12/19

Job No.	SE0045
Replaces Bridge No.	S0532

Missouri Department of Transportation Bridge Survey Location Request

Page 1 to be completed by District staff.

Bridge o	over:	Smal	Creek			Route:	N	
County:	Cape Girardeau	Section	n: 1		Township:	29 North	Range:	11 East
Latitude: 37°12'26.72"N Lon					ngitude:89°4	6'55.44"W	- -	
District Co	ntact: Garrett Galyean (5	73-472	-5221)			Date:	5/3/202	:3
	HICH WATE	D EL E	VATIONS	AT D	PODOSED E	DIDCE SITE		
HIGH WATER ELEVATIONS AT PROPOSED BRIDGE SITE Recorded high water elevations or elevation of high water marks								
Extreme High Water (EHW) (Give date(s) of occurrence)								
Elevation	ns and date(s) of same		Loca	ation		Source of information		
4.	5" Below (1986)	Ве	low East E	End of	Bridge	HW Book 8124A		
Existing E	Bridge Overtopped ☐ Yes	□No ▷	Unknown	Existi	ng Roadway	Overtopped	□ Yes □No	⊠Unknown
				Approx. Overtopping Location(s):				
		LOC	CATION O	F NEV	V BRIDGE			
Replace in	Existing Location	\boxtimes	Provide de or as an a			sed changes t	o profile gra	de below
Relocation	(near existing Structure)		Provide de	etails d	of proposed l	ocation and d	rade of the	roadway
New Route)		Provide details of proposed location and grade of the roadway across the floodplain, any proposed/potential channel change					
Other:			or modific	ations	, etc. below o	or as an attach	nment.	

Additional Information:

page 2 & subsequent pages to be completed by Bridge Division

Note: Proposed elevations, distances, etc. are based on the best available data at the time the form was completed. Actual field conditions or recently acquired data may require deviation from the proposed values. Please contact the Bridge Division with concerns regarding the proposed values or if large deviations from these values are required.

Note: The information below supplements the survey requirements noted in the EPG, please consult EPG 238 for additional surveying requirements.

Bridge Contact: Garrett Hager, Garrett.Hager@modot.mo.gov, (573)751-7411

Survey	Type:	1D	Survey	1
--------	-------	----	--------	---

Stream Crossing Survey Location Details (1D)								
Item Requirement Standard Guidance						Specific Guidance		
.3)	C/L Profile	Terminal Point	Limit of Lor	nge	st offset Profile	Use Standar	d Guidance	е
<u>~</u>	Upstream Offset	Terminal Point	Same as V	alle	y Sections	Elevation =		365 ft
Profiles* 238.3.36.1	Profile	Offset Distance	On Natural	Gr	ound	Estimated Di	stance =	40 ft
Profiles* 238.3.36	Downstream	Terminal Point	Same as V	alle	y Sections	Elevation =		365 ft
EPG	Offset Profile	Offset Distance	On Natural	Gr	ound	Estimated Di	stance =	40 ft
(E	Special	Please Provide Prof	ile Along Me	dia	n			
		Length	Natural Stream		Section limits (Min. of 1000' each side of crossing.)	Use Natural Stream Guidance (Upstream)		
Stream	nbed Profiles**		Drainage Ditch		500' Each Side of Crossing	Use Drainage Ditch Guidance (Down Stream)		idance
	38.3.36.3.6)				Nat. Stream 25'	- Use Natural Stream Guidance		
			of Crossing		Drain. Ditch 50'			iidance
		Elevation Intervals	Beyond 1000' from Crossing		At Vertical and Horizontal Break Points (200' max.)	(see EPG 238.3.36.3.6 if a significant slope change is encountered)		gnificant
	Sections	Terminal Point	Natural Stream	5'	above EHW	Elevation =	365 ft (ma either sid creek) (U	e of small
(EPG 238.3.36.3.8), (EPG 750.3.1.1)	Terrilliai Poliit	Drainage Ba		o' Beyond ankside Toe of evee	Distance =	50' beyon leave (downstre		

Item	Requirement	Standard (Guidance	Specific Guidance		
	Water Surface Profile Data Needed? ☐ Yes ☐ No					
Water Surface Profile (EPG 238.3.36.3.7)	Locations with flowing water	Drainage Ditch	100' and 200' each side of Crossing	Use Water Surface Profile Standard Guidance		

