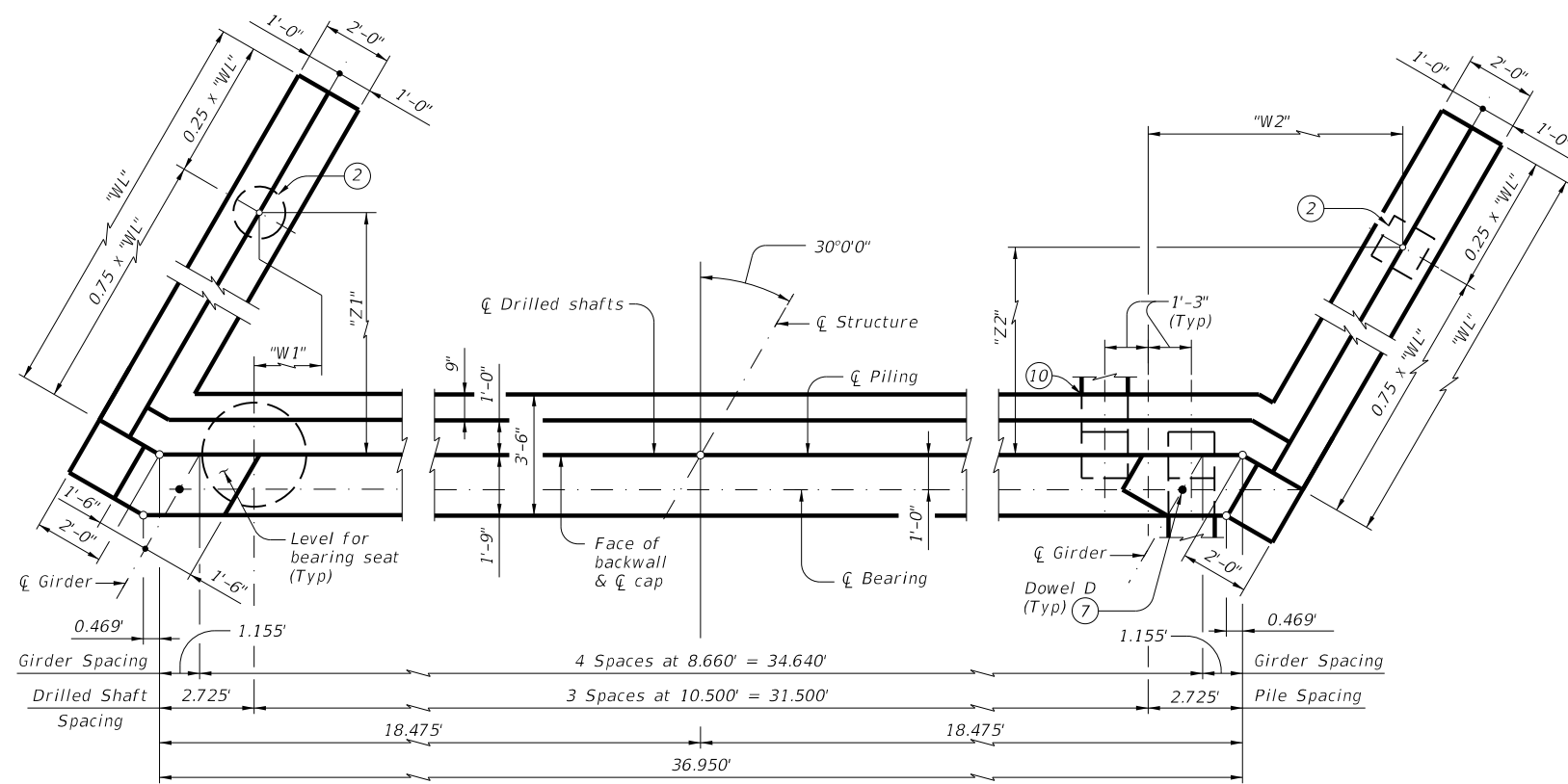
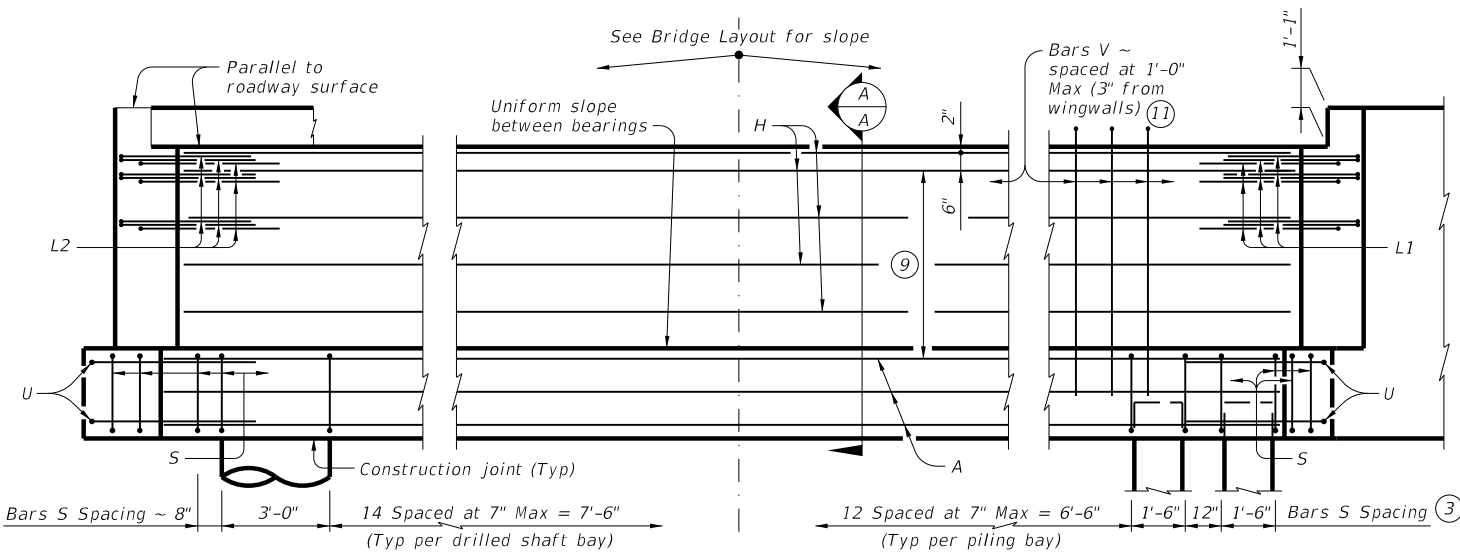


