR 6'-1' 131 2 5 STR 7'' 12 A131 2 5 STR 7'' 12 A112 2 5 STR 7'' 12 A112 2 5 STR 1''''' 13 A112 2 5 STR 1''''''''''''''''''''''''''''''''''''	A1	478	5	1	6'-4"	3,158	A308	2	5	STR	7′-2″	15	
LIOD 2.8 5 STR 11'-2'' 2.533 A31 2 5 STR 5'-7'' 12' A102 2 5 STR 10''-4'' 22 A312 2 5 STR 4'-6'' 9 A103 2 5 STR 4'-6'' 9 A312 2 5 STR 4'-6'' 9 A104 2 5 STR 4'-0'' 2 A312 2 5 STR 4'-6'' 9 A104 2 5 STR 4'-2'' 17 A312 2 S STR 2'-2'' 18 A106 2 5 STR 6'-1'' 13 A400 2 5 STR 10'''' 2.5 STR 10''''''''''''''''''''''''''''''''''''	A2	478	5	1	6'-1"	3,033							
A102 2 5 S IF 8 10-47 22 A313 2 5 S TR 47-67 8 A104 2 5 S TR 87-37 13 A316 2 5 S TR 37-57 7 A105 2 5 S TR 87-27 17 A316 2 5 S TR 27-27 18 A106 2 5 S TR 77 27 A317 2 5 S TR 117 2 2.5 S TR 10-67 2.2 3 S TR 117 2 2.5 S TR 10-67 2.3 3 10-67 2.5 S TR 10-67 2.3 3 110 2.5 S TR 9-10-7 2.3 4402 2 S TR 9-10-7 2.3 3 13 3 2.5 S TR 9-10-7 2.3 3 14 116 2.5 S TR 9-10-7 2.3 3 14 2.5 S TR 9-10-7 2.3 3 116 2.5 S TR 9-10-7 2.3	A100	218	5	STR	11'-2"	2,539						1	
103 2 5 STR 9*-10* 21 A314 2 5 STR 4*-0* 8 A106 2 5 STR 8*-9* 18 A315 2 5 STR 5*-5* 5 A106 2 5 STR 8*-9* 18 A316 2 5 STR 2*-5* 5 A106 2 5 STR 6*-7* 14 A400 218 5 STR 10*-7* A109 2 5 STR 5*-7* 12 A4012 2 S STR 10*-10* 23 A112 2 S STR 10*-0* 8 A404 2 S STR 10*-0* 2 A112 2 S STR 5*-7* 12 A402 2 S STR 10*-0* 2 A402 2 S STR 10*-0* 2 A402 2 S STR 10*-0* 10 10 10 10 10 10 10 10 <													
Line 4 2 5 STR 9'-3' 13 A316 2 5 STR 3'-5' 7 A106 2 5 STR 6'-9' 18 A316 2 5 STR 7'-2' 15 A107 2 5 STR 6'-2' 14 A317 2 5 STR 10'-2' 2' 2' 18 A108 2 5 STR 6'-1' 14 A400 2 5 STR 10'-0'' 23 A111 2 5 STR 6'-1'' 14 A400 2 5 STR 10'-4'' 24 A111 2 5 STR 4'-6'' 8 A403 2 5 STR 10'-4'' 24 A111 2 5 STR 4'-6'' 8 A400 2 5 STR 10'-2'''''''''''''''''''''''''''''''''''				-									
ALOG 2 5 STR 8'-2' 17 A317 2 5 STR 2'-2' 18 ALOG 2 5 STR 7'-2' 15 A318 8 5 STR 1'-2' 2:3 ALOG 2 5 STR 6'-7' 14 A400 2 5 STR 10'-4' 22 ALI2 2 5 STR 6'-6' 1 4402 2 5 STR 9'-3' 19 ALI2 2 5 STR 4'-6' 9 4404 2 5 STR 8'-2'' 17 ALI6 2 5 STR 1'''' 6 A400 2 5 STR 8''''''''''''''''''''''''''''''''''''													
ALOC 2 5 5 11 C'-2' 15 ALOB 2 5 STR 6'-7' 14 AdOO 218 5 STR 10'-2' 2.53 ALOD 2 5 STR 6'-7' 14 AdOO 218 5 STR 10'-2' 2.53 ALID 2 5 STR 6'-7' 12 AdOO 22 5 STR 10'-4'' 22 ALID 2 S STR 6'-0'' 8 AdOO 2 5 STR 10'-10'' 22 ALID 2 S STR 10'-0'' 8 AdOO 2 5 STR 10'-1''' 2 11'''''''''''''''''''''''''''''''''''			5				A316		5	1			
A102 2 5 STR 6'-7 14 AdOC 28 5 TR 10'-2' 2,5 A111 2 5 STR 6'-7' 14 AdOC 28 5 STR 10'-4'' 22 A111 2 5 STR 6'-7' 10 AdOC 25 STR 10'-4'' 22 A112 2 5 STR 6'-6' 8 AdOC 2.5 STR 10'-4'' 22 A112 2 5 STR 10'-4'' 2 AdOC 2.5 STR 10'-4'' 27 A114 2 5 STR 17'-2'' 18 AdOC 2.5 STR 10'-4'' 27 A116 2 5 STR 10''-4'' 4 400 2.5 STR 10''-2'' 18 A117 2 STR 10''-4'' 22 Ad12 2.5 STR 10''-2'' 12 A2012 2 STR 10''-4'' 22 Ad12 2.5 STR <													
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A111 2 5 STR 5'-7' 12 A403 2 5 STR 10'-4' 22 A112 2 5 STR 4'-6' 9 A404 2 5 STR 9'-10' 22 A113 2 5 STR 4'-6' 9 A404 2 5 STR 9'-10' 19 A115 2 5 STR 4'-6' 8 A405 2 5 STR 8'-9' 19 A116 2 5 STR 12'-5' 5 A400 2 5 STR 6'-7' 13 A200 218 5 STR 10'-10' 23 A411 2 5 STR 6'-7' 12 A201 2 5 STR 10'-10' 23 A411 2 5 STR 6'-7' 12 A414 2 5 STR 6'-7' 12 A414 2 5 STR 10'-10' 23 411 2 5 STR 10'-10' 14 <td></td> <td>2</td> <td>5</td> <td>STR</td> <td>6'-7"</td> <td>14</td> <td>A400</td> <td></td> <td></td> <td>STR</td> <td></td> <td>2,539</td>		2	5	STR	6'-7"	14	A400			STR		2,539	
