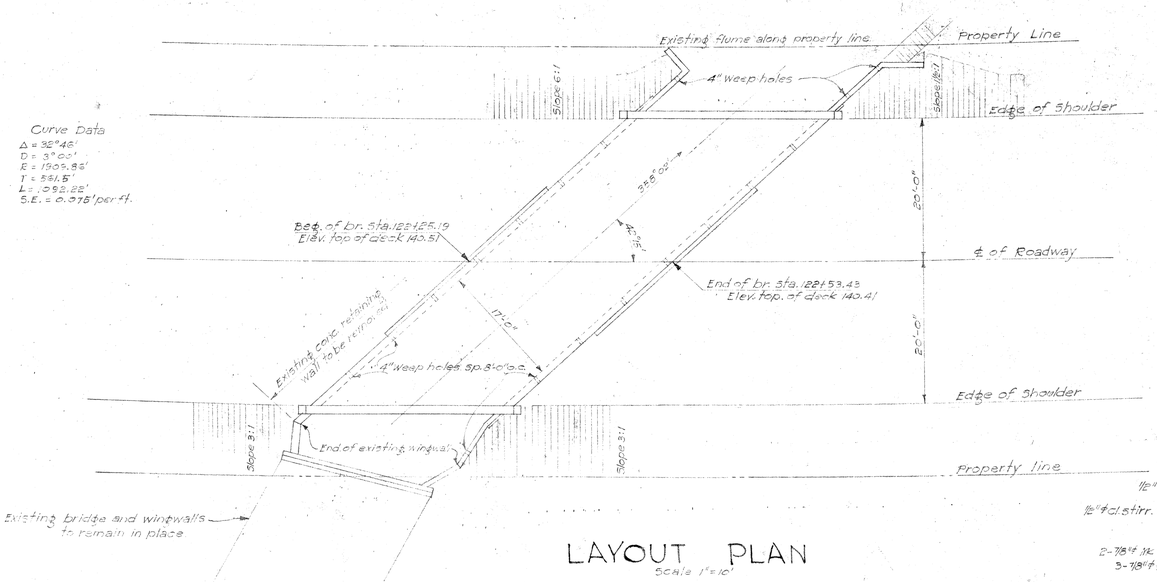
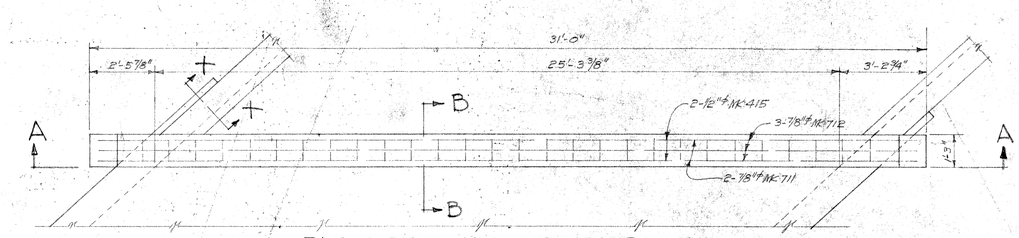
#924

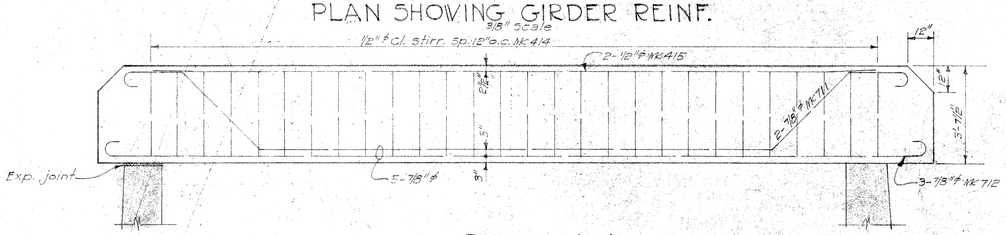
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	A-D(1)	1960	14	23