DISCLAIMER: This standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE: FILE:



PLAN 1

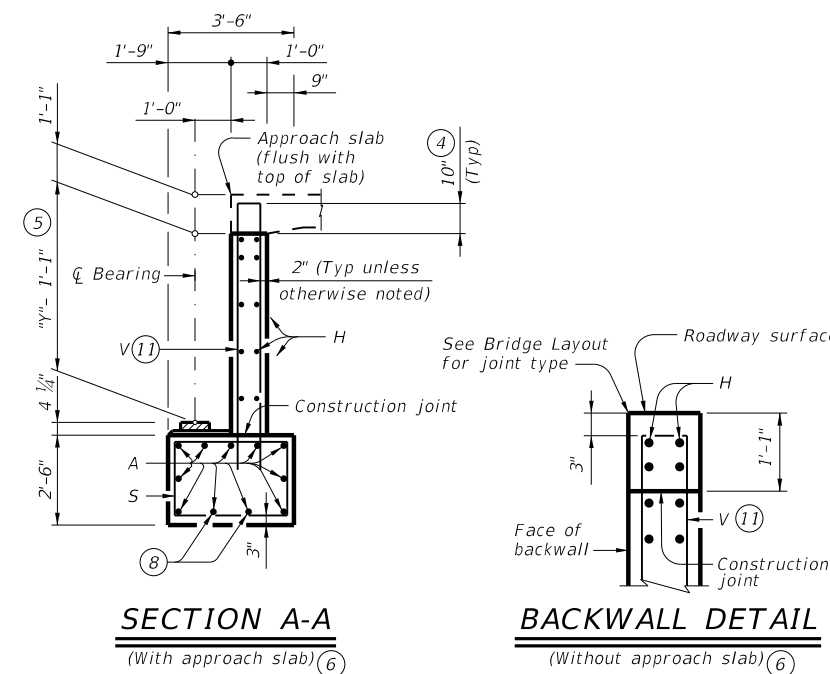


ELEVATION

Header Slope	Girder Type	Wingwall Type	Wingwall Lgth "WL"	"W1"	"Z1"	"W2"	Z2"
2:1	Tx28	Cantilevered	10.000'	Not Applicable			
	Tx34	Cantilevered	11.000'	Not Applicable			
	Tx40	Cantilevered	12.000'	Not Applicable			
	Tx46	Founded	14.000'	1.659'	9.593'	8.841'	8.593'
	Tx54	Founded	15.000'	2.034'	10.243'	9.216'	9.243'
3:1	Tx28	Founded	14.000'	1.659'	9.593'	8.841'	8.593'
	Tx34	Founded	16.000'	2.409'	10.892'	9.591'	9.892'
	Tx40	Founded	18.000'	3.159'	12.191'	10.341'	11.191'
	Tx46	Founded	20.000'	3.909'	13.490'	11.091'	13.789'
	Tx54	Founded	22.000'	4.659'	14.789'	11.841'	13.789'