A112 2 5 STR 6'-0' 10 A403 2 5 STR 9'-10' 21 A113 2 5 STR 4'-0' 8 A404 2 5 STR 8'-9' 16 A115 2 5 STR 7'-5' 7 A406 2 5 STR 8'-9' 16 A117 2 5 STR 7'-2' 16 A407 2 5 STR 6'-7' 13 A200 218 5 STR 10'-10' 23 A412 2 5 STR 6'-1'' 13 A201 2 S STR 10'-4' 22 A412 2 5 STR 6'-1'' 13 A202 2 S STR 10'-10'' 21 A412 2 5 STR 16'-1'' 13 A204 2 S STR 10'-1'' 14 A416 2 5 STR 16'-0'' 16 A206 2 S S												23	
A113 2 5 STR 4'-0'' 8 A404 2 5 STR 8'-3'' 10'' A116 2 5 STR 8'-0'' 10'' A406 2 5 STR 8'-2'' 1T A116 2 5 STR 8'-0'' 10'' A407 2'' 5 STR 8''-2'' 1T A116 2 5 STR 1''' 4407 2''' 5 STR 1''''' 1''''' A110 2 5 STR 1''''''''''''''''''''''''''''''''''''				_									
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AII 2 5 SIR 2'-2' IB Ad08 2 5 SIR 6'-2' IB AIIB 8 5 SIR 2'-2' IB Ad09 2 5 SIR 6'-7' IB A200 215 5 SIR 1'-2' 2'.53 Ad10 2 5 SIR 6'-7' IB A200 215 5 SIR 1'-2' 2'.53 Ad112 2 5 SIR 6'-7' IB A201 2 5 SIR 9'-10' 21 Ad413 2 5 SIR 4'-2' 18 A204 2 5 SIR 9'-10' 21 Ad414 2 5 SIR 7'-2' 18 A207 2 5 SIR 6'-7'' 14 Ad16 2 5 SIR 7'-7' 3.78 A208 2 5 SIR 6'-7'' 14 B1 4'R 5 SIR 2'-2' 18 A210 2 S <t< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>						-							
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2200 218 5 5 TR 11'-2" 2:533 A411 2 5 5 TR 5'-7" 10 A201 2 5 5 TR 10'-10" 21 A414 2 5 5 TR 4'-6' 9 A203 2 5 5 TR 9'-10" 21 A414 2 5 5 TR 4'-6' 9 A203 2 5 5 TR 9'-10" 21 A414 2 5 5 TR 4'-6' 9 A206 2 5 S TR 8'-9" 18 A416 2 5 S TR 2'-11' 6 A206 2 5 S TR 7'-7" 14 B1 478 5 S TR 7'-7" 3.7 A210 2 5 S TR 5'-7" 10 C1 248 4 S TR 1'-7" 3.7 A212 2 5 S TR 5'-2" 10 C1 248 4 S TR 1'-7" 2.6 A214 2 5	A118							2	5		6′-7″	14	
A201 2 5 STR 10'-10' 23 A412 2 5 STR 5'-0' 10' A202 2 5 STR 9'-10' 21 A414 2 5 STR 4'-0' 8 A203 2 5 STR 9'-10' 21 A414 2 5 STR 4'-0' 8 A204 2 5 STR 9'-10' 21 A414 2 5 STR 4'-0' 8 A205 2 5 STR 9'-17' 18 A416 2 5 STR 2'-11' 6 A206 2 5 STR 6'-7' 16 A418 8 5 STR 7'-7' 3.76 A208 2 5 STR 6'-7' 14 81 478 5 STR 3'-4'' 5.87 7'-7' 3.76 A211 2 5 STR 6'-7' 10 C1 248 4 STR 31'-4'' 5.15 A212 <	1000				11/ 0"								
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2203 2 5 STR 9'-10" 21 A414 2 5 STR 4'-0" 8 2204 2 5 STR 9'-3" 19 A415 2 5 STR 2'-5" 5 A205 2 5 STR 9'-3" 19 A415 2 5 STR 2'-5" 5 A206 2 5 STR 7'-7" 16 A418 8 5 STR 2'-5" 5 A208 2 5 STR 6'-7" 16 A418 8 5 STR 7'-7" 3,76 A208 2 5 STR 6'-7" 12 4'-6" 9 10 6 STR 7'-7" 3,76 A211 2 5 STR 7'-0" 10 C1 248 4'-6" 9 10 6 STR 1'-7" 24 A214 2 5 STR 1'-10" 6 STR 1'-2" 421 2 STR 1'-10" 2'-11" <td></td> <td>2</td> <td>5</td> <td>+ +</td> <td></td> <td></td> <td></td> <td>2</td> <td>5</td> <td>1</td> <td></td> <td>9</td>		2	5	+ +				2	5	1		9	
$\frac{2006}{2} \frac{2}{5} \frac{5}{5} \frac{5}{5} \frac{11}{11} \frac{8' \cdot 9'}{2} \frac{13}{44!7} \frac{44!6}{2} \frac{2}{5} \frac{5}{5} \frac{5}{5} \frac{11}{12} \frac{2' \cdot 11'}{2} \frac{6}{5} \frac{6}{5} \frac{11}{2} \frac{2' \cdot 11'}{2} \frac{6}{5} \frac{11}{5} \frac{11}{2} \frac{2' \cdot 11'}{2} \frac{11}{5} \frac{11}{2} \frac{11}{5} \frac{11}{5} \frac{11}{7} \frac{11}{7} \frac{11}{2} \frac{11}{2} \frac{11}{6} \frac{11}{2} \frac{11}{2} \frac{11}{5} \frac{11}{5} \frac{11}{7} \frac{11}{7} \frac{11}{2} \frac{11}{2} \frac{11}{6} \frac{11}{2} \frac{11}{2} \frac{11}{5} \frac{11}{5} \frac{11}{7} \frac{11}{7} \frac{11}{7} \frac{11}{2} \frac{11}{2} \frac{11}{6} \frac{11}{6} \frac{11}{2} \frac{11}{2} \frac{11}{5} \frac{11}{5} \frac{11}{7} $	A203	2	5	1 1	9'-10"	21	A414	2	5	STR	4'-0"	8	
A206 2 5 STR 8'-27' 17 A417 2 5 STR 2'-5'' 5 A207 2 5 STR 7'-2'' 15 A418 8 5 STR 2'-2'' 18 A208 2 5 STR 6'-7'' 14 B1 478 5 STR 2'-2'' 18 A210 2 5 STR 6'-1'' 13 B2 478 5 STR 5'-2'' 2.57 A212 2 5 STR 5'-7'' 12 2 5 STR 5'-2'' 2.57 A213 2 5 STR 4'-6'' 9 D1 10 6 STR 11'-7'' 24 A216 2 5 STR 2'-5' 5 5 5 5 7 12 8 5 STR 12'-4'' 491 A217 2 5 STR 10'-4'' 12 8 5 12''''''''''''''''''''''''''''''''''''				+ +									