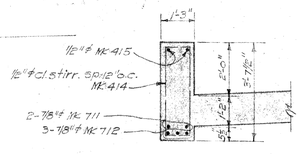
LAYOUT PLAN
Scale 1"=10'



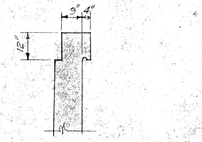
PLAN SHOWING GIRDER REINF.
3/8" Scale



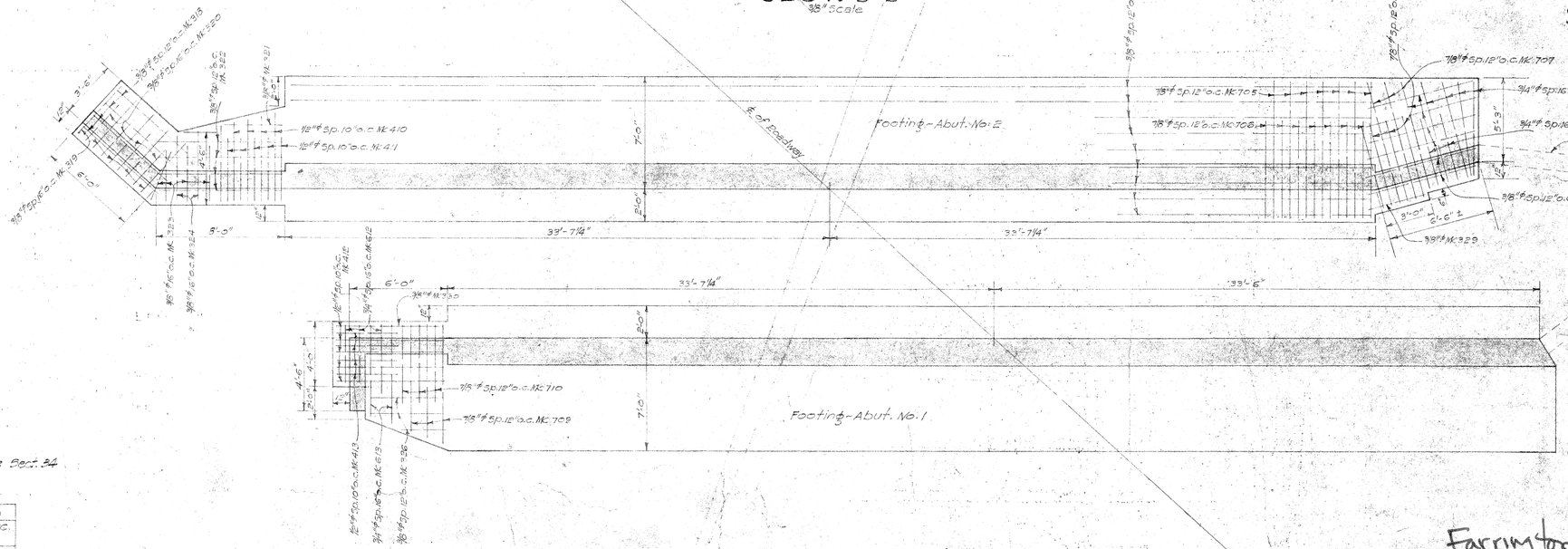
SECT. A-A
3/8" Scale



SECT. B-B
3/8" Scale



SECT. X-X



FOOTING PLAN
1/4" Scale

NOTE: For Brush Coat Waterproofing See Sect. 34 Pamphlet "N" of the Specifications.