TABLE OF FOUNDATION LOADS

Span Length Ft	All Girder Types	
	Tons/Shaft	Tons/Pile
40	58	54
45	62	56
50	65	58
55	69	60
60	73	62
65	76	64
70	80	66
75	84	68
80	87	70
85	91	71
90	94	73
95	98	75
100	101	77
105	105	79
110	108	80
115	112	82
120	115	84
125	119	86



SECTION A-A  
(With approach slab) 6

BACKWALL DETAIL  
(Without approach slab) 6

- 1 See Table A for variable dimensions based on header slope and girder type.
- 2 See Table A to determine if this wingwall foundation is required.
- 3 For piling larger than 16" adjust Bars S spacing as required to avoid piling.
- 4 Increase as required to maintain 3" from finished grade.
- 5 See Span details for "Y" value.
- 6 See Bridge Layout to determine if approach slab is present.
- 7 Omit Dowels D at end of multi-span unit. Adjust reinforcing steel total accordingly.
- 8 With pile foundations, move Bars A shown to clear piles.
- 9 Spacing based on girder type:  
Tx28 ~ 3 spaces at 1'-0" Max  
Tx34 ~ 3 spaces at 1'-0" Max  
Tx40 ~ 4 spaces at 1'-0" Max  
Tx46 ~ 4 spaces at 1'-0" Max  
Tx54 ~ 5 spaces at 1'-0" Max
- 10 See Detail A on the Common Foundation Details (FD) standard.
- 11 Field bend as needed to clear piles.

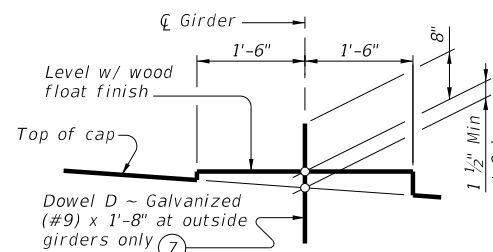
MATERIAL NOTES:

Provide Class C concrete ( $f'_c = 3,600$  psi).  
Provide Class C (HPC) concrete if shown elsewhere in the plans.  
Provide Grade 60 reinforcing steel.  
Galvanize dowel bars D.

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications.  
See Bridge Layout for header slope and foundation type, size and length.  
See Common Foundation Details (FD) standard sheet for all foundation details and notes.  
See Concrete Riprap (CRR) standard sheet or Stone Riprap (SRR) standard sheet for riprap attachment details, if applicable.  
See applicable rail details for rail anchorage in wingwalls.  
Details are drawn showing right forward skew. See Bridge Layout for actual skew directions.  
These abutment details may be used with standard SIG-34-30 only.

Cover dimensions are clear dimensions, unless noted otherwise.  
Reinforcing bar dimensions shown are out-to-out of bar.



BEARING SEAT DETAIL

(Bearing surface must be clean and free of all loose material before placing bearing pad.)