A207 2 5 STR 77-8" 16 A418 8 5 STR 27-2" 18 A208 2 5 STR 6'-1" 13 B2 478 5 STR 5'-2" 2,57 A210 2 5 STR 6'-1" 13 B2 478 5 STR 5'-2" 2,57 A211 2 5 STR 6'-1" 13 B2 478 5 STR 5'-2" 2,57 A212 2 5 STR 4'-0" 8 D1 10 6 STR 1'-1" 24 A215 2 5 STR 2'-11" 6 C1 8 5 STR 1'-2" 2,53 A216 2 5 STR 2'-11" 6 C1 8 5 STR 1'-2" 2,53 B STR 1'-2" 2,53 B STR 1'-2" 2,53 B ST 1'-2" 2,53 B 1'-2" 2,53 B 1'-2" 2,													
A200 2 5 STR 6'-7" 14 BI 478 5 STR 7'-7" 3,7E A210 2 5 STR 6'-1" 13 B2 476 5 STR 5'-2" 2,57 A211 2 5 STR 5'-7" 12 10 6 STR 3'-4" 5.15 A212 2 5 STR 4'-0" 8 DI 10 6 STR 1'-7" 24 A216 2 5 STR 4'-0" 8 DI 10 6 STR 1'-4" 12E A216 2 5 STR 2'-11" 6 CI 8 5 STR 1'-2" 2,539 REINFORCING STEEL LBS. 29,5 A300 2 5 STR 9'-3" 19 A306 2 5 STR 8'-9" 1' 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A207	2	5	STR	7'-8"	16			1				
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A211 2 5 STR 5'-7" 12				+ +									
A213 2 5 STR 4'-6'' 9 Image: Constraint of the straint of the str								110			52	2,310	
A214 2 5 STR 4'-O'' 8 DI 10 6 STR 1'-7'' 24 A215 2 5 STR 2'-11'' 6 GI 8 5 STR 15'-4'' 128 A216 2 5 STR 2'-5' 5 STR 12' 8 STR 15'-4'' 491 A300 218 5 STR 10'-10'' 23 BAR TYPE A302 2 5 STR 9'-3'' 19 BAR TYPE A303 2 5 STR 9'-3'' 19 BAR TYPE A304 2 5 STR 9'-3'' 19 BAR TYPE A304 2 5 STR 9'-3'' 10' 1 VERTICAL LEG 6'''RAD. A306 2 5 STR 9'-3'' 16 1 VERTICAL LEG WAYNE COUNTY A307 2 5 STR 1''-4'' 2'''A'/A''' ALL BAR DIMENSIONS ARE OUT TO OUT				++			C1	248	4	STR	31'-4"	5,191	
A215 2 5 STR 3'-5" 7 6 6 6 6 5 STR 12'-4" 128 A216 2 5 STR 2'-11" 6 6 6 6 5 STR 15'-4" 128 A218 8 5 STR 2'-2" 18 S1 12 8 STR 15'-4" 49 A300 218 5 STR 10'-4" 23 BAR TYPE A302 2 5 STR 9'-3" 19 30 2 5 STR 8'-2" 17 A304 2 5 STR 8'-2" 17 16 1 VERTICAL LEG 6" RAD. 1 1 VERTICAL LEG 6" RAD. 1 <								10	6	СТР	1'-7"	24	
A216 2 5 STR 2'-11" 6 G1 8 5 STR 15'-4" 128 A218 8 5 STR 2'-5" 5 5 112 8 STR 15'-4" 491 A300 218 5 STR 11'-2" 2,539 REINFORCING STELL LBS. 29,5 A301 2 5 STR 10'-10" 23 BAR TYPE A303 2 5 STR 9'-10" 21 BAR TYPE A304 2 5 STR 8'-9" 18 16 1				-				10	0		1 - 1	24	
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Kinley >> Horn 421 Fayetteville Street, Suite 600 Raleigh, NC 27601-1772 Phone (919) 677-2000 NC LICENSE # For of services, is intended only for the specific purpose ond client for twos prepored. Reuse of ond improper religione of this document without Current, together with the concepts and designs presented herein, as an end of services, is intended only for the specific purpose on client for Current, together with the concepts and designs presented herein, as an end of services, is intended only for the specific purpose on this document without Subtriviation and adaption by Kimley-Horn and Associates, Inc., shall be the specific purpose on this document without						SIN	GLE	<u> </u>	U F	• _	X 6	\vdash _	
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Phone (919) 677-2000 F-0102 NO. BY: DATE: NO. BY: DATE: C-2 Curment, together with the concepts and designs presented herein, as an it of services, is intended only for the specific purpose and client for it was prepared. Reuse of and improper reliance of this document without authorization and adaption by Kimley-Horn and Associates, inc., shall be	F	Raleigh, N	NC 27601-	1772 NC				REVIS	IONS			SHEET NO.	
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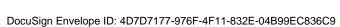