Item Requirement	Standard Guidance	Specific Guidance
------------------	-------------------	-------------------

Typical Channel	Typical Channel Se	ection Data Needed?	⊠ No
Sections (EPG 238.3.36.3.9)	Within 300' each side of Centerline	Provide when Needed (i.e., Culvert on Perennial and Intermittent Stream)	

Item	Requirement	Standard Guidance	Specific Guidance		
Existing Bridge Data	Existing Bridge Data Needed?				
	Description	Provide General Description	N/A		

Item	Requirement Standard Guidance		Specific Guidance			
	Other Bridge Data Needed? ☐ Yes ☒ No					
Other Bridges	Description	Provide General Description	N/A			
(EPG 238.3.36.3.10)	Profile Location	C/L Structure	N/A			
	Profile Terminal Point	5' above EHW	Elevation =	N/A		

^{*} additional profiles may be needed for relocated routes

Additional Information:

Valley Sections for each leg upstream, as well as a valley section between the structure and where the tributaries converge. Channel sections for each leg will be needed as well.

Additional Documents Provided:

Image & kmz file showing Valley Section Locations.

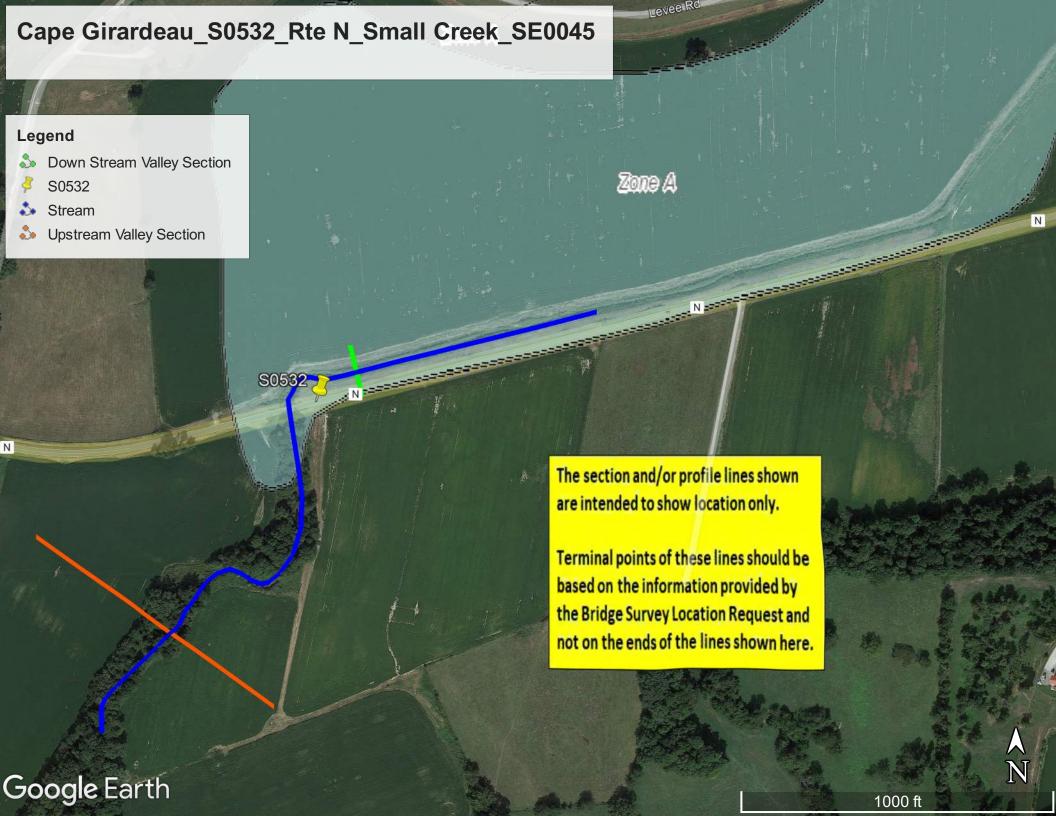
Roadway Design Notes for Bridge Survey:

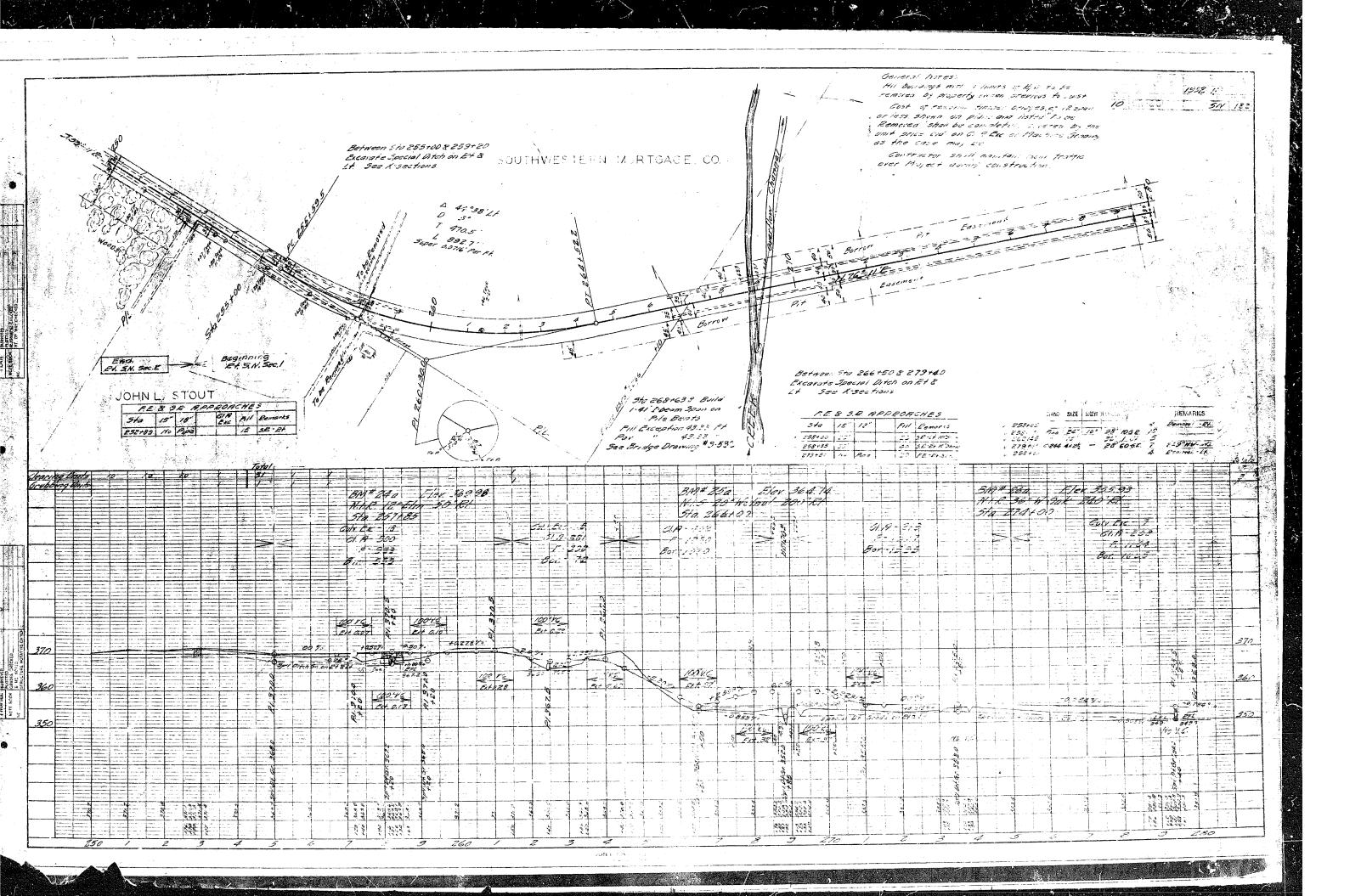
The Bridge Survey should include all the pertinent items listed in EPG 747 and the Bridge Survey Checklist.