ESTIMATED QUANTITIES			
LOCATION	CLASS A CONC. C.Y.	REINF. ST. LBS	STR. EXC. C.Y.
SUPERST.	62.6	7,856.0	
ABUTS.	77.4	37,930	
WINGWALLS	12.2	1,247.0	
FOOTINGS	76.0	6,185.0	625.0
TOTAL	228.2	54,073.0	625.0

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DESIGNED BY	
	DRAWN BY	
NOTE BOOK	TRACED BY	
	QUANTITIES BY	
No.	QUANTITIES CHECKED BY	
	CHECKED BY	

Farrington Hwy Bridge No. 2
Waianae

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

BRIDGE No. 2

STA. 122+25.19 TO 122+53.43

WAIANAE ROAD F.A.P. 4-D (1)

SHEET Nº 1 OF 5 SHEETS

4468.14

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	4-D(1)	1940	15	23

SECT. A-A
1/4" Scale

Note:
Timber bumpers to be furnished and installed as an incidental to class "A" conc.

SECT. B-B
3/8" Scale

PLAN ◇ DECK REINF.
3/8" Scale

SECT. C-C
3/8" Scale

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

BRIDGE No. 2

STA. 122+25.19 To 122+53.43

WAIANAE ROAD F.A.P. 4-D(1)

SHEET No 2 OF 5 SHEETS

4468.15

ORIGINAL PLAN	
NOTE BOOK No.	SURVEY PLOTTED BY .... DATE ....
	DESIGNED BY W.R. Bartels " June 1938
	DRAWN BY P. Kang " "
	TRACED BY "
	QUANTITIES BY RK " "
	QUANTITIES CHECKED BY T.N.G. " "
	CHECKED BY W.R. Bartels " "

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	4-D(1)	1940	16	23

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
No.	DRAWN BY	
	TRACED BY	
	QUANTITIES BY	
	QUANTITIES CHECKED BY	
	CHECKED BY	

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

BRIDGE No. 2

STA. 122+25.19 TO 122+53.43

WAIANAE ROAD F.A.P. 4-D(1)

SHEET No 3 OF 5 SHEETS

4468.16

STEEL SCHEDULE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	4D(1)	1940	17	23

MK	DESCRIPTION	Location	Size	Length	No. of Bars in Ea. Unit	No. of Units	Total No. of Bars	Total Length	Wt. Per Ft.	Total Weight
320	2'-9" / 6"	FOOTINGS W.W. Abut. No.2-Lt.	3/8"ϕ	3'-9"	4	1	4	15.0	0.38	6
319	3'-9" / 6"	"	"	4'-9"	5	1	5	23.75	"	9
318	5'-9"	"	"	5'-9"	6	1	6	34.5	"	13
323	3'-3" / 6"	"	"	4'-3"	4	1	4	17.0	"	6
322	7'-6"	"	"	7'-6"	6	1	6	45.0	"	17
324	Av. 4'-0" / 6"	"	"	Var. Av. 5'-0"	2	1	2	10.0	"	4
321	3'-6"	"	"	3'-6"	1	1	1	3.5	"	2
410	Av. 4'-10" / 8"	"	1/2"ϕ	Var. Av. 6'-2"	4	1	4	24.68	0.67	16
411	3'-6" / 8"	"	"	4'-10"	5	1	5	24.15	"	16
610	Av. 5'-6" / 13"	W.W. Abut. No.2-Rt.	3/4"ϕ	Var. Av. 7'-8"	5	1	5	38.35	1.50	57
611	3'-9" / 13"	"	"	5'-11"	2	1	2	11.84	"	18
707	6'-11" / 15"	"	7/8"ϕ	9'-5"	2	1	2	18.84	2.04	38
708	4'-5" / 15"	"	"	6'-11"	4	1	4	27.68	"	56
325	6'-9"	"	3/8"ϕ	6'-9"	8	1	8	54.0	0.38	20
329	3'-6"	"	"	3'-6"	2	1	2	7.0	"	3
412	6'-2" / 8"	W.W. Abut. No.1-Lt.	1/2"ϕ	7'-6"	5	1	5	37.5	0.67	25
413	3'-5" / 8"	"	"	4'-9"	4	1	4	19.0	"	13
612	Av. 3'-10" / 13"	"	3/4"ϕ	Var. Av. 6'-0"	3	1	3	18.0	1.50	27
613	Av. 5'-5" / 13"	"	"	Var. Av. 7'-7"	2	1	2	15.16	"	23
710	4'-2" / 15"	"	7/8"ϕ	6'-8"	3	1	3	20.0	2.04	41
709	Av. 6'-2" / 15	"	"	Var. Av. 8'-8"	3	1	3	26.0	"	53
326	Av. 4'-0"	"	3/8"ϕ	Var. Av. 4'-0"	3	1	3	12.0	0.38	4
705	7'-11" / 15"	Abut. No.1&2	7/8"ϕ	10'-5"	68	2	136	1417.12	2.04	2891
706	5'-5" / 15"	"	"	7'-11"	67	2	134	1061.28	"	2165
317	66'-8"	"	3/8"ϕ	66'-8"	13	2	26	1733.4	0.38	659
330	6'-6"	"	"	6'-6"	1	1	1	6.5	"	3

MK	DESCRIPTION	Location	Size	Length	No. of Bars in Ea. Unit	No. of Units	Total No. of Bars	Total Length	Wt. Per Ft.	Total Weight
603	13" / Mk 603 / 8'-0" / 1'-5½" / 45° ; 13" / Mk 604 / Av. 12'-2½" / 1'-5" / 45°	WINGWALLS Abut. No.2-Rt	3/4"ϕ	12'-0"	3	1	3	36.0	1.50	54
604		"	"	Var. Av. 18'-2"	4	1	4	72.68	"	109
605	13" / Mk 605 / 6'-0½" / 1'-11" / 45° ; 13" / Mk 606 / 10'-11½" / 1'-11" / 45°	"	"	10'-6"	3	1	3	31.5	"	47
606		"	"	15'-6"	2	1	2	31.0	"	46
607	13" / Mk 607 / Av. 15'-0½" / 1'-11" / 45° ; Av. 8'-2"	"	"	Var. Av. 19'-6"	2	1	2	39.0	"	58
306		"	3/8"ϕ	Var. Av. 8'-2"	3	2	6	49.0	0.38	19
305	Av. 15'-0"	"	"	Var. Av. 15'-0"	7	1	7	105.0	"	40
308	8'-0"	"	"	8'-0"	11	2	22	176.0	"	67
307	Av. 4'-0"	"	"	Var. Av. 4'-0"	3	2	6	24.0	"	10
403	8" / 5'-4" / Mk 403 / 1'-3" ; 8" / Av. 8'-1" / Mk 402 / 1'-4"	Abut. No.2-Lt.	1/2"ϕ	8'-2"	9	1	9	73.53	0.67	49
402		"	"	Var. Av. 11'-6"	4	1	4	46.0	"	31
404	8" / 6'-1" / Mk 404 / 1'-4" ; 8" / Av. 10'-0" / Mk 405 / 1'-4"	"	"	9'-0	2	1	2	18.0	"	12
405		"	"	Var. Av. 12'-11"	2	1	2	25.84	"	17
500	11" / 6'-4" / Mk 500 / 1'-4" ; 11" / Av. 10'-4½" / Mk 501 / 1'-4"	"	5/8"ϕ	9'-10"	2	1	2	19.66	1.04	20
501		"	"	Var. Av. 14'-5"	2	1	2	28.84	"	30
304	Av. 9'-6	"	3/8"ϕ	Var. Av. 9'-6"	8	1	8	76.0	0.38	29
302	Av. 5'-3"	"	"	Var. Av. 5'-3"	3	2	6	31.5	"	12
303	9'-6"	"	"	9'-6"	7	2	14	133.0	"	50
406	8" / 8'-0" / Mk 406 / 1'-8" ; 8'-0"	"	1/2"ϕ	10'-10"	6	1	6	64.98	0.67	44
311		"	3/8"ϕ	8'-0"	6	1	6	48.0	0.38	18
312	5'-6"	"	"	5'-6"	7	2	14	77.0	"	29
504	11" / Av. 12'-2" / Mk 504 / 1'-5" ; 11" / 6'-0" / Mk 505 / 1'-5"	Abut. No.1-Lt.	5/8"ϕ	Var. Av. 15'-9"	7	1	7	110.25	1.04	115
505		"	"	10'-5"	7	1	7	72.94	"	76
313	Av. 12'-6"	"	3/8"ϕ	Var. Av. 12'-6"	6	1	6	75.0	0.38	28
328	7'-6"	"	"	7'-6"	11	2	22	165.0	"	63
310	4'-0"	"	"	4'-0"	11	2	22	88.0	"	33
502	11" / 11'-1" / Mk 502 / 1'-5" ; 11" / 6'-7" / Mk 503 / 1'-5"	"	5/8"ϕ	15'-6"	3	1	3	46.5	1.04	48
503		"	"	10'-2"	3	1	3	30.51	"	32

MK	DESCRIPTION	Location	Size	Length	No. of Bars in Ea. Unit	No. of Units	Total No. of Bars	Total Length	Wt. Per Ft.	Total Weight
309	12'-3"	WINGWALLS Abut. No.1-Lt	3/8"ϕ	12'-3"	3	1	3	36.75	0.38	14
327	10'-9"	"	"	10'-9"	2	1	2	21.5	"	8
314	Av. 2'-3"	Abut. No.1-Rt.	"	Var. Av. 2'-3"	2	2	4	9.0	"	3
407	Av. 6'-0" bend to fit	"	1/2"ϕ	Var. Av. 6'-0"	4	2	8	48.0	0.67	32
400	Av. 13'-3"	ABUT. Abut. No.1&2	1/2"ϕ	Var. Av. 13'-3"	63	2	126	1669.5	0.67	1119
401	Av. 16'-0"	"	"	Var. Av. 16'-0"	2	2	4	64.0	"	43
406	Av. 13'-0"	"	"	Var. Av. 13'-0"	2	2	4	52.0	"	35
600	13" / 8'-0" / Mk 600 / 5' / 2'-7" ; 13" / Av. 11'-3" / Mk 601 / 5' / 2'-7"	"	3/4"ϕ	13'-2"	67	2	134	1764.8	1.50	2647
601		"	"	Var. Av. 16'-5"	64	2	128	2101.76	"	3153
602	13" / Av. 11'-0" / Mk 602 / 5' / 2'-6" ; 13" / Av. 15'-3" / Mk 608 / 5' / 2'-7"	"	"	Var. Av. 16'-1"	2	2	4	64.32	"	96
608		"	"	Var. Av. 20'-5"	2	2	4	81.68	"	122
300	Av. 31'-6"	"	3/8"ϕ	Var. Av. 31'-6"	2	4	8	252.0	0.38	96
301	66'-8	"	"	66'-8"	11	4	44	2933.5	"	1115
700	3'-0"	Abut. No.2	7/8"ϕ	3'-0"	60	1	60	180.0	2.04	367

CONTRACTOR'S NOTE

This steel schedule is subordinate to details shown on the plans. In case of discrepancy between steel list and detail drawings the latter shall govern.

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All stirrup dimensions are to inside of stirrups; all other dimensions are figured to center line of bars.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

BRIDGE No. 2

STA. 122+25.19 To 122+53.43

WAIANAE ROAD F.A.P. 4D(1)

SHEET No. 4 OF 5 SHEETS

ORIGINAL PLAN	DESIGNED BY W.R. Bartels	DATE 6-1938
NOTE BOOK	DRAWN BY P. Lang	" " "
No.	TRACED BY P.C.	" " "
	QUANTITIES BY	" " "
	CHECKED BY T. Ring	" " "

4468.15

STEEL SCHEDULE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	40(1)	1940	18	23

MK	DESCRIPTION	Location	Size	Length	No. of Bars in Ea. Unit	No. of Units	Total No. of Bars	Total Length	Wt. Per Ft.	Total Weight
711	4'-1⅛" · 1'-8" · 15" · 19'-0" · 2'-11"	SUPERST. Girders	7/8"ϕ	33'-1"	2	2	4	132.3	2.04	270
712	15" · 29'-11"	"	"	32'-5"	3	2	6	194.52	"	397
415	27'-0"	"	1/2"ϕ	27'-0"	2	2	4	108.0	0.67	72
414	6" · 5'-3" · 10"	"	"	9'-2"	28	2	56	513.52	"	344
701	15" · 18'-0"	Deck	7/8"ϕ	20'-6"	38	1	38	779.0	2.04	1589
702	1'-3" · 7⅛" · 15" · 15'-0" · 10⅛"	"	"	21'-3"	39	1	39	828.75	"	1691
703	6'-0" · 1'-8⅛" · 10⅛" · 15" · Av. 17'-1⅛"	"	"	Var. Av. 27'-0	5	2	10	270.0	"	551
704	6'-0" · 1'-8⅛" · 10⅛" · 1'-3" · 7⅛" · 15" · Av. 15'-8" · 10⅛"	"	"	Var. Av. 27'-5"	4	2	8	219.36	"	447
609	5'-1" · 1'-8⅛" · 10⅛" · 1'-3" · 8" · 13" · Av. 12'-0⅛" · 10⅛"	"	3/4"ϕ	Var. Av. 22'-7"	5	2	10	225.8	1.50	339
610	5'-1" · 1'-8⅛" · 10⅛" · 13" · Av. 13'-0⅛"	"	"	Var. Av. 21'-8"	5	2	10	216.7	"	325
507	4'-1" · 1'-8⅛" · 10⅛" · 1'-3" · 8⅛" · 11" · Av. 7'-4" · 10⅛"	"	5/8"ϕ	Var. Av. 16'-7"	5	2	10	165.8	1.04	172
508	4'-1" · 1'-8⅛" · 10⅛" · 11" · Av. 8'-11⅛"	"	"	Var. Av. 16'-3"	4	2	8	130.0	"	135
408	Av. 5'-5⅛" · 1'-8⅛" · 10⅛" · 8"	"	1/2"ϕ	Var. Av. 13'-7"	7	2	14	190.12	0.67	127
315	24'-0"	"	3/8"ϕ	24'-0"	2	2	4	96.0	0.38	36
314	Av. 10'-0"	"	"	Var. Av. 10'-0"	2	2	4	40.0	0.38	15
409	3'-1⅛" · 1'-8⅛" · 10⅛" · 8"	"	1/2"ϕ	8'-11"	1	2	2	17.84	0.67	12
316	62'-6"	"	3/8"ϕ	62'-6"	2	2	4	250.0	0.38	95
506	62'-6"	"	5/8"ϕ	62'-6"	19	1	19	1187.5	1.04	1235
								GRAND TOTAL		24,075#

MK	DESCRIPTION	Location	Size	Length	No. of Bars in Ea. Unit	No. of Units	Total No. of Bars	Total Length	Wt. Per Ft.	Total Weight

MK	DESCRIPTION	Location	Size	Length	No. of Bars in Ea. Unit	No. of Units	Total No. of Bars	Total Length	Wt. Per Ft.	Total Weight

ORIGINAL PLAN — NOTE BOOK — No.

DESIGNED BY W. E. Bartels — DATE Jul 1938
DRAWN BY P. Kang — " "
TRACED BY P.K. — " "
QUANTITIES BY T. Ting — " "
QUANTITIES CHECKED BY — " "
CHECKED BY — " "

CONTRACTOR'S NOTE

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TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

BRIDGE No. 2

STA. 122+25.19 TO 122+53.43

WAIANAE ROAD F.A.P. 4D(1)

SHEET No. 5 OF 5 SHEETS

4468.18