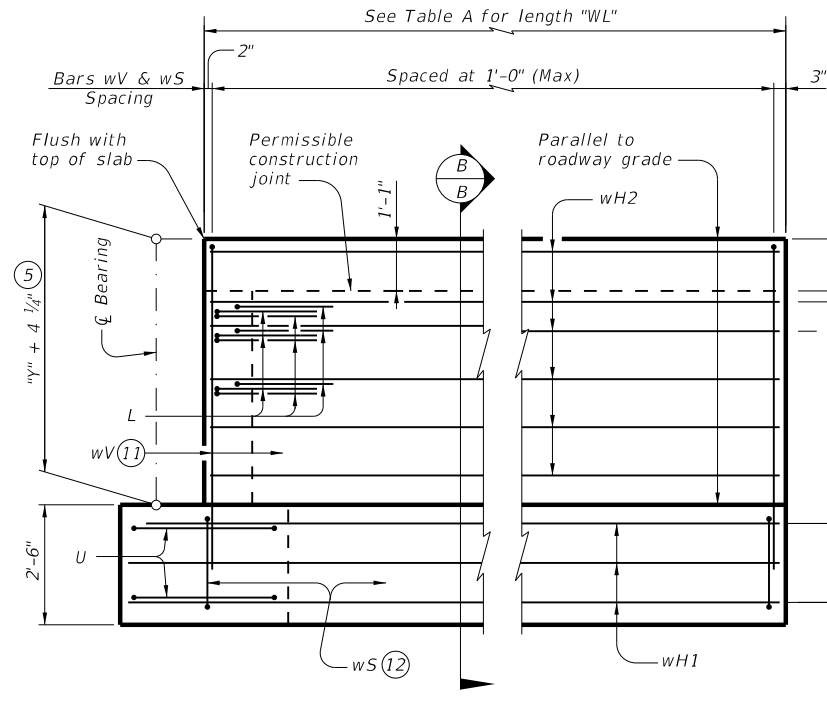
ABUTMENTS  
TYPE TX28 THRU TX54  
PRESTR CONC I-GIRDERS  
34' ROADWAY 30° SKEW

AIG-34-30

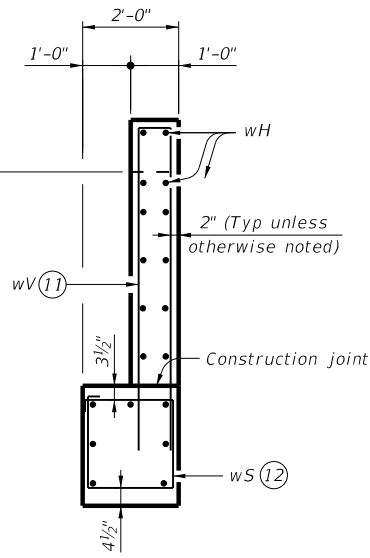
FILE: IG-AIG3430-24.dgn	DN: TAR	CK: VC	DW: SFS	CK: TAR
©TxDOT January 2023	CONT	SECT	JOB	HIGHWAY
REVISIONS				
05/2024: Updated FDN loads.	DIST	COUNTY		SHEET NO.

DISCLAIMER: This standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

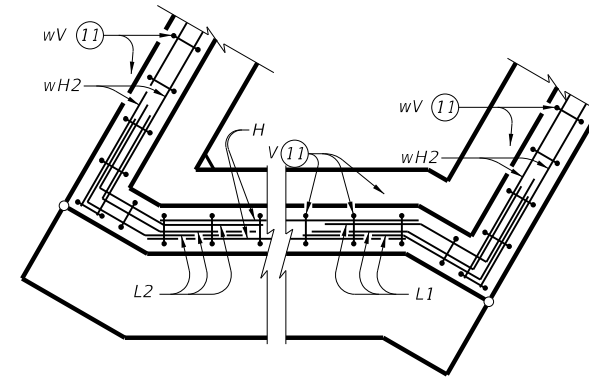
DATE:  
FILE:



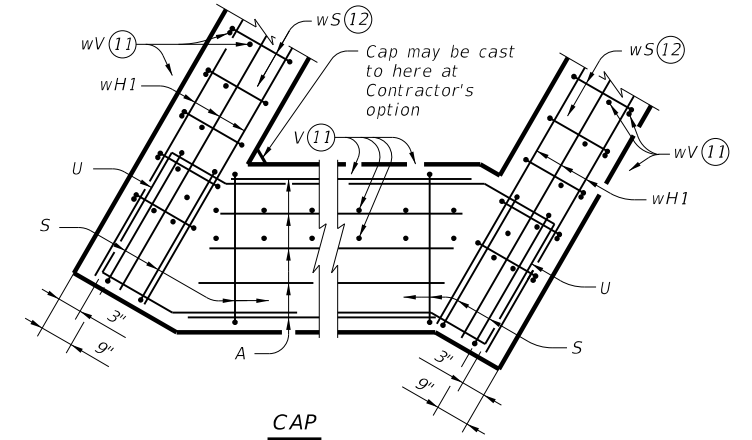
**WINGWALL ELEVATION**



**SECTION B-B**

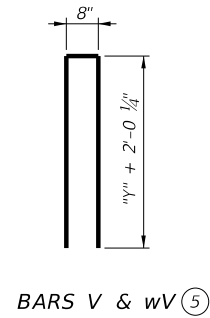


**BACKWALL**

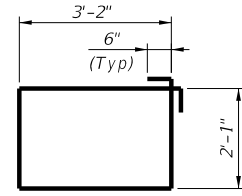


**CAP**

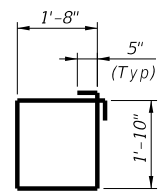
**CORNER DETAILS**



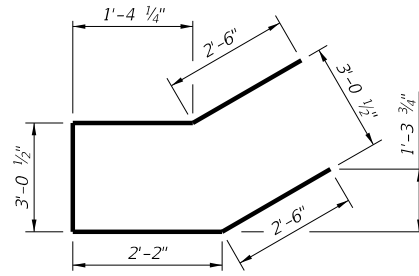
**BARS V & wV(5)**



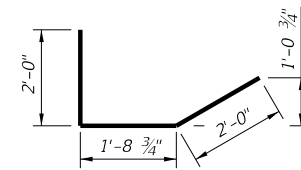
**BARS S**



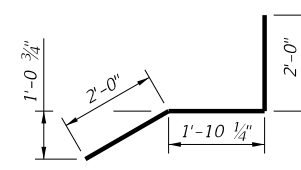
**BARS wS**



**BARS U**



**BARS L2**



**BARS L1**

(5) See Span details for "y" value.

(9) Spacing based on girder type:  
 Tx28 ~ 3 spaces at 1'-0" Max  
 Tx34 ~ 3 spaces at 1'-0" Max  
 Tx40 ~ 4 spaces at 1'-0" Max  
 Tx46 ~ 4 spaces at 1'-0" Max  
 Tx54 ~ 5 spaces at 1'-0" Max

(11) Field bend as needed to clear piles.

(12) Adjust as required to avoid piling.

		<b>Bridge Division Standard</b>	
<b>ABUTMENTS</b> TYPE TX28 THRU TX54 PRESTR CONC I-GIRDERS 34' ROADWAY 30° SKEW <b>AIG-34-30</b>			
FILE: IG-AIG3430-24.dgn	DN: TAR	CK: VC	DW: SFS
©TxDOT January 2023	CONT	SECT	JOB
REVISIONS			HIGHWAY
05/2024: Updated FDN loads.	DIST	COUNTY	SHEET NO.

DISCLAIMER: This standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

**TABLES OF ESTIMATED QUANTITIES WITH 2:1 HEADER SLOPE<sup>13</sup>**

TYPE Tx28 Girders					TYPE Tx34 Girders					TYPE Tx40 Girders					TYPE Tx46 Girders					TYPE Tx54 Girders									
Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight					
A	11	#11	36'-11"	2,158	A	11	#11	36'-11"	2,158	A	11	#11	36'-11"	2,158	A	11	#11	36'-11"	2,158	A	11	#11	36'-11"	2,158					
D <sup>7</sup>	2	#9	1'-8"	11	D <sup>7</sup>	2	#9	1'-8"	11	D <sup>7</sup>	2	#9	1'-8"	11	D <sup>7</sup>	2	#9	1'-8"	11	D <sup>7</sup>	2	#9	1'-8"	11					
H	8	#6	36'-11"	444	H	8	#6	36'-11"	444	H	10	#6	36'-11"	554	H	10	#6	36'-11"	554	H	12	#6	36'-11"	665					
L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80					
L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78					
S	50	#5	11'-6"	600	S	50	#5	11'-6"	600	S	50	#5	11'-6"	600	S	50	#5	11'-6"	600	S	50	#5	11'-6"	600					
U	4	#6	11'-7"	70	U	4	#6	11'-7"	70	U	4	#6	11'-7"	70	U	4	#6	11'-7"	70	U	4	#6	11'-7"	70					
V	40	#5	11'-4"	473	V	40	#5	12'-4"	515	V	40	#5	13'-4"	556	V	40	#5	14'-4"	598	V	40	#5	15'-8"	654					
wH1	14	#6	11'-5"	240	wH1	14	#6	12'-5"	261	wH1	14	#6	13'-5"	282	wH1	14	#6	15'-5"	324	wH1	14	#6	16'-5"	345					
wH2	20	#6	9'-8"	290	wH2	20	#6	10'-8"	320	wH2	24	#6	11'-8"	421	wH2	24	#6	13'-8"	493	wH2	28	#6	14'-8"	617					
wS	22	#4	7'-10"	115	wS	24	#4	7'-10"	126	wS	26	#4	7'-10"	136	wS	30	#4	7'-10"	157	wS	32	#4	7'-10"	167					
wV	22	#5	11'-4"	260	wV	24	#5	12'-4"	309	wV	26	#5	13'-4"	362	wV	30	#5	14'-4"	448	wV	32	#5	15'-8"	523					
Reinforcing Steel				Lb	4,819	Reinforcing Steel				Lb	4,972	Reinforcing Steel				Lb	5,308	Reinforcing Steel				Lb	5,571	Reinforcing Steel				Lb	5,968
Class "C" Concrete				CY	22.9	Class "C" Concrete				CY	24.7	Class "C" Concrete				CY	26.6	Class "C" Concrete				CY	29.2	Class "C" Concrete				CY	31.7