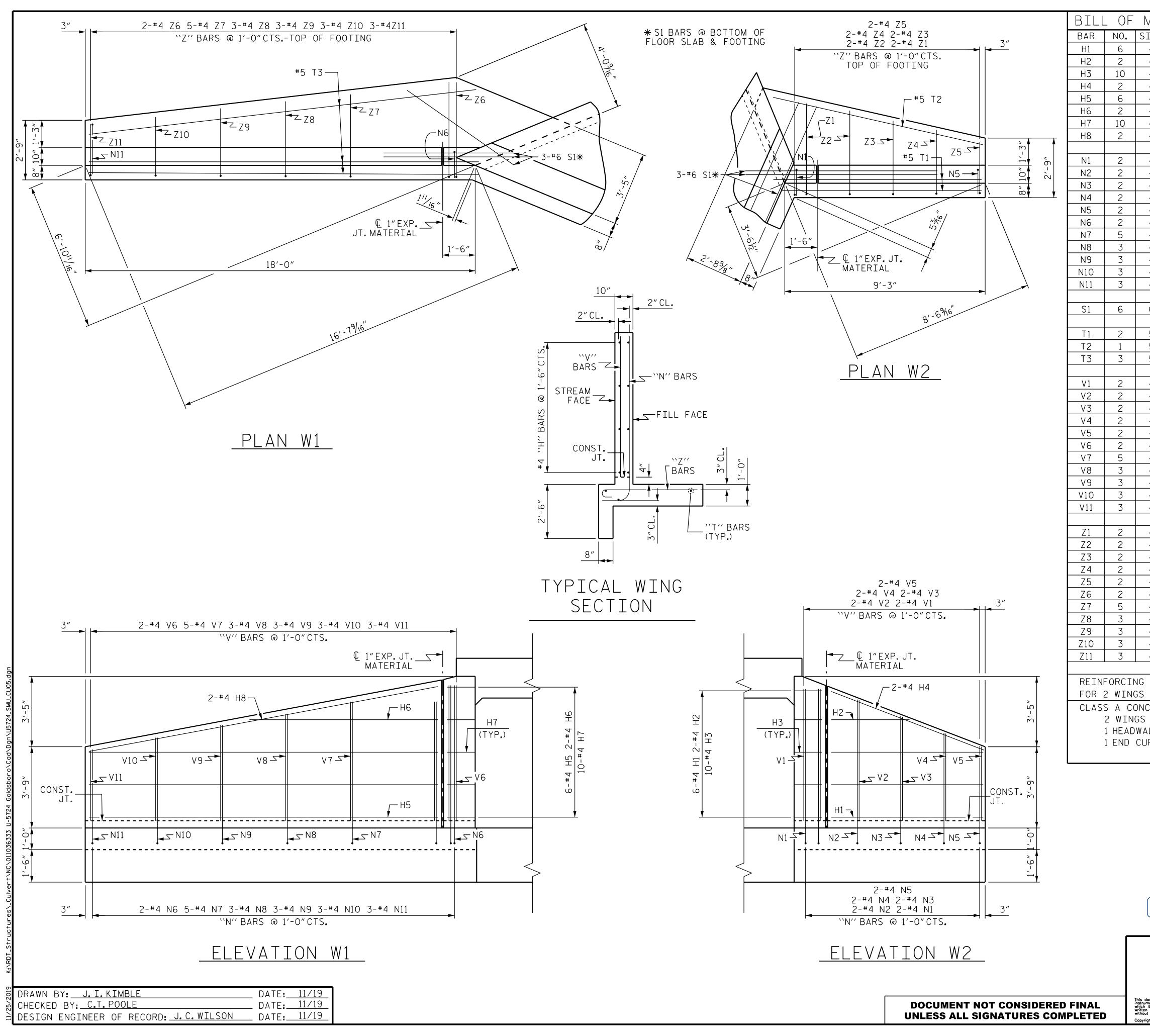
2019	DRAWN BY: J.I.KIMBLE	DATE:	11/19
272	CHECKED BY: C.T. POOLE	DATE:	11/19
11/2	DESIGN ENGINEER OF RECORD: J.C.WILSON	DATE:	11/19

END ELEVATION NORMAL TO SKEW - INLET

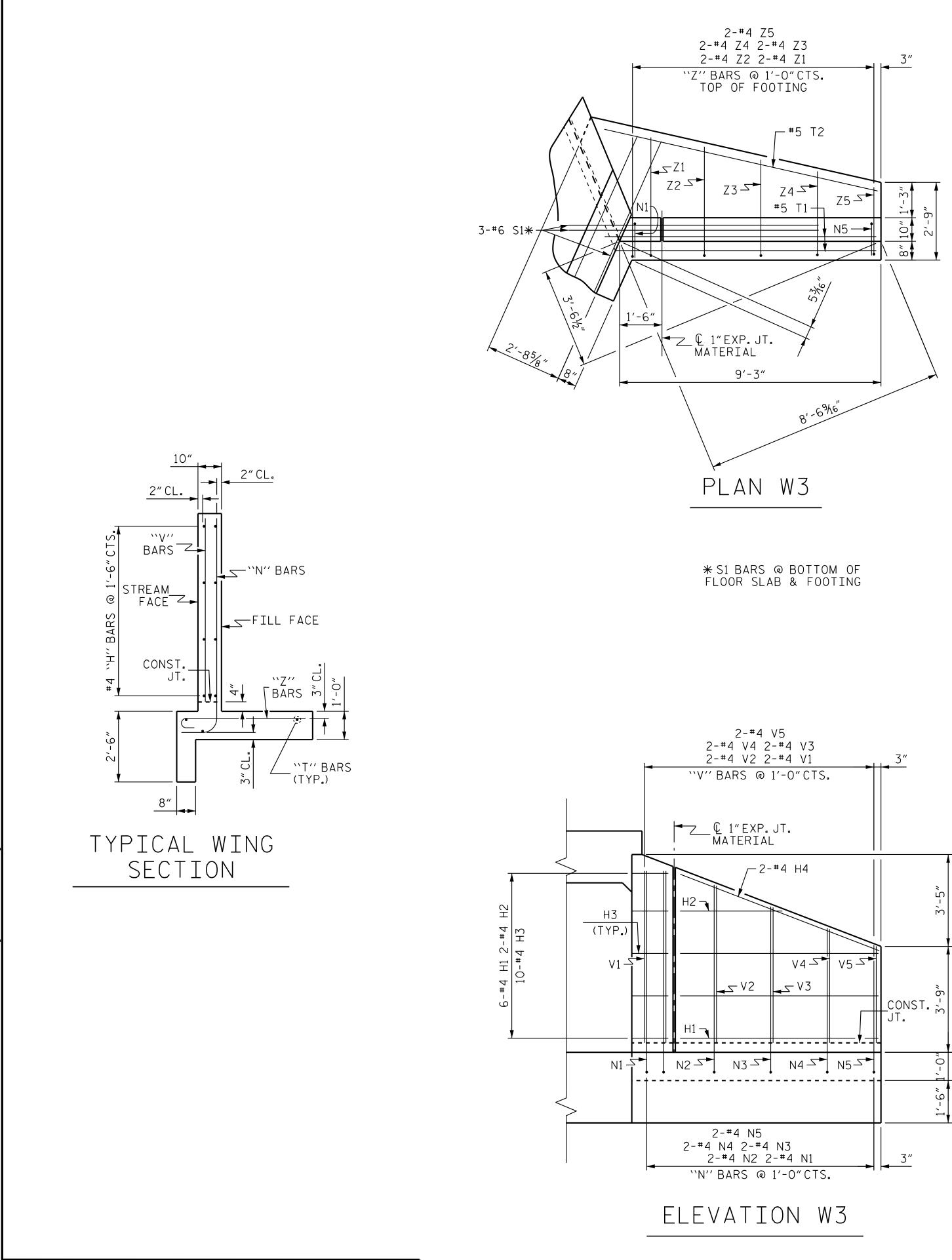
EVATION NORMAL TO SKEW - OUTLET

	PROJECT NO. <u>U-5724</u> <u>WAYNE</u> county Station: 44+87.00 -Y2-
	STATION: 44 + 87.00 - 12 - 12
MUNITH CARO	SHEET 4 OF 8
DocuSigned by: Jeffrey. C. Wilson CDA045FAFCC9416	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH
DocuSigned by: "",",",",",",",",",",",",",",",",",","	SINGLE 10 FT.X 6 FT. Concrete box cuivert
Kimley »Horn	136° SKEW
421 Fayetteville Street, Suite 600 Raleigh, NC 27601-1772 Phone (919) 677-2000 F-0102	REVISIONS SHEET NO. NO. BY: DATE: NO. BY: DATE: C-4
ument, together with the concepts and designs presented herein, as an nt of services, is intended only for the specific purpose and client for was prepared. Reuse of and improper reliance of this document without buthorization and adaption by Kimley-Horn and Associates, Inc. shall be liability to Kimley-Horn and Associates, Inc.	1 3 TOTAL SHEETS 2 4 8
t Kimley-Horn and Associates, Inc., 2019	



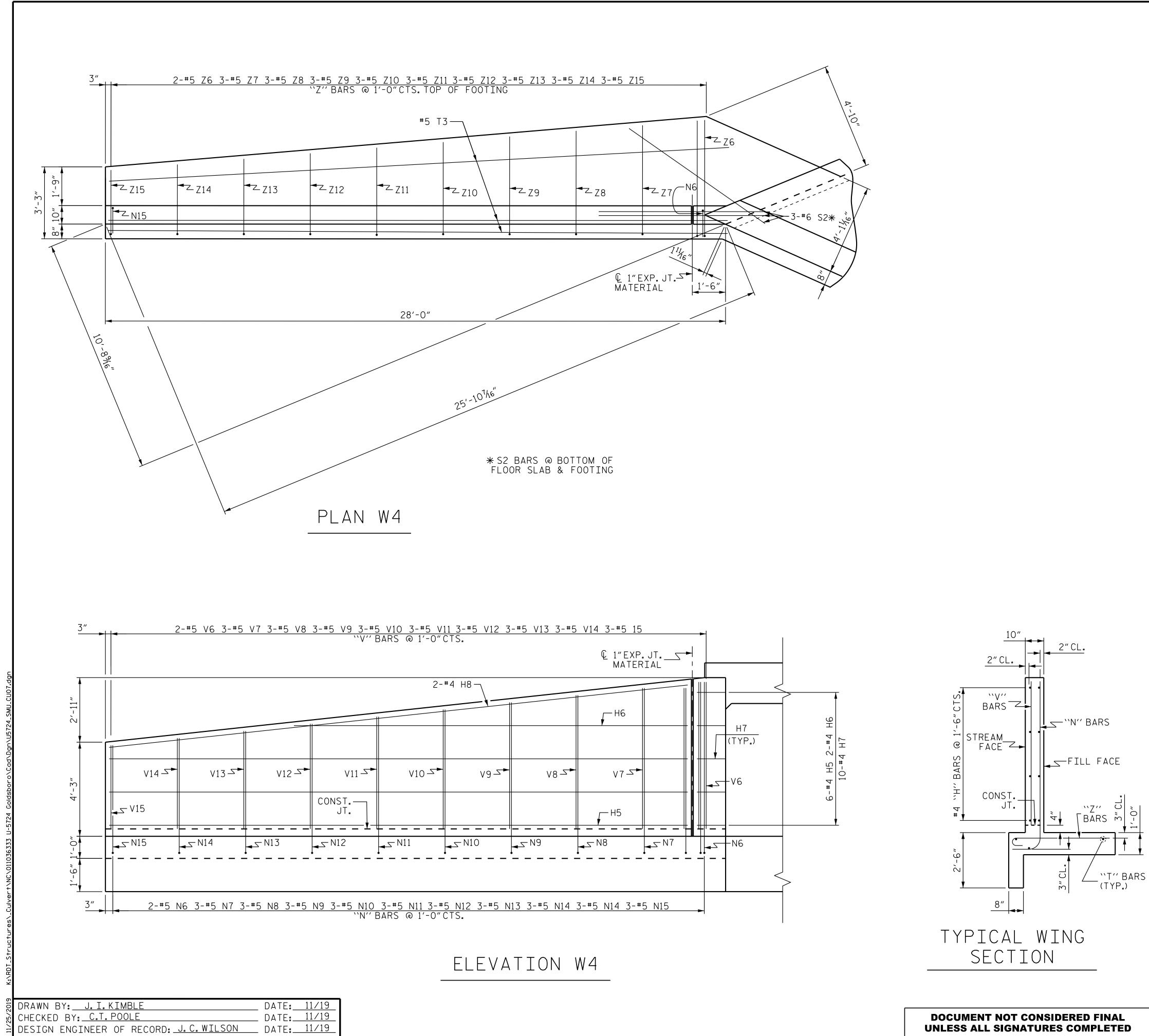


		AL-W1	& W2	BAR TYPES
SIZE	TYPE	LENGTH	WEIGHT	
4	STR	7'-4"	29	
4	STR	3'-10"	5	
4	1	3'-3"	22	$\begin{array}{c c} 1 & & & & \\ \hline 1 & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$
4	STR	7'-11"	11	1,-10//8" 1'-10//8"
4	STR	16'-1"	64	
4	STR	9'-2"	12	
4	2	3'-3"	22	
4	STR	16'-4"	22	1'-3" 91/8"
				│ ⋖──── ≻┼ ⋖── ≻┤
4	3	8'-4"	11	
4	3	7′-8″	10	(2) 2'-0"
4	3	6'-11"	9	
4	3	6'-2"	8	×8/6
4	3	5′-4″	7	o
4	3	8′-6″	11	
4	3	7′-9″	26	1'-3" 1'-10 ¹ /8"
4	3	7'-1"	14	
4	3	6'-6"	13	N11 N10 N10 N10 N10 N10 N10 N10 N10 N10
4	3	5'-11"	12	
4	3	5′-4″	11	
6	STR	6'-0"	54	6'-10 ¹ /2" 6'-2 ¹ /2" 5'-5 ¹ /2" 3'-10 ¹ /2" 5'-0 ¹ /2" 5'-0 ¹ /2" 5'-10 ¹ /2" 5'-10 ¹ /2" 3'-10 ¹ /2"
				5'-10 6'-2 5'-5 7'-0 7'-0 7'-0 7'-0 7'-0 7'-0 7'-0 7'-0
5	STR	8′-7″	18	
5	STR	9′-10″	10	
5	STR	18'-0"	56	
				6" RAD.
4	STR	6'-4"	8	
4	STR	5′-7″	7	3/2
4	STR	4'-10"	6	8"
4	STR	4'-1"	5	71 // 0// 0//
4	STR	3′-4″	4	
4	STR	6′-6″	9	Z2 3'-9" 6"
4	STR	5′-8″	19	Z3 3'-4" 6"
4	STR	5′-1″	10	
4	STR	4′-5″	9	Z4 2'-11" 6"
4	STR	3′-10″	8	Z5 2′-5″6″
4	STR	3'-3"	7	Z6 4'-5" 6"
4	4	4′-8″	6	Z7 <u>3'-10"</u> <u>6"</u>
4	4	4'-3"	6	Z8 3'-6" 6"
4	4	3'-10"	5	Z9 3'-2" 6"
4	4	3′-5″	5	
4	4	2'-11"	4	Z10 2'-9" 6"
4	4	4'-11"	7	Z11 2'-5" 6"
4	4	4'-4"	14	
4	4	4'-0"	8	
4	4	3′-8″	7	(4) <u>HK</u> .
4	4	3'-3"	7	
4	4	2'-11"	6	ALL BAR DIMENSIONS ARE OUT TO OUT.
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<u>ст</u> г	EI	~	24 100	
; STE		Ь	24 LBS	
<u>,</u> ורטר ד				
ICRET	Ľ		9.7 CY	
s All			9.7 CY	
	IN WAI	LL	0.8 CY	
			11.2 CY	PROJECT NO. <u>U-5724</u>
	-			
				WAYNE COUNTY
				STATION: <u>44+87.00 - Y2-</u>
	. \			SHEET 5 OF 8
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		2POTLOSION T		STATE OF NORTH CAROLINA
		SEAL 040384		DEPARTMENT OF TRANSPORTATION
		EN F		RALEIGH
		EX W W	Ĩ.	INLET WING (W1 & W2)
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	ey C. Will 045FAFCC9416	,	,1	DETAILS FOR
				CONCRETE BOX CULVERT
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K	ml	ey≫ŀ	Inn	H = 6' - 0'' SLOPE = 3:1
		-		136° SKEW
	421 Fayet Raleic	teville Street, Su h, NC 27601-17	772	# REVISIONS SHEET NO.
	-	ne (919) 677-200	NULUENSE	
document, ument of so	together with t ervices, is inten	he concepts and designed only for the speci	ns presented herein, as fic purpose and client ce of this document wi d Associates, Inc. shall	
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rignt Kimley	r−Horn and Ass	sociates, Inc., 2019		



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019	DRAWN BY: J.I.KIMBLE	DATE:	11/19
5/2	CHECKED BY: C.T. POOLE	DATE:	11/19
11/2	DRAWN BY: <u>J.I.KIMBLE</u> CHECKED BY: <u>C.T.POOLE</u> DESIGN ENGINEER OF RECORD: <u>J.C.WILSON</u>	DATE:	11/19

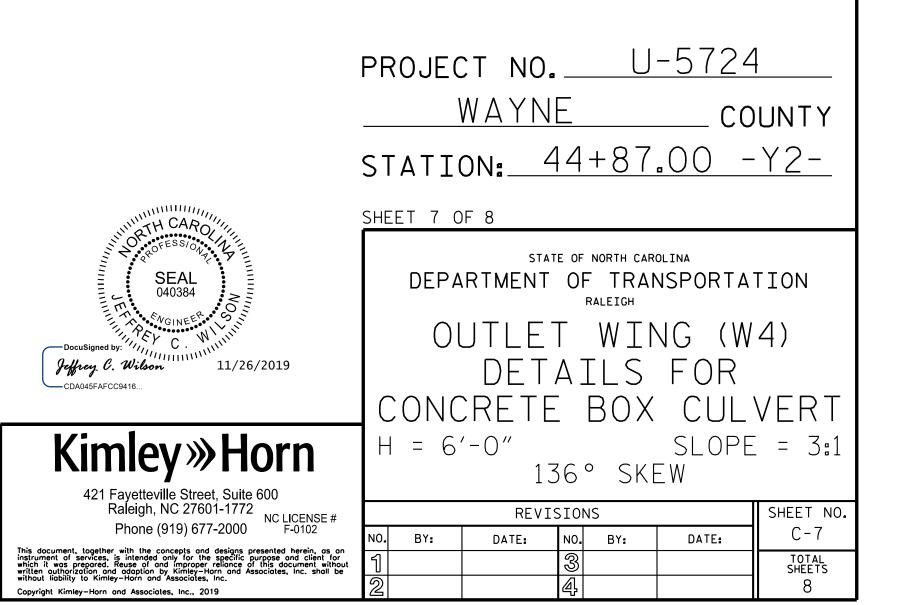
BILL OF MATERIAL-W3 & W4											BAR TYPES				
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT				
H1	6	4	STR	7'-4"	29 5	V1	2	4	STR	6'-4"	8	$\int \int data = \frac{1}{2} $			
H2 H3	2 10	4	STR 1	3'-10" 3'-3"	5 22	V2 V3	2	4	STR STR	5'-7" 4'-10"	6	1 $\dot{\circ}$ $\dot{\circ}$ $\dot{\circ}$ $\dot{\circ}$ $\dot{\circ}$ $\dot{\circ}$ $\dot{\circ}$			
H4	2	4	STR	7'-11"	11	V4	2	4	STR	4'-1"	5	1 $\sqrt[3]{1}$ $\sqrt[3]{2}$ $2'-0''$			
H5	6	4	STR	26'-1"	105	V5	2	4	STR	3'-4"	4				
H6 H7	2 10	4	STR 2	17'-9" 3'-3"	24 22	V6 V7	2 3	5	STR STR	6'-7" 6'-4"	14 20				
Н8	2	4	STR	26'-3"	35	V8	3	5	STR	6'-0"	19	1'-3" 91/8"			
N11	2	1	7	0/ ///	11	V9	3	5	STR	5'-8"	18	1'-3'' $1'-10'/8''$			
N1 N2	2	4	3 3	8'-4" 7'-8"	11 10	V10 V11	3 3	5	STR STR	5'-4" 5'-0"	17 16				
N3	2	4	3	6′-11″	9	V12	3	5	STR	4'-8"	15				
N4 N5	2 2	4	3 3	6'-2" 5'-4"	8	V13 V14	3 3	5	STR STR	4'-5" 4'-1"	14 13				
N6	2	5	3	8'-8"	18	V14 V15	3	5	STR	3'-9"	13				
N7	3	5	3	8'-4"	26							NI N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N			
N8 N9	3 3	5	3 3	8'-0" 7'-9"	25 24	Z1 Z2	2	4	4	4'-8" 4'-3"	6				
N10	3	5	3	7'-5"	23	ZZ Z3	2	4	4	3'-10"	5				
N11	3	5	3	7'-1"	22	Z4	2	4	4	3'-5"	5	$(\mathcal{A}) = \frac{-10/2}{(-1)/2} = $			
N12 N13	3 3	5 5	3 3	6′-9″ 6′-5″	21 20	Z5 Z6	2	4	4	2'-11" 5'-8"	4	$\int_{-1}^{-1} \frac{6'-10!/_{2}"}{5'-5!/_{2}"} \frac{6'-10!/_{2}"}{5'-5!/_{2}"} \frac{6'-2!/_{2}"}{3'-10!/_{2}"} \frac{4'-8!/_{2}"}{5'-11!/_{2}"} \frac{6'-6!/_{2}"}{5'-11!/_{2}"} \frac{6'-6!/_{2}"}{5'-11!/_{2}"} \frac{4'-11!/_{2}"}{4'-11!/_{2}"} \frac{4'-3!/_{2}"}{4'-3!/_{2}"}$			
N13 N14	3	5	3	6'-1"	19	Z0 Z7	3	5	4	5'-5"	12				
N15	3	5	3	5′-9″	18	Z8	3	5	4	5'-2"	16	6'' RAD.			
S1	3	6	STR	6'-0"	27	Z9 Z10	3 3	5 5	4	4'-11" 4'-8"	15 15				
S2	3	6	STR	7'-6"	34	Z11	3	5	4	4'-5"	14	3/2			
			CTD	0/ 7"	10	Z12	3	5	4	4'-2"	13	8"			
T1 T2	2	5 5	STR STR	8'-7" 9'-10"	18 10	Z13 Z14	3 3	5 5	4	3'-11" 3'-8"	12 11				
Т3	3	5	STR	27'-11"	87	Z15	3	5	4	3'-5"	11				
	CLASS A CONCRETE 2 WINGS 14.1 CY 1 HEADWALLS 0.8 CY TOTAL 16.2 CY 2 2 3'-9" 6° 2 3'-4" 6° 2 3'-4" 6° 2 4'-2" 10" 6° 2 4'-2" 6' 2 4'-2" 6' 2 4'-2" 6' 2 4'-2" 6' 2														
										Graduation for the second seco	yetteville Stree leigh, NC 2760 hone (919) 677	$\begin{array}{c} \text{DETAILS FOR} \\ \text{CONCRETE BOX CULVERT} \\ \text{H} = 6'-0'' \\ \text{Suite 600} \\ 1-1772 \\ -2000 \\ \text{F-0102} \\ \text{NOL BY: DATE: NOL BY: DATE: } \end{array}$			
				OCUMEN ILESS ALI						ich it was prepared, is tten authorization and a hout liability to Kimley- pyright Kimley-Horn and					



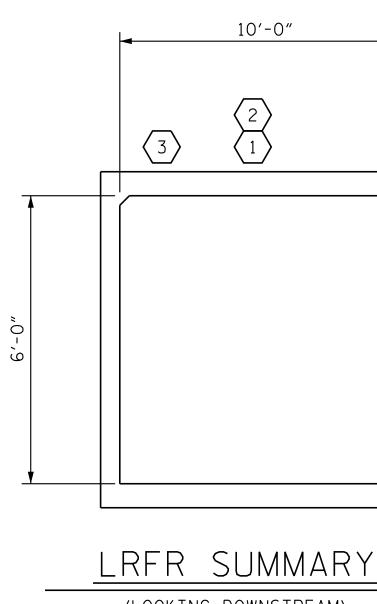
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NOTES

SEE SHEET C-6 FOR BILL OF MATERIAL.



										RETE BO>						r
										STRENGTH	I LIM	IT ST	ATE			
										MOMENT				SHEAR		1
LEVEL		VEHICLE	WEIGHT (W) (TONS)	CONTROLLING #	MINIMUM RATING FACTORS (RF)	TONS = W × RF	LIVE-LOAD FACTORS (Y _{LL})	RATING FACTOR	BOX NO.	ELEMENT TYPE	DISTANCE FROM LEFT END OF ELEMENT (f†)	RATING FACTOR	BOX NO.	ELEMENT TYPE	DISTANCE FROM LEFT END OF ELEMENT (f†)	
		HL-93 (INVENTORY)	N/A	$\langle 1 \rangle$	1.07		1.75	1.07	1	TOP SLAB	5.38	1.25	1	TOP SLAB	0.75	
DESIGN LOAD		HL-93 (OPERATING)	NZA		1.39		1.35	1.39	1	TOP SLAB	5.38	1.62	1	TOP SLAB	0.75	
RATING		HS-20 (INVENTORY)	36.000	2	1.16	41.76	1.75	1.16	1	TOP SLAB	5.38	1.38	1	TOP SLAB	0.75	
		HS-20 (OPERATING)	36.000		1.50	54.00	1.35	1.50	1	TOP SLAB	5.38	1.79	1	TOP SLAB	0.75	
		SNSH	13.500		2.11	28.49	1.40	2.11	1	TOP SLAB	5.38	2.95	1	TOP SLAB	0.75	
	ICLE	SNGARBS2	20.000		1.97	39.40	1.40	1.97	1	TOP SLAB	5.38	2.69	1	TOP SLAB	0.75	
		SNAGRIS2	22.000		2.11	46.42	1.40	2.11	1	TOP SLAB	5.38	2.95	1	TOP SLAB	0.75	
	VEH SV)	SNCOTTS3	27.250	3	1.47	40.06	1.40	1.51	1	TOP SLAB	5.38	1.47	1	TOP SLAB	0.75	
	SLE (S	SNAGGRS4	34.925		1.47	51.34	1.40	1.47	1	BOTTOM SLAB	5.38	2.09	1	BOTTOM SLAB	0.75	
	SING	SNS5A	35.550		1.55	55.10	1.40	1.55	1	BOTTOM SLAB	5.38	1.87	1	TOP SLAB	0.75	
		SNS6A	39.950		1.54	61.52	1.40	1.54	1	BOTTOM SLAB	5.38	1.87	1	TOP SLAB	0.75	L
LEGAL LOAD		SNS7B	42.000		1.55	65.10	1.40	1.55	1	BOTTOM SLAB	5.38	1.88	1	TOP SLAB	0.75	L
LOAD RATING	LER	TNAGRIT3	33.000		1.94	64.02	1.40	1.94	1	BOTTOM SLAB	5.38	2.71	1	BOTTOM SLAB	0.75	L
	[RA]	TNT4A	33.075		1.80	59.54	1.40	1.80	1	TOP SLAB	5.38	1.89	1	TOP SLAB	0.75	
	L-IW	TNT6A	41.600		1.56	64.90	1.40	1.56	1	BOTTOM SLAB	5.38	1.93	1	TOP SLAB	0.75	
	R SEM	ΤΝΤ7Α	42.000		1.68	70.56	1.40	1.68	1	BOTTOM SLAB	5.38	1.95	1	TOP SLAB	0.75	
	CTOR (TT)	TNT7B	42.000		1.55	65.10	1.40	1.55	1	BOTTOM SLAB	5.38	1.88	1	TOP SLAB	0.75	
	TRA	TNAGRIT4	43.000		1.80	77.40	1.40	1.80	1	TOP SLAB	5.38	1.89	1	TOP SLAB	0.75	
	TRUCK	TNAGT5A	45.000		1.81	81.45	1.40	1.81	1	BOTTOM SLAB	5.38	1.94	1	TOP SLAB	0.75	
	TR	TNAGT5B	45.000		1.80	81.00	1.40	1.80	1	TOP SLAB	5.38	1.89	1	TOP SLAB	0.75	



ASSEMBLED BY CHECKED BY :		DATE DATE	11/19 11/19
DRAWN BY : CHECKED BY :	7/II 7/II	REV. 10/1/11 REV. 12/17	MAA/GM MAA/THC

10'-0"

(LOOKING DOWNSTREAM)

LOAD FACTORS:

LOAD TYPE	MAX FACTOR	MIN FACTOR
DC	1.25	0.90
DW	1.50	0.65
ΕV	1.30	0.90
EH	1.35	0.90
ES	1.35	0.90
LS	1.75	
WA	1.00	

DESIGN LOAD RATING FACTORS

NOTE:

RATING FACTORS ARE BASED ON THE STRENGTH I LIMIT STATE.

COMMENTS:

- 1. 2.
- 3.
- 4.
- (#) CONTROLLING LOAD RATING 1 DESIGN LOAD RATING (HL-93) $\langle 2 \rangle$ design load rating (HS-20) 3 LEGAL LOAD RATING ** ** SEE CHART FOR VEHICLE TYPE

	PROJECT NO. <u>U-5724</u> <u>WAYNE</u> county Station: <u>44+87.00 -Y2-</u>		
SHEET 8 OF 8			
Docusigned by: Jeffrey C. Wilson 11/26/2019	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH STANDARD		
	LRFR SUMMARY FOR		
	REINFORCED CONCRETE		
Kimley Worn	(NON-INTERSTATE TRAFFIC)		
421 Fayetteville Street, Suite 600 Raleigh, NC 27601-1772	REVISIONS SHEET NO.		
Phone (919) 677-2000 F-0102	NO. BY: DATE: NO. BY: DATE: C-8		
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ht Kimley-Horn and Associates, Inc., 2019			
	STD.NO.LRFR5		

DESIGN DATA:

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SPECIFICATIONS	A.A.S.H.T.O. (CURRENT)
LIVE LOAD	SEE PLANS
IMPACT ALLOWANCE	SEE A.A.S.H.T.O.
STRESS IN EXTREME FIBER OF STRUCTURAL STEEL - AASHTO M270 GRADE 36	20,000 LBS.PER SQ.IN.
- AASHTO M270 GRADE 50W	27,000 LBS.PER SQ.IN.
- AASHTO M270 GRADE 50	27,000 LBS.PER SQ.IN.
REINFORCING STEEL IN TENSION - GRADE 60	24,000 LBS.PER SQ.IN.
CONCRETE IN COMPRESSION	1,200 LBS.PER SQ.IN.
CONCRETE IN SHEAR	SEE A.A.S.H.T.O.
STRUCTURAL TIMBER - TREATED OR UNTREATED EXTREME FIBER STRESS	1,800 LBS.PER SQ.IN.
COMPRESSION PERPENDICULAR TO GRAIN OF TIMBER	375 LBS.PER SQ.IN.
EQUIVALENT FLUID PRESSURE OF EARTH	30 LBS.PER CU.FT. (MINIMUM)

MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2018 ``STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" OF THE N. C. DEPARTMENT OF TRANSPORTATION.

STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE HOT ROLLED.

CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; AND CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP.

CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED $\frac{3}{4}$ " WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO 11/2" RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A 1/4" FINISHING TOOL UNLESS OTHERWISE REQUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A $\frac{1}{4}$ "RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12" INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE $\frac{7}{8}$ " Ø SHEAR STUDS FOR THE ¾″Ø STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - $\frac{7}{8}$ " Ø STUDS FOR 4 - $\frac{3}{4}$ " Ø STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF 1/8" Ø STUDS ALONG THE BEAM AS SHOWN FOR $\frac{3}{4}$ " Ø STUDS BASED ON THE RATIO OF 3 - $\frac{7}{8}$ " Ø STUDS FOR 4 - $\frac{3}{4}$ " Ø STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-O".

STANDARD NOTES

ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE.

ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS FOR THE ELEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER. WHERE BOTTOM OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER.

IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK, AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FALSEWORK OR FORMS IS STARTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS.

WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

STRUCTURAL STEEL:

EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE. THE CONTRACTOR MAY, AT HIS OPTION. SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST 5/16" IN THICKNESS AND DO NOT EXCEED A WIDTH EQUAL TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/AASHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED.

WITH THE SOLE EXCEPTION OF EDGES AT SURFACES WHICH BEAR ON OTHER SURFACES.ALL SHARP EDGES AND ENDS OF SHAPES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SUITABLE MEANS TO A RADIUS OF APPROXIMATELY 1/16 INCH OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING. GALVANIZING. OR METALLIZING.

HANDRAILS AND POSTS:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB.

METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

SPECIAL NOTES:

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THÉ SPECIFICATIONS, BUT THÉ REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS ARTICLE 105-4.