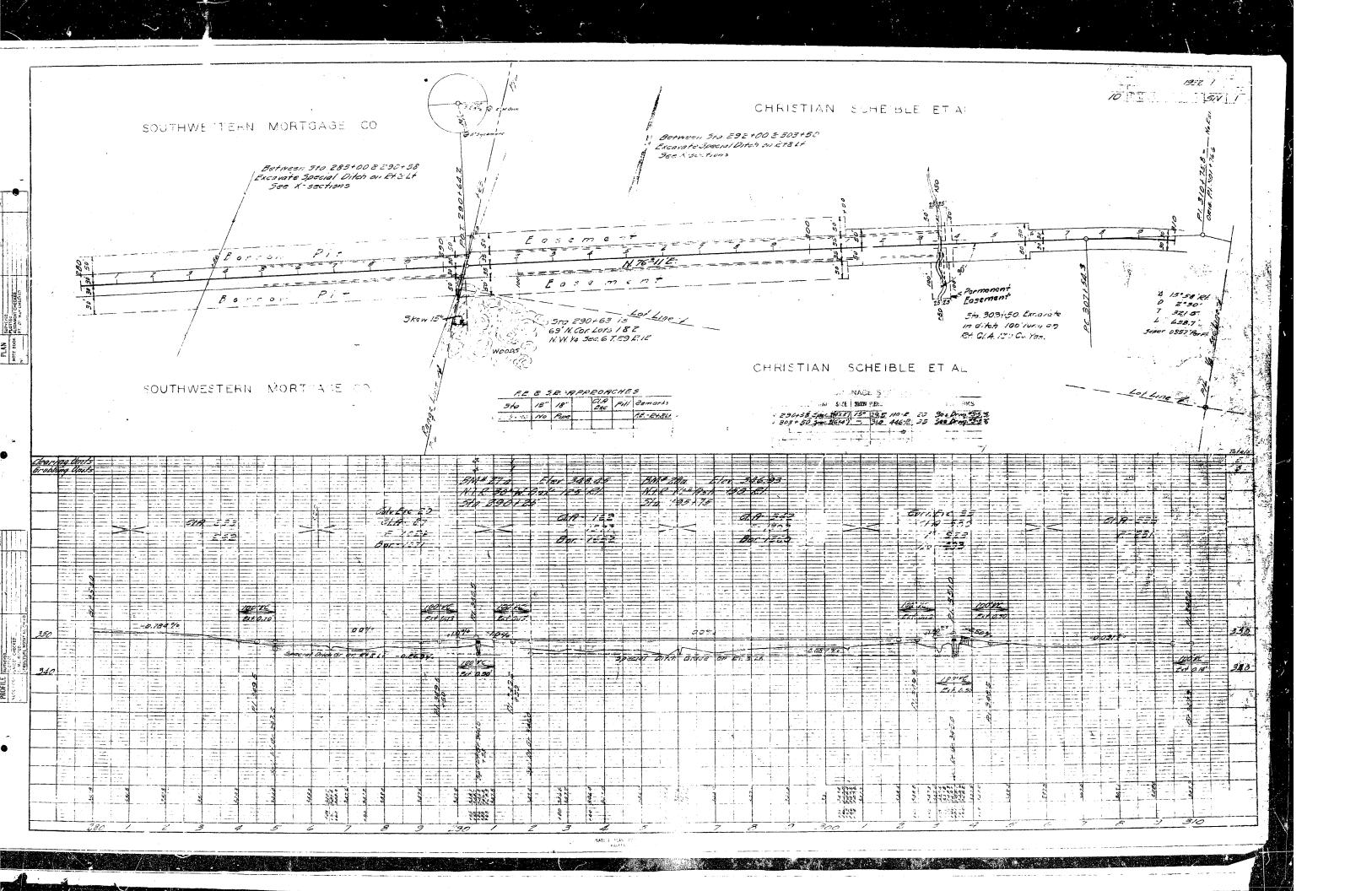
Bridge Design Notes:

FEMA Zone A, panel 29201C0075D eff. 6/5/2012

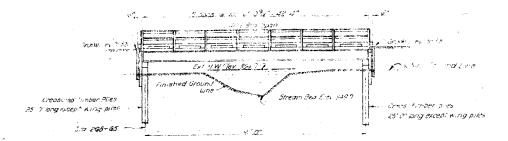
^{**} at confluent streams provide proposed data for both streams as appropriate.





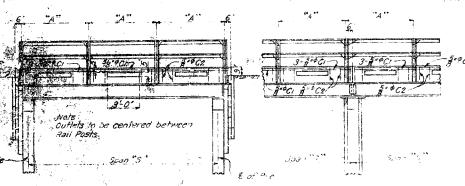


MISSOURI STATE HIGHWAY DEPARTMENT



GENERAL ELEVATION

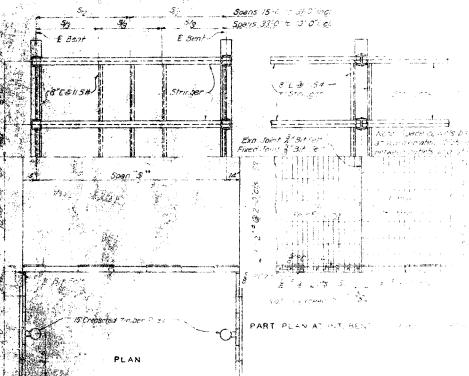
Note: - See Special Provisions in regard to ordering et see seed troubled in regard to indering the Research of the constant of the seed of the tips shall be driven to Elev. 335.0.



٠,	Ė	ŧ	=	١.	A	т	,	a	Ni	
20		-		٠	~		Ł	·		

4

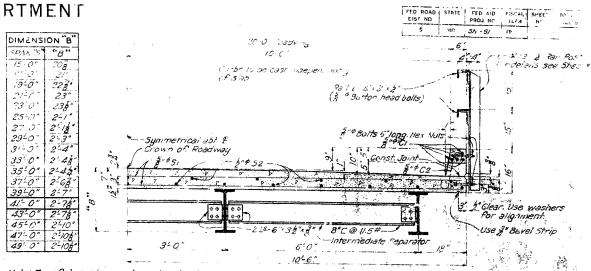
PART ELEVATION AT INT. BENT



A sembled June 330 By h E g

		HANDRA	AL SPAC	ING	
		46	4" DIMEN.	510NS	
554.7	A C PANEIS	SINGLE	15:51	ALL 'NT.	457 EVO
-	. 74/42.20	SPAN	SPAN	5,445	シジイハ
15 Q	3	5-55 abt	5-018 abt	5÷0°	5-46 30
17.0	3	6-1 1 abt	5'816'abt.	5'8	5-0/8 3bt
19"0	3	6-97 25	6-4/2 abt.	6-4"	6-81600
21'0"	4	5 ¹ 7"	5.32	5-3"	5-62
23-0"	4	6-1"	5-95"	5-9"	6-04
25'0"	4	617	6-32"	6-3"	6-62
27.0"	5	5 ' 8 '	5-5% abt	5-4 Fabt	5 75 300
29'-0"	5	6'0 8 301		5-98"abt	6-04 abt
31'0"	5	6-59 35+		6-28 30+	6.57.35
33-0	6	5-8/6 201	5 6 3 abt	5-6	3 30 30
35'0"	6	6-06261	5-1012 201		607 3.
370"	6	6-4 6 abt	6-2 8abr.		5-48 an
390"	フ	5-95 abt	5-78 abt	5'68"ant	5-85 35
410	· ·	5 0% ab+	5000000	5-10 2 201	6 01 00
15°C	~~	64	6.2"	6-118 25	6:3835
-15 °	. 8	5-99	5 3	5-75	519
47.01	8	6-05	5.03	5 02	6-03
136	2	F 198	F 3	6-12	6 2.5

ひEFL	ECT	TON:	301	
52418			_ 54 _ 54 _ 54 _ 54 _	
150	ξ.	36	2, 15-7 3	
77-01 1940	å, .	3	Note that you make thought to grade a concern	
20	3	32	े जिल्ला प्राप्त विकास कि विकास के अधिकार के प्राप्त के कि	
. ,	. 67	3.	- to excess Device offices atout on fine of contract. - restriction for a see batter is suffice of a movement	
		3	THE COURT OF BUILD OF THE BOOK TO THE THE THE	. ,
** *	.5	4	- Africa mengelah Karengana Pagrama Malaka Baratan Baratan Baratan Baratan Baratan Baratan Baratan Baratan Bar Baratan Baratan Barata	
	43	4	in a popular de la participa de la proposición del la proposición del la proposición de la proposición de la proposición del la proposición de la proposición del la	
1	÷.	3	15 1 2 12 12 13 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
W 5	Ä	1.6, 1	THE LECTION STEELERS	
	**	3	1	
	<u></u>		&	
		•		
			4	
		13	, , , , , , , , , , , , , , , , , , ,	



Note: Top of channel separators at ends of each I-Beam Span to be flush with bottom of floor stands as shown in section thru end bent at \$

Note: Depth of outside stringers will in some cases be a fraction of an inch less than that of inside stringers and in order to keep bottom nistab horizontal to will be necessary to haunch slab down to top of outside stringers.

MALE SECTION THRU SPAN

. TABLE OF STRINGERS								
5/24N	PER	PL.4 <i>NS</i>	PERMISSIBLE SUBSTITUTIONS					
57741	CARNEGIE BEAMS		STANDAR	PO I-BEAMS	BETHLE YEM BEAMS			
	Inside	Outside	Inside	Outside	Inside	Outside		
1540"	14 @ 30#			12 "@35 #				
17-0	CONTRACTOR OF STREET		15"@429#	15"@423#	14°@ 33#	14 62 33#		
19-0"	16 @ 37#	16"@37#	15"@42 9 #	15"@429#	16 1 3 " 4	16'€37=		
21'0"	The same of the same of the same	16 @ 37#		15 @ 45#		16 237#		
23-0"				8001 4		16 3 2 #		
2540"				18 @ 54 1#		8 347#		
27-0"	18"@52#	18 @ 47#	80 60 #	18"@ 54 #	S'912#	8 24 #		
29:0"	22 @ 55#	20 @ 55#	20"@ 652#	20@554#	20 3 500	20 ₹ 55#		
31-0	21058#	. 458#	200010#	30 0065-1#	22 #58#	22 258#		
33-0	21360#	2' @ 58#	20 @ 75#	20 2 70#	22 962#	22"@58#		
35-51	21200	2/ 360	30 @8 4#	EU '@ "5#	22 21	2280 - #		
37'0"	24 @ 70#	24 3 70#	24 @ ~ 9.9#	32 @ 394	24 07 "	24 3		
3920"	21 20 71#	243 10#	24 Dr9.9#	3. 3 19#	24'6 1=	240 700		
4100	34°2881 ×	34"0 ". ! #	21 3 850	31 \$ 79 9#	24 30 6 #	250 14 14		
				24 @ 9C#				
35	395#	21@85#	24 @/259#	34 @ 10#	26 @ 354	26 285#		
				34 @ 05.9#				
30 2	0- 32.0	سرن چ	21 6 //5#	146 059#	39°@3. 2	Je 2		

ESTIMATED	QUAN	TITIES	
TEW		STATES of CA	· The T
nayo ini suban jiliyari	1,50	1.	3
er og professor fra fra fra fra fra fra fra fra fra fr	05		
	1.75		i

GENERAL NOTES:

Loading: One 10 Tan Truck, 80% of weight on rear axie, 30% impact, 14-0" Wheel base, 6-0" gage, 10" fire.
All conscrete to the 10.38 inst X" where no other bevel is noted.
All immer to be creeneded Soughes fir of the West Coast Region, Close-graned Strucks " rade; creened Southern Yellow Pine, Dense granes when hade, crossored Southarn Yellow Rine, Dense with the Sound Grade, or intregred California was sound Grade, or intregred California was a sound Grade, and the sound California was sound from the sound of the case Slight variations in sawing to be in accordance with grading rules All treated timber to be out to lengths, shaped and bored as shown before treating. Backing plank are all billed Glong and are to be interested timber to be interested to be interested to the same out in the field.

tored as shown before treating. Backing plank are all billed 6 long and are to be intered as out in the field.

The late in the ford only one shall be field bared \$9. Unless otherwise mated of ather field have in timber shall be field bared \$9. When have incorporate heads are indicated on plans out washing shall be used to be incorporate heads. The wishers shall be used to be incorporate for the property of all botts.

The material of the first excess Last of such as foreign about the hardware to be a local or and for timber in place.

The material of the first excess Last of such and all hardrall posts with sattenings, on any and cap plate on end bent with fastenings, with the safe and as as structural steel fost of metallic edge moulding to such an arm that where the concrete.

The material of the first of the safe for an order of the same of t

Source shell - submitted to the store highway

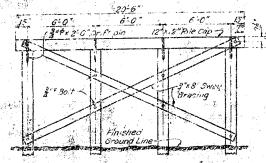
The steer steer some sopreme before steet

THE STREET WHE SUPSTY

gyurun Talahan

المردمة ورمع بالصاصف

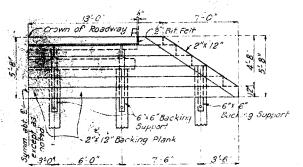
MISSOURI STATE HIGHWAY DEPARTMENT



Note: Omit sway bracing when distance from bottom of pile cap to ground is less than 50°.

DETAIL OF INTERIOR BENTS

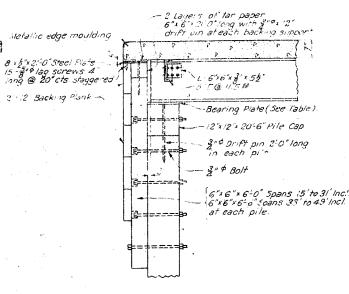
Note: Any irregularity in alignment of piling in end bents to be corrected by facing one surface of the 6° 6° backing support or by varying the thickness of the backing support such as to place the surface of the backing in a true plane and eliminate any strain on the backing plank. Splice in backing plank to be made at center of 6° x 6" backing support and to be alternated on the two intermediate supports.



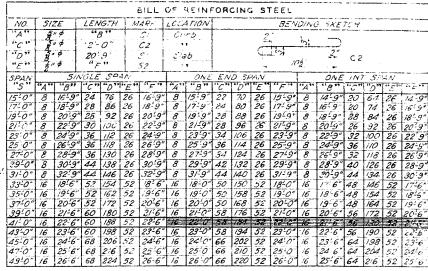
HALF ELEVATION OF END BENT

	3'0' 6'0'	7-6 3-6 B Marie in her zonta in to ac
3	10-6	Learning - month
200	E Pile Cap	
4	(1)	
. 1		72 3 -207
	1-44	
. 6	10-62	20 24

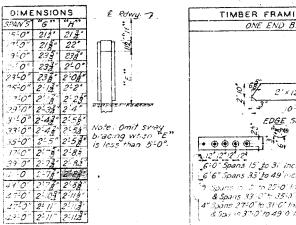
HALF PLAN OF END BENT



SECTION THRU END BENT AT &



Note: Reinforcing bans in each span to be billed and tagged separately

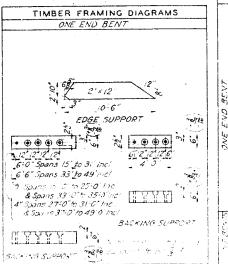


NAILING SCHEDULE :

Source head

£ Rdwy 7

Bucking plain to summer's (3:30d at each memorified ablices) 3-30d each side of such Pieces of ends of back and to parking plant and stid to Luch Sacrent Honk



** ** ** Shoulder Plank Eage Support Backing Suppo 5pans 15 to 31 in Soans 33 to 49 In 11 11 91 • • 3"x8"

SUBSTRUCTURE TIMBER BILLS NO. S SIZE LENGTH

Cut to length

Curto engrt

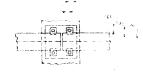
Note Although to be sessified as bear a unit of in yers. All enter to open to be classified as a set of including

* * 325 to exact depth of ";"



DETAILS OF FLANGE CLAMPS

in the standard of the standard standard to the standard standard



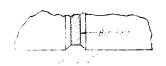
	12/275	20047/8A	AU HOC	SIJE	. 71 v 174		redo a
rj.	D- 40	Secring Cas	1.5	4.6	12		
- 9		مرد کا تا تا	5	ો	2		
4.	Part of the	and the state of t	1.7	130	. 2.1		
	1.88	30 N = 149		ile i e i	123		
	1 40 3	e e syneria	1.50				
17	11 14 0,0	2 C 3#		3.0	2	•	
- 3	80.75 3	Bracing	1	7.0	48		
τ,	Bolts 3	<i>8</i> ∞ ° ° °			32	Ī	•
- 94	1 -		† -	, 7			*

Note: From the consequence of Figure 1

| FD | SCAD | STATE | SD AIT | F SUAL | Sh | TDING | STATE | SD AIT | F SUAL | Sh | TDING | STATE | ST

Ĺ.,		SUPERST	RUCT	URE	HARDW	ARE BILL
		20047.5	47.05	572.2	LENGTH	REMARKS
		100 6 4		8 2	2:05	See cotail
Ì	A & 39 SC 145	Cao F	1.2	8	4	Flat csk. heads
	Spacer 30/5	Spans 5'	4.3	3 9	V2-75	: - bolts, washer for out
	5000 8005	Coans 53 [o 49] Incl.	E#	<i>ā"</i> *	Varies	Turn bons, washer for nur
	Hanaraii 80.45	27115 /5	16	8 0	31	Su has . washers, hex nots
SPAN	••	to 19'Incl	.32	E 118	37	Button heads.
18		Spans 2!	20	30	ô'	Sa. nds., washers, hex nut
[w	***	to 25 Incl	40		14"	Button heads
12	***************************************	Spans 27"	24	B . 4	6'	59 nds , washers, hex nurs
751/15		to 31 Incl.	48	\$" Ø	14"	Button heads
13	77 79	Spans 33	28	A"0	6"	Sq nds, washers, nex. mits
	** 11	to 37'Incl	56	300	14.	Button heads
	** **	Spans 39"	32	7.0	6"	Sq hds , washers, nex nuts
1	** *,	to 43' Incl.	-64	g p	1/4"	Button heads
		Spans 45	36	8 4	6"	Sq. hds., washers, hex nuts
ŀ		to 49 incl	72	\$"\$	12"	Button heads
ł	Bo!ts	Bearing Pls.	16	3,0	12"	So heads, no threads.
<u></u>	Flange Clarrip		16	5ee	Detail	Detailed on this sheet.
	Space: Bolts	Spans 15' 3' Incl.	48	₹"\$	Varies	Turn bolts, washer for nur
	<i>Брасе - 80 1</i> 5	33 10 - 100	64	₹	Varies	Turn boits, washer for nut
	Fandra . 35 5	5,000 15	12	H B	6"	Sq his, washers, hex nuts
1.	, ,,	~ 19 mc/	32	8 9	/a"	Surfon heads
13		5,405.2	16	20	6"	Sq. has , washers, hex nuts:
165		10 25 Incl.	40	3.00	14"	Buiton heads
13	**	5pans 27'	20	3.0	6"	Sq. hds., washers, hex. nuts
15	**	10 31 Incl	48	8"0	14'	Button heads.
13		Spans 33'	24	\$110	6"	Sq hds, washers, hex nuis
18	,, ,,	, to 37'Inc/	56	3.0	4	Button heads
100		Spans 39'	28	7.0		Sq hds., washers, hex nuts
1.	,,	to 43 mc/	64	8 0	4"	Button heads.
15	*, **	Spans 45"	32	18.	6	Sq hds , washers, her nut
17	4	to 49 incl	~2		14"	Button heads
Ι΄	80/15	Bear of the	16	400	-2	Sa head's, no thirted's
	Spice " 3045		10	4	2"	Turn bolts, washer for out
	** **	Spans 13:549	48	7.	2"	34 17 23 17 14
1	Flange Clamp		6	Sec	Detail	Detailed on this sheet.
	1 0 m	11.50		1	٠,	*1 * Shent # 3043
İ	May to			3 3		7 2 7 30/10
				·		·

includes a second to the contract of the contr



tion is an incoming for exposed faces of soons of my of nature ous felt except. Oxio of natural sections The confidence of the second of the

TALLS OF BUDEL FOR BIT FELT JOINTS

/ OVER SMALL CREEK

HOW DRUM TO DELTA 1 268 - 65

CAPE GIRARDEAU

TYPICAL JOINTS OVER INT. BENT

be on Hed in

Designed New 1929 By FW 11

\$ # \$ 12 Or Fr Both

Square head

Draw Pec 1930 By RJC Checked Dec

EXPANSION

9 W