**TABLES OF ESTIMATED QUANTITIES WITH 3:1 HEADER SLOPE<sup>13</sup>**

TYPE Tx28 Girders					TYPE Tx34 Girders					TYPE Tx40 Girders					TYPE Tx46 Girders					TYPE Tx54 Girders									
Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight					
A	11	#11	36'-11"	2,158	A	11	#11	36'-11"	2,158	A	11	#11	36'-11"	2,158	A	11	#11	36'-11"	2,158	A	11	#11	36'-11"	2,158					
D <sup>7</sup>	2	#9	1'-8"	11	D <sup>7</sup>	2	#9	1'-8"	11	D <sup>7</sup>	2	#9	1'-8"	11	D <sup>7</sup>	2	#9	1'-8"	11	D <sup>7</sup>	2	#9	1'-8"	11					
H	8	#6	36'-11"	444	H	8	#6	36'-11"	444	H	10	#6	36'-11"	554	H	10	#6	36'-11"	554	H	12	#6	36'-11"	665					
L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80					
L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78					
S	50	#5	11'-6"	600	S	50	#5	11'-6"	600	S	50	#5	11'-6"	600	S	50	#5	11'-6"	600	S	50	#5	11'-6"	600					
U	4	#6	11'-7"	70	U	4	#6	11'-7"	70	U	4	#6	11'-7"	70	U	4	#6	11'-7"	70	U	4	#6	11'-7"	70					
V	40	#5	11'-4"	473	V	40	#5	12'-4"	515	V	40	#5	13'-4"	556	V	40	#5	14'-4"	598	V	40	#5	15'-8"	654					
wH1	14	#6	15'-5"	324	wH1	14	#6	17'-5"	366	wH1	14	#6	19'-5"	408	wH1	14	#6	21'-5"	450	wH1	14	#6	23'-5"	492					
wH2	20	#6	13'-8"	411	wH2	20	#6	15'-8"	471	wH2	24	#6	17'-8"	637	wH2	24	#6	19'-8"	709	wH2	28	#6	21'-8"	911					
wS	30	#4	7'-10"	157	wS	34	#4	7'-10"	178	wS	38	#4	7'-10"	199	wS	42	#4	7'-10"	220	wS	46	#4	7'-10"	241					
wV	30	#5	11'-4"	355	wV	34	#5	12'-4"	437	wV	38	#5	13'-4"	528	wV	42	#5	14'-4"	628	wV	46	#5	15'-8"	752					
Reinforcing Steel				Lb	5,161	Reinforcing Steel				Lb	5,408	Reinforcing Steel				Lb	5,879	Reinforcing Steel				Lb	6,156	Reinforcing Steel				Lb	6,712
Class "C" Concrete				CY	25.5	Class "C" Concrete				CY	28.1	Class "C" Concrete				CY	30.9	Class "C" Concrete				CY	33.8	Class "C" Concrete				CY	37.3

<sup>7</sup> Omit Dowels D at end of multi-span unit. Adjust reinforcing steel total accordingly.

<sup>13</sup> Quantities shown are for one abutment only (with approach slab). With no approach slab, add 1.6 CY Class "C" concrete and 250 lbs reinforcing steel for 4 additional Bars H.

Texas Department of Transportation		Bridge Division Standard	
<h2 style="margin: 0;">ABUTMENTS</h2> <h3 style="margin: 0;">TYPE TX28 THRU TX54</h3> <h3 style="margin: 0;">PRESTR CONC I-GIRDERS</h3> <h3 style="margin: 0;">34' ROADWAY 30° SKEW</h3> <h2 style="margin: 0;">AIG-34-30</h2>			
FILE: IG-AIG3430-24.dgn	DN: TAR	CK: VC	DW: SFS
©TxDOT January 2023	CONT	SECT	JOB
REVISIONS	DIST		COUNTY
05/2024: Updated FDN loads.			SHEET NO.

DATE: FILE: