EL CAPITAN

Pipe Line Levels

Cuts and Grades

Sta. 479+49.7 to Sta. 695+00

W206

MICROFILMED
JAN 11 1965

Our Leather Bound Engineers Note Books are carried in the following rulings:

No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.

No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.

No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.

No. 385 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 8 vertical and 4 horizontal lines to the inch, Center Line Red.

We also carry the Note Books listed above, bound in extra strong Fabri-Hide (otherwise the same quality of book), which can be furnished at a somewhat lower price.

In ordering Fabri-Hide covered books, add the letter *"F"* to catalog number.

THE FREDERICK POST CO.

ENGINEERING and DRAFTING SUPPLIES

IRVING PARK STATION

CHICAGO, ILL.

92 FIFTH ST.
PORTLAND, ORE.

79 NEW MONTGOMERY ST.
SAN FRANCISCO, CAL.

AGENTS FOR

"BERGER" TRANSITS and LEVELS
"GURLEY" SURVEYING and HYDRAULIC INSTRUMENTS
"CHICAGO" STEEL TAPES, etc.

Center Line Cuts, Offset Cuts, And Grades From

Sta. 479+49½ To Sta. 695+00

Page 1 To 39

W. H. Simpson

All offset Distances 10 ft Unless otherwise Recorded.

Sta	+	℄	−	El.	℄ −
				381.70	
	3.16	384.86			
479+49	B.C.				
+74					
+99					
480+24					
+56	E.C.				
481					5.6
+50					5.4
482					5.5
+50					5.5
483					5.6
+50					5.8
484					6.3

Offset	℄ El	offset El.	Grade	℄ cut.	offset cut.
			371.83		
4.6		380.3	371.75		7.5
4.7		380.2	371.66		8.5
4.5		380.4	371.57		8.8
4.6		380.3	371.46		8.8
4.5	379.3 ✓	380.4	371.31	8.0 ✓	9.1
4.4	379.5 ✓	380.5	371.13	8.4 ✓	9.4
4.4	379.4 ✓	380.5	370.96	8.4 ✓	9.5
4.5	379.4 ✓	380.4	370.79	8.6 ✓	9.6
4.7	379.3 ✓	380.2	370.61	8.7 ✓	9.6
4.8	379.1 ✓	380.1	370.44	8.7 ✓	9.7
5.3	378.6 ✓	379.6	370.26	8.3 ✓	9.3

Sta	+	℄	−	El.	℄ −
		384.86			
484+50					7.2
485					7.7
+50			5.91	378.95	7.7
	4.44	383.39			
486					6.1
+50					6.1
487					5.8
+50					5.6
488					5.6
+50					5.8
489					5.5
+50					4.8
490					5.6

Offset −	℄ El.	Offset El.	Grade	℄ Cut	Offset Cut.
5.5	377.7	379.4	370.09	7.6 ✓	9.3 ✓
5.7	377.2	379.2	369.92	7.3 ✓	9.3 ✓
5.9	377.2	379.0	369.74	7.5 ✓	9.3 ✓
4.5	377.3	378.9	369.57	7.7 ✓	9.3 ✓
4.6	377.3	378.7	369.39	7.9 ✓	9.3 ✓
4.6	377.6	378.8	369.22	8.4 ✓	9.6 ✓
4.6	377.8	378.8	369.04	8.8 ✓	9.8 ✓
4.7	377.8	378.7	368.87	8.9 ✓	9.8 ✓
4.8	377.6	378.6	368.70	8.9 ✓	9.9 ✓
5.0	377.9	378.4	368.52	9.4 ✓	9.9 ✓
5.2	378.6	378.2	368.34	10.3 ✓	9.9 ✓
5.4	377.8	378.0	368.17	9.6 ✓	9.8 ✓

Sta	+	℄	−	El.	℄ −
		383.39			
490+50	G.B.				6.0
491			5.75	377.64	6.4
	4.41	382.05			
+50					5.8
492					6.0
+50					
+68½	B.C.				6.1
+93½					7.2
493+18½					7.2
+43½					7.5
+68½					7.3
+93½					7.5
494+18½					7.2

Offset −	℄ El	Offset El.	Grade	℄ Cut	Offset Cut.
5.6	377.4	377.8	368.0	9.4 ✓	9.8 ✓
5.7	377.0	377.7	368.21	8.8 ✓	9.5 ✓
4.3	376.3	377.8	368.43	7.9 ✓	9.4 ✓
4.4	376.1	377.7	368.64	7.5 ✓	9.1 ✓
4.3	376.0	377.8	368.93	7.1 ✓	8.9 ✓
4.2	374.9	377.9	369.04	5.9 ✓	8.9 ✓
4.2	374.9	377.9	369.14	5.8 ✓	8.8 ✓
4.2	374.6	377.9	369.25	5.4 ✓	8.6 ✓
4.2	374.8	377.9	369.36	5.4 ✓	8.5 ✓
4.1	374.6	378.0	369.47	5.1 ✓	8.5 ✓
4.2	374.9	377.9	369.57	5.3 ✓	8.3 ✓

+1.429%

Sta.	+	℄ 382.05	−	El.	℄ −	Offset −	℄ El	Offset El.	Grade	℄ Cut	Offset Cut.
494+43½.					6.7	4.0	375.4	378.1	369.68	5.7 ✓	8.4 ✓
+68½					6.2	4.0	375.9	378.1	369.79	6.1 ✓	8.3 ✓
+84⁸	E.C.				5.6	4.1	376.5	378.0	369.86	6.6 ✓	8.1 ✓
495					4.8	4.0	377.3	378.1	369.93	7.4 ✓	8.2 ✓
+50					2.0	4.1	380.1	378.0	370.15	9.9 ✓	7.8 ✓
496			3.73	378.32	5.4	3.7	376.7	378.4	370.36	6.3 ✓	8.0 ✓
	7.95	386.27									
+50					7.8	7.8	376.5	378.5	370.57	5.9 ✓	7.9 ✓
497					11.0	7.2	375.3	379.1	370.79	4.5 ✓	8.3 ✓
+50	G.B.				10.4	6.6	375.9	379.7	371.0	4.9 ✓	8.7 ✓
498					10.2	5.5	376.1	380.8	371.75	4.4 ✓	9.0 ✓
+50					9.2	4.5	377.1	381.8	372.50	4.6 ✓	9.3 ✓
499					8.6	3.4	377.7	382.9	373.25	4.4 ✓	9.6 ✓

373.3
4.4

Sta	+	π	−	El.	℄ −	offset →	℄ El.	offset El.	Grade	℄ cut	offset Cut.
		386.27									
499+50	G.B.		0.63	385.64	5.0	1.6	381.3	384.7 X 374.0		7.3 ✓	10.7 ✓
	7.72	393.36									
500					10.1	6.1	383.3	387.3	376.0	7.3 ✓	11.3 ✓
								+ 400 = 787.3			
+50					7.2	5.1	386.2	388.3	378.0	8.2 ✓	10.3 ✓
501					6.3	4.1	386.6	389.3	380.0	6.6 ✓	9.3 ✓
+50	G.B.		1.62	391.74	5.4	2.3	388.0	391.1 X 382.0		6.0 ✓	9.1 ✓
	5.61	397.35									
+76	B.C.	373			7.0	5.8	388.4	391.6	382.26	6.1 ✓	9.3 ✓
								+ 1.00 = 792			
502+01					8.1	5.0	389.3	392.4	382.51	6.8 ✓	9.9 ✓
								+			
+26					9.3	4.6	388.1	392.8	382.76	5.3 ✓	10.0 ✓
+50	G.B.							X 383.0			
+51					8.9	4.6	388.5	392.8	382.94	5.6 ✓	9.9 ✓
+76					9.1	4.7	388.3	392.8	381.55	6.7 ✓	11.1 ✓
								5.56			
503+01		"A"	12.54	384.81	10.6	5.7	386.8	391.7	380.16	6.6 ✓	11.5 ✓
	1.22	386.03		10.10				5.5			
+26			"B" H.I.	394.91	1.9 A	6.5 "B"	384.1 ✓	388.4	378.77	5.3 ✓	9.6 ✓

Sta	+	"A" 386.03 "B" 394.91	−	El.	℄ −	offset −	℄ El.	offset El.	Grade	℄ Cut.	offset dist	offset cut.
503+51					2.9 "A"	7.1 "B"	383.1	367.8	377.39	5.7	15.0	10.4
+76					5.3 "A"	2.8 "A"	380.7	383.2	376.0	4.7		7.2
504+01					7.2	5.0	378.8	381.0	374.61	4.2		6.4
+30	= 733.8	E.C.	G.B.		8.4	6.3	377.6	379.7	373.0	4.6		6.7
+50					8.2	6.5	377.8	379.5	373.28	4.5		6.2
505					6.9	5.5	379.1	380.5	373.97	5.1		6.5
+54		S.C.			7.0	4.7	379.0	381.3	374.73	4.3		6.6
+79					5.9	3.5	380.1	382.5	375.08	5.0		7.4
506+04			0.54	385.49	4.4	3.1	381.6	382.9	375.43	6.2	9.9	7.5
	4.66	390.15										
+29					7.8	4.8	382.4	381.2	375.78	6.6		5.4
+50		G.B.							376.0			
+54					7.2	4.5	383.0	381.5	375.84	7.2		5.7
+79					6.3	3.2	383.9	382.8	375.04	8.9		7.8

Sta.	+	℄	−	El.	℄ −
		390.15			
507+00	?				6.8
+29	?				10.4
+54	?				11.9
+81	E.C.				11.7
508			10.44	379.71	5.5
	2.47	382.18			
+50					8.0
509	G.B.				9.4
+50					9.4
510	G.B.				8.8
+50					10.1
+95	P.I.		10.83	371.35	11.2
	2.43	373.78			
511+50					5.7

Offset	℄ El	Offset El.	Grade	℄ Cut	Offset Cut.
4.2	383.4	386.0	374.24	9.2	11.8
8.2	379.8	382.0	373.44	6.4	8.6
9.3	378.3	380.9	372.64	5.7	12' offset. 8.3
		379.4			
10.8	378.5	379.4	371.85	6.7	7.5
11.7	376.7	378.5	371.26	5.4	7.2
5.5	374.2	376.7	369.66	4.5	7.0
8.2	372.8	374.0	368.0	4.8	6.0
7.1	372.8	373.1	367.50	5.3	5.6
8.5	373.4	373.7	367.0	6.4	6.7
8.4	372.1	373.8	366.80		8.5
9.1	371.0	373.1	366.06		9.4
3.2	368.1	370.6	366.40		8.8

Sta	+	π	−	El.	Σ−
		373.78			
512	G. B.				7.4
	+50				8.9
513					8.9
	+51 3/3	B.C.			8.5
	+76 3/3				8.3
514	+01 3/3				8.3
	+26 3/3				8.4
	+50	G. B.			
	+51 3/3				8.7
	+85 3/3	E.C.			8.7
515			8.31	365.47 / 365.47	E. M. 9.5
	5.37	370.84			
	+50				7.3
516					5.8

offset−	Σ El.	offset El.	Grade	Σ cut.	offset cut.
	364.4				
4.5	363.4	369.3	362.00	2.4	9.3
6.0	364.9	367.8	361.80	3.1	8.0
5.5	364.9	368.3	361.60	3.3	8.7
5.6	365.3	368.2	361.40	3.9	8.8
5.8	365.5	368.0	361.30	4.2	8.7
5.7	365.5	368.1	361.20	4.3	8.9
5.7	365.4	368.1	361.10	4.3	9.0
5.9	365.1	367.9	361.00	4.1	8.9
6.0	365.1	367.8	360.93	4.2	8.9
6.3	364.3	367.5	360.77	3.5	6.7
3.9	363.5	366.9	360.54	3.0	6.4
4.1	365.0	366.7	360.31	4.7	6.4

Sta	+	℄	-	El.	℄ -
		370.84			
516+50					6.7
517					6.8
+50					7.7
518					8.0
+50					7.6
519					8.3
+50					10.2
520					10.3
+50			2.24	367.60	10.2
	0.90	368.50			
521	G.B.				8.2
+50					7.8
522					7.8
+50					7.5

Offset	℄ El	Offset El.	Grade	℄ cut	Offset Dist.	Offset cut.
4.4	364.1	366.4	360.08	4.0		6.3
4.6	364.0	366.2	359.84	4.2		6.4
4.8	363.1	366.0	359.61	3.5		6.4
5.2	362.8	365.6	359.38	3.1		6.2
5.5	363.2	365.3	359.15	4.0		6.2
5.8	362.5	365.0	358.92	3.6		6.1
5.8	360.6	365.0	358.69	1.9		6.3
6.6	360.5	364.2	358.46	2.0		5.8
6.8	360.6	364.0	358.23	2.4		5.8
4.9	360.3	363.6	358.00	2.3		5.6
5.2	360.7	363.3	357.90	2.8		5.4
5.2	360.7	363.3	357.80	2.9		5.5
5.3	361.0	363.2	357.70	3.3		5.5

Sta	+	℄ 368.50	−	El.	℄ −
523					7.7
+50					7.4
524					6.8
+50					7.8
525			6.02	362.48	8.5
	4.37	366.85			
+50					6.7
526					6.2
+50					5.8
527					6.3
+50					6.0
528					6.0
+50					6.6

Offset −	℄ El.	Offset El.	Grade	℄ Cut	Offset Dist	Offset Cut.
5.6	360.8	362.9	357.60	3.2	✓	5.8
5.7	361.1	362.8	357.50	3.6	✓	5.3
5.9	361.7	362.6	357.40	4.3	✓	5.2
6.1	360.1	362.4	357.30	3.4	✓	5.1
6.1	360.0	362.4	357.20	2.8	✓	5.2
4.5	360.2	362.4	357.10	3.1	✓	5.3
4.4	360.7	362.5	357.00	3.7	✓	5.5
4.5	361.1	362.4	356.90	4.2	✓	5.5
4.4	360.6	362.5	356.80	3.8	✓	5.7
4.4	360.9	362.5	356.70	4.2	✓	5.8
4.3	360.9	362.6	356.60	4.3	✓	6.0
4.4	360.3	362.5	356.50	3.8	✓	6.0

Sta	+	℄	−	El.	℄ −
		366.85			
529					6.5
+50					6.7
530					6.5
+50					6.8
531					6.2
+50			4.15	362.70	6.0
	4.46	367.16			
532					6.9
+50					6.5
533					6.9
+50					6.9
534					7.1
+50					7.1

Offset −	℄ El.	offset El.	Grade	℄ Cut	offset Dist	offset Cut.
4.3	360.4	362.6	356.40	4.0	✓	6.2
4.3	360.2	362.6	356.30	3.9	✓	6.3
4.3	360.4	362.6	356.20	4.2	✓	6.4
4.2	360.1	362.7	356.10	4.0 ✓	9.6	6.6
4.2	360.7	362.7	356.00	4.7 ✓	9.4	6.7
4.2	360.9	362.7	355.90	5.0 ✓	9.4	6.8
4.5	360.3	362.7	355.80	4.5 ✓	9.3	6.9
4.5	360.7	362.7	355.70	5.0 ✓	9.3	7.0
4.5	360.3	362.7	355.60	4.7 ✓	9.3	7.1
4.5	360.3	362.7	355.50	4.8 ✓	9.3	7.2
4.6	360.1	362.6	355.40	4.7 ✓	9.2	7.2
4.5	360.1	362.7	355.30	4.8 ✓	9.2	7.4

Stn	+	℄	−	El.	℄ −	offset −	℄ El.	offset El.	Grade	℄ Cut	12 offset Dist	offset Cut
		367.16										
535					7.0	4.5	360.2	362.7	355.20	5.0 ✓	9.1	7.5
	+50				6.9	4.5	360.3	362.7	355.10	5.2 ✓	9.1	7.6
536	G.B.				8.0	4.5	359.2	362.7	355.00	4.2 ✓	8.9	7.7
	+50				6.7	4.5	360.8	362.7	355.25	5.3 ✓	9.1	7.5
537					7.0	4.5	360.2	362.7	355.50	4.7 ✓	9.0	7.2
	+50		4.64	362.52	6.2	4.5	361.0	362.7	355.75	5.2 ✓	9.0	7.0
	5.52	368.06		362.54	B.M.							
538					7.5	5.3	360.6	362.8	356.00	4.6 ✓	9.0	6.8
	+50				7.0	5.3	361.1	362.8	356.25	4.9 ✓	9.0	6.6
539					6.9	5.2	361.2	362.9	356.50	4.7 ✓	9.0	6.4
	+50				5.7	5.0	362.4	363.1	356.75	5.6 ✓	8.0	6.4
539	G.B.				5.3	4.7	362.8	363.4	357.00	5.6 ✓	8.0	6.4
	+50				4.7	4.6	363.4	363.5	356.89	6.5 ✓	8.0	6.6

Sta	+	℄ 368.06	−	El.	℄ −
541					4.3
+50					4.6
542					4.7
+50					5.1
543			5.11	362.95	5.3
	3.04	365.99			
+50					3.6
544					4.1
+50					4.4
545					4.9
+50					5.0
546					5.1
+50					5.5

offset −	℄ El.	offset El.	Grade	℄ cut	offset dist.	offset cut.
4.5	363.8	363.6	356.78	✓ 7.0	8.0	6.8
4.5	363.5	363.6	356.67	✓ 6.8	8.0	6.9
4.6	363.4	363.5	356.56	✓ 6.8	8.0	6.9
4.9	363.0	363.2	356.45	✓ 6.6	8.0	6.7
5.1	362.8	363.0	356.34	✓ 6.3	8.0	6.7
3.3	362.4	361.7	356.23	✓ 6.2	8.0	5.5
3.5	361.9	361.5	356.12	✓ 5.8	8.0	5.4
3.8	361.6	362.2	356.01	✓ 5.6	8.0	6.2
4.1	361.1		355.89	✓ 5.2	8.0	6.0
4.3	361.0		355.78	✓ 5.2	8.0	5.9
4.4	360.9	361.16	355.67	✓ 5.2	8.0	5.9
4.4	360.5		355.56	✓ 4.9	8.0	6.0

Sta	+	℄ 365.99	−	El.	℄ −	offset −	℄ El.	offset El.	Grade	℄ cut	offset Pist.	offset Cut.
547					5.2	4.5	360.8		355.45	✓ 5.4	8.0	6.1
+50					4.8	4.5	361.2		355.34	✓ 5.9	8.0	6.2
548					4.6	4.6	361.4		355.23	✓ 6.2	8.0	6.2
+50					4.8	4.6	361.2		355.12	✓ 6.1	8.0	6.3
549					4.8	4.6	361.2		355.01	✓ 6.2	8.0	6.4
+50			4.85	361.14	5.0	4.7	361.0	0.0	354.89	✓ 6.1	8.0	6.4
	5.40	366.54						2.2				
550					5.7	5.3	360.8	.2	354.78	✓ 6.0	8.0	6.4
+50					5.9	5.4	360.6	1	354.67	✓ 5.9	8.0	6.4
551					6.2	5.5	360.3		354.56	✓ 5.7	8.0	6.4
+50					6.6	5.6	359.9		354.45	✓ 5.5	8.0	6.5
552					6.9	5.6	359.6		354.34	✓ 5.3	8.0	6.6
+50					6.7	5.4	359.8		354.23	✓ 5.6	8.0	6.9

Sta	+	℄ 366.54	−	El.	℄ −
553					6.6
+50	G.B.				5.7
554					4.2
+50					2.7
555					1.8
+50					1.1
556			0.29	366.25	0.4
	4.72	370.97			
~~+50~~					4.7
557					4.8
+50					4.8
558					5.1
+50					5.6

Offset	℄ El.	Offset El.	Grade	℄ Cut	Offset Dist	Offset Cut.
5.1	359.9	N 22 1/2 W	354.12	✓ 5.8	8.0	7.2
4.4	360.8		354.0	✓ 6.8	8.0	8.1
3.5	362.3		354.36	✓ 7.9	8.0	8.6
2.4	363.8		354.73	✓ 9.1	8.0	9.4
1.5	364.7		355.09	✓ 9.6	8.0	9.9
0.9	365.4		355.46	✓ 9.9	8.0	10.1
0.3	366.1		355.82	✓ 10.3	8.0	10.4
4.5	366.3		356.19	✓ 10.1	7.0	10.3
4.5	366.2		356.55	✓ 9.6	7.0	10.0
4.5	366.2		356.92	✓ 9.3	7.0	9.6
4.7	365.9		357.28	✓ 8.6	7.0	9.0
4.7	365.4		357.64	✓ 7.8	7.0	8.7

Sta	+	= 370.97	−	El.	℄	Offset	℄ El.	Offset El.	Grade	℄ Cut.	offset dist.	offset Cut.
559					6.4	4.6	364.6		358.0	6.6	7.0	8.4
+50					5.8	4.3	365.2		358.4	6.8	7.0	8.3
560					5.6	4.0	365.4		358.8	6.6	7.0	8.2
+50					5.0	3.4	366.0		359.2	6.8	7.0	8.4
561					3.7	2.6	367.3		359.6	7.7	7.0	8.8
+50			1.10	369.87	2.2	1.9	368.8		360.0	8.8	7.0	9.1
	5.96	375.83										
562					4.7	5.9	371.1		360.4	10.7	7.0	9.5
+50					3.8	5.4	372.0		360.8	11.2	7.0	9.6
563					3.6	5.1	372.2		361.2	11.0	7.0	9.5
+50					3.7	4.9	372.1		361.6	10.5	7.0	9.3
564					3.9	4.7	371.9		362.0	9.9	7.0	9.1
+50					5.1	4.7	370.7		361.84	8.9	7.0	9.3

Sta	+	H.I.	−	El.	℄ -
		375.83			
565					4.9
+50					4.8
566					4.9
+50					5.2
567					5.0
+50					5.2
568			5.49	370.34	5.8
	3.71	374.15		370.41 – B.M.	
+50					4.3
569					5.1
+50					5.2
570	G.B.				6.1
+50					5.9

Offset -	℄ El.	Offset El.	Grade	℄ Cut.	Offset Dist.	Offset Cut.
4.6	370.9		361.67	9.2 ✓	7.0	9.5
4.7	371.0		361.51	9.5 ✓	7.0	9.6
4.7	370.9		361.34	9.6 ✓	7.0	9.8
4.7	370.6		361.17	9.4 ✓	7.0	9.9
4.9	370.8		361.0	9.8 ✓	7.0	9.9
5.1	370.6		360.84	9.8 ✓	7.0	9.9
5.5	370.0		360.67	9.3 ✓	7.0	9.6
4.1	369.9		360.51	9.4 ✓	7.0	9.6
4.3	369.1		360.34	8.8 ✓	7.3	9.6
4.5	369.0		360.17	8.8 ✓	7.2	9.5
4.6	368.1		360.0 X	8.1 ✓	7.2	9.6
4.5	368.3		360.40	7.9	7.1	9.4

+0.6 Gr.

Sta.	+	℄ 374.15	−	El.	℄ −
571					5.8
+50					5.6
572					5.4
+50					5.0
573					4.7
+50					5.0
574			4.94	369.21	5.1
	5.02	374.23			
+50					4.8
575	G.B				4.7
+50					4.7
576					4.6
+50					4.6

Offset −	℄ El.	offset El.	Grade	℄ cut	offset Dist.	offset Cut.
4.6	368.4		360.80	7.6	7.0	9.0
4.5	368.6		361.20	7.4	7.0	8.8
4.5	368.8		361.60	7.2	7.0	8.5
4.4	369.2		362.00	7.2	7.0	8.3
4.4	369.5	10	362.40	7.1	6.9	8.0
4.4	369.2	80	362.80	6.4	6.9	7.7
4.4	369.1		363.20	5.9	6.9	7.4
4.5	369.4		363.60	5.8	6.9	7.0
4.5	369.5		X 364.00	5.5	6.8	5.7
4.4	369.5		363.75	5.7	6.8	6.1
4.3	369.6	0.50 80	363.50	6.1	6.8	7.4
4.3	369.6		363.25	6.4	6.8	6.7

Sta	+	=	−	El.	℄
		371.23			
577					4.6
+50					4.7
578					4.6
+50					4.1
579					4.3
+50					5.4
580			8.88	365.35	6.4
	5.31	370.64		365.30 B.M.	
+50					3.6
581					4.2
+50					4.3
582					4.4
+50					4.5

Offset	℄ El.	Offset El.	Grade	℄ cut	Offset dist	Offset cut.
4.1	369.6		363.00	✓ 6.6	6.8	7.1
4.1	369.5		362.75	✓ 6.7	6.7	7.1
4.0	369.6		362.50	✓ 7.1	6.7	7.7
4.1	370.1		362.25	✓ 7.9	6.7	7.9
4.5	369.9		362.00	✓ 7.9	6.6	7.7
5.1	368.8	60	361.75	✓ 7.0	6.7	7.1
5.7	367.8	50 40	361.50	✓ 6.3	6.6	7.0
2.7	367.0		361.25	✓ 5.8	6.7	6.7
3.1	366.4		361.00	✓ 5.4	6.6	6.5
3.4	366.3		360.75	✓ 5.5	6.6	6.5
3.8	366.2		360.50	✓ 5.7	6.6	6.3
4.2	366.1		360.25	✓ 5.9	6.5	6.2

Sta	+	℄	−	El.	℄−
		370.64			
583	G.B.				5.2
+50					5.4
584					5.8
+50					6.3
585					6.5
+50					6.8
586					7.6
+50					7.6
587					7.9
+50	G.B.				7.7
588				369.55 BM.	7.6
	1.98	371.53			
+44.9	B.C.				8.2

offset −	℄ El.	offset El.	Grade	℄ cut	offset dist.	offset cut.
4.6	365.4		X 360.00	5.4 ✓	6.6	6.0
4.8	365.2		359.56	5.6 ✓	6.5	6.2
5.2	364.8		359.11	5.7 ✓	6.5	6.3
5.6	364.3		358.67	5.6 ✓	6.5	6.3
6.0	364.1		358.22	5.9 ✓	6.4	6.4
6.3	363.8	0.89%	357.78	6.0 ✓	6.4	6.5
6.7	363.0		357.33	5.7 ✓	6.4	6.6
7.0	363.0		356.89	6.1 ✓	6.3	6.7
7.1	362.7		356.44	6.3 ✓	6.4	7.1
6.9	362.9		X 356.00	6.9 ✓	6.3	7.7
6.4	363.0	20%	356.10	6.9 ✓	7.8	8.1
6.9	363.3	364.6	356.19	7.1 ✓		8.4

Sta	+	℄	-	El.	℄ -
		371.53			
588+69	9				8.1
	+84	9			7.6
589+04	9				5.3
	+24	9			4.6
	+44	9			4.2
	+64	9			4.1
	+79	7	=	78° E.C.	4.0
	64	9			
	14.8				
	+90	7		B.C	4.3
590+15		7			4.3
	+40	7			3.1
	+50			G.B	
	+65	7			2.6
	+90	7			2.5

offset -	℄ El.	offset El.	Grade	℄ cut	offset cut
6.8	363.4	364.7	356.23	7.2	8.5
6.9	363.9	364.6	356.27	7.6	8.3
6.4	366.2	365.1	356.31	9.9	8.8
5.1	366.9	366.4	356.35	10.6	10.1
3.8	367.3	367.7	356.39	10.9	11.3
4.0	367.4	367.5	356.43	11.0	11.1
		0.20			
4.0	367.5	367.5	356.46	11.0	11.0
4.2	367.2	367.3	356.49	10.7	10.8
4.1	367.2	367.4	356.54	10.7	10.9
3.2	368.4	368.3	356.59	11.8	11.7
			356.60		
2.4	368.9	369.1	356.98	11.9	12.1
		00			
2.3	369.0	369.20	357.58	11.4	11.6
		+2.20			

Sta	+	℄	−	El.	℄ −
		371.53			
591+15					3.1
+31	E.C.				3.4
+50	G.B.		3.40	368.13	3.4
	1.75	369.88			
592					2.4
+50					3.2
593					3.7
+50					4.3
594					4.8
+50					5.5
595					6.2
+50					6.9
596					7.0
+50					6.9

Offset	℄ El.	Offset ℄ El.	Grade	℄ Cut	Offset Cut.
2.5	368.4	369.0	358.18	10.2	10.8
2.7	368.1	368.8	358.55	9.6	10.3
3.0	368.1	368.5	359.00	9.1	9.5
1.9	367.5	368.0	358.76	8.7	9.3
2.6	366.7	367.3	358.53	8.2	8.8
3.4	366.2	366.5	358.29	7.9	8.7
4.0	365.6	365.9	358.06	7.5	7.8
4.7	365.1	365.2	357.82	7.3	7.4
5.4	364.4	364.5	357.59	6.8	6.9
6.0	363.7	363.9	357.35	6.4	6.6
6.5	363.0	363.4	357.12	5.9	6.3
6.4	362.9	363.5	356.88	6.0	6.7
6.7	363.0	363.2	356.65	6.4	6.6

Sta	+	369.88 π	−	El.	℄ −
			6.39	363.49	
597	4.16	367.65			4.9
		3.26			
		364.39			
+50		364.40 = Bm			4.9
598					4.9
+50					5.1
599					5.1
+50					5.7
600	G.B.				6.3
+50				B.M. 354.08	7.2
	7.37	361.45			
601					1.7
+50					2.7
602					3.2
+50					3.6

23

offset −	℄ El.	offset El.	Grade	℄ cut	offset cut
4.5	362.7	363.1	356.41	6.3	6.7
4.6	362.7	363.0	356.17	6.5	6.8
4.7	362.7	362.9	355.94	6.8	7.0
4.9	362.5	362.7	355.70	6.8	7.0
5.0	362.5	362.6	355.47	7.0	7.1
5.4	361.9	362.2	355.23	6.7	7.0
5.9	361.3	361.7	355.00	6.3	6.7
6.7	360.4	360.9	354.83	6.1	6.6
1.8	359.7	359.6	353.67	6.0	5.9
2.8	358.7	358.6	353.00	5.7	5.6
3.3	358.2	358.1	352.33	5.9	5.8
3.7	357.8	357.6	351.67	6.1	5.9

Sta	+	℄	−	El.	℄−
		361.45			
603					4.1
+50					5.1
604					5.8
+50					6.3
605					6.2
+50					6.5
606	G.B.		7.37	354.08	8.4
	2.23	356.31			
+50					3.9
607					4.1
+50					5.0
608					5.5
+50					5.1

Offset −	℄ El.	offset El.	Grade	℄ cut	24. offset cut.
3.9	357.3	357.5	351.0	6.3	6.5
5.1	356.3	356.3	350.33	6.0	6.0
5.8	355.6	355.6	349.67	5.9	5.9
6.2	355.1	355.2	349.0	6.1	6.2
6.0	355.2	355.4	348.33	6.9	7.1
6.2	354.9	355.2	347.67	7.2	7.5
8.3	353.0	354.1	347.00	6.0	7.1
3.7	352.4	352.6	346.63	5.8	6.0
3.7	352.2	352.6	346.25	6.0	6.3
4.6	351.3	351.7	345.88	5.4	5.8
5.0	350.8	351.3	345.50	5.3	5.8
4.6	351.2	351.7	345.13	6.1	6.6

Sta	+	T	−	El.	℄ −
		356.31			
609					5.2
+50					5.6
610					5.7
+50					5.5
611					5.2
+50					7.1
612			4.43	351.88	6.8
	0.02	351.90			
+50					4.6
613					5.2
+50					5.4
614					6.6
+50					7.0

25.

offset −	℄ El.	offset El.	Grade	℄ cut	offset cut
4.5	351.1	351.8	344.75	6.3 ✓	7.0
5.0	350.7	351.3	344.38	6.3 ✓	6.9
5.0	350.6	351.3	344.00	6.6 ✓	7.3
4.6	350.8	351.7	343.5	7.3 ✓	8.2
3.8	351.1	352.5	343.0	8.1 ✓	9.5
3.6	349.2	352.7	342.5	6.7 ✓	10.2
4.3	349.5	352.0	342.0	7.5 ✓	10.0
1.4	347.3	350.5	341.5	5.8 ✓	9.0
2.6	346.7	349.3	341.0	5.7 ✓	8.3
4.4	346.5	347.5	340.5	6.0 ✓	7.0
6.1	345.3	345.8	340.0	5.3 ✓	5.8
7.3	344.9	344.6	339.5	5.4 ✓	5.1

0.75 0.90 1.0 0.90

Sta	+	π	−	El.	℄
		351.90			
615					7.8
+50					7.5
616					6.9
+50					7.8
617			8.40	343.50	9.0
	3.65	347.13		343.48 – B.M. –	
+50					4.5
618					4.5
+50					4.6
619					4.5
+50					4.5
620					4.4
+50					4.5

offset −	℄ El.	offset El.	Grade	℄ cut	26. offset cut.
7.9	344.1	344.0	339.00	5.1 ✓	5.0
7.6	344.4	344.3	338.84	5.6 ✓	5.5
7.2	345.0	344.7	338.67	6.3 ✓	6.0
7.7	344.1	344.2	338.51	5.6 ✓	5.7
8.8	342.9	343.1	338.34	4.6 ✓	4.8
4.5	342.6	342.6	338.17	4.4 ✓	4.4
4.4	342.6	342.7	338.0	4.6 ✓	4.7
4.4	342.5	342.7	337.84	4.7 ✓	4.9
4.4	342.6	342.7	337.67	4.9 ✓	5.0
4.2	342.6	342.9	337.51	5.1 ✓	5.4
4.2	342.7	342.9	337.34	5.4 ✓	5.6
4.3	342.6	342.8	337.17	5.4 ✓	5.6

-0.33%

Sta	+	℄	−	El	℄
		347.13			
621					4.8
+50					4.9
622					5.1
+50					5.5
623			5.58	341.55	5.6
	3.41	344.96			
+50					3.7
624					3.9
+50					4.1
625					4.5
+50					4.4
626					4.8
+50					5.1

Offset −	℄ El.	offset El.	Grade	℄ cut	offset cut.
4.8	342.3	342.3	337.0	5.3 ✓	5.3
4.9	342.2	342.2	336.84	5.4 ✓	5.4
5.1	342.0	342.0	336.67	5.3 ✓	5.3
5.4	341.6	341.7	336.51	5.1 ✓	5.2
5.4	341.5	341.7	336.34	5.2 ✓	5.4
3.3	341.3	341.7	336.17	5.1 ✓	5.5
3.6	341.1	341.4	336.0	5.1 ✓	5.4
3.9	340.9	341.1	335.84	5.1 ✓	5.3
4.1	340.5	340.9	335.67	4.8 ✓	5.2
4.2	340.6	340.8	335.51	5.1 ✓	5.3
4.6	340.2	340.4	335.34	4.9 ✓	5.1
4.7	339.9	340.3	335.17	4.7 ✓	5.1

Sta	+	℄	−	El	℄ −
		344.96			
627					5.3
+50					5.3
628					5.6
+50					5.7
629			4.54	340.42	6.0
	1.76	342.18			3.5
+50					
630	G.B.				3.9
+50					3.9
631					4.3
+50					4.2
632					4.3
+50					4.3

28.

Offset −	℄ El.	offset El.	Grade	℄ cut	offset Cut.
4.8	339.7	340.2	335.0	4.7 ✓	5.2
5.6	339.7	339.4	334.84	4.9 ✓	4.6
5.4	339.4	339.6	334.67	4.7 ✓	4.9
5.4	339.3	339.6	334.51	4.8 ✓	5.1
6.1	339.0	338.9	334.34	4.7 ✓	4.6
3.0	338.7	339.2	334.17	4.5 ✓	5.0
3.6	338.3	338.6	334.0	4.3 ✓	4.6
3.9	338.3		333.70	4.6 ✓	4.6
4.9	337.9		333.41	4.5 ✓	3.9
5.3	338.0		333.12	4.9 ✓	3.8
4.3	337.9		332.82	5.1 ✓	5.1
4.0	337.9		332.53	5.4 ✓	5.7

Sta	+	π	-	El.	℄ -
		342.18			
633					4.6
+50					4.8
634					5.0
+50					4.9
635			2.94	339.24	5.1
	1.92	341.19		339.27 - B.M.	
+50					4.0
636					4.4
+50					4.4
637					4.7
+50					4.6
638					5.5
+50	G.B				5.1

Offset -	℄ El.	offset El.	Grade	℄ cut.	29 offset cut.
4.5	337.6		332.23	5.4 ✓	5.5
5.7	337.4		331.94	5.5 ✓	4.6
5.7	337.2		331.64	5.6 ✓	4.9
5.3	337.3		331.35	5.9 ✓	5.6
4.9	337.1		331.05	6.0 ✓	6.3
4.1	337.2		330.76	6.4 ✓	6.3
4.3	336.8	0.59-%	330.46	6.3 ✓	6.4
4.5	336.8		330.17	6.6 ✓	6.5
4.9	336.5		329.87	6.6 ✓	6.4
4.7	336.6		329.58	7.0 ✓	6.9
4.7	335.7 ✓ ~~335.6~~		329.28	6.4 ✓	7.1
4.9	336.1		X 329.00	7.1 ✓	7.3

Sta	+	π	−	El.	℄ −
		341.19			
639					5.3
	+50				5.3
640					5.5
	+50				5.6
641					5.6
	+50		1.92	339.27 B.M.	6.2
	From Here on The H.I.'s Read up the page			336.71 − B.M.	
642	P.I.		3.34	336.70	5.4
	+50				5.2
643					4.9
	+50				4.5
644					4.4
	+50	4.93 → 340.04			4.7
		339.43	4.32	335.11	

Offset −	℄ El.	offset El.	Grade	℄ Cut	30 offset Cut.
5.0	335.9		328.95	7.0	7.3
5.0	335.9		328.90	7.0	7.3
5.8	335.7		328.85	6.9	6.9
6.1	335.6		328.80	6.8	6.3
6.6	335.6		328.75	6.8	5.9
6.1	335.0		328.70	6.3	6.4
4.7	334.6		328.65	6.0	6.7
4.8	334.8		328.60	6.2	6.8
4.8	335.1	335.2	328.55	6.5	5.8
4.8	335.5		328.50	7.0	6.7
5.3	335.3		328.45	6.9	6.3
4.6	335.3		328.40	6.9	7.0

0.10 ft

Sta	+	℄ 339.43	−	El.	℄ −
645					4.0
+50					4.0
646					4.2
+50					4.4
647					4.7
+50					4.8
648					5.1
+50					5.0
649					5.4
+50					5.5
650					5.8
+50					5.6
		339.43			

Offset —	℄ El.	offset El.	Grade	℄ cut	offset cut.
4.4	335.4		328.35	7.0	6.7
4.4	335.4		328.30	7.1	6.7
4.5	~~335.7~~ 335.2		328.25	7.0	7.2
4.7	335.0		328.20	6.8	6.5
4.8	334.7		328.15	6.5	6.5
5.0	334.6		328.10	6.5	6.3
5.2	334.3	−0.10%	328.05	6.2	6.1
5.3	334.4		328.00	6.4	6.1
5.4	334.0		327.95	6.0	6.1
5.7	333.9		327.90	6.0	5.8
5.6	~~333.5~~ 333.6		327.85	5.8	5.9
5.9	333.8		327.80	6.0	5.7

Sta	+	H	−	El.	℄ −
651					5.6
	5.05	339.43			
+50			5.81	334.38	6.1
652					5.9
+50					5.5
653					5.4
+50	G.B.				5.3
654					5.4
+25	P.I.				5.0
+50					4.8
655	G.B.				4.6
+50	~~492~~	340.19			4.8
			4.89	335.27 / 335.27	B.M.
656	~~5.37~~	~~340.16~~			
+50			3.24	334.79	3.7
		338.03			

offset-	℄ El	offset El.	Grade	℄ Cut	32. offset Cut.
5.9	333.8		327.75	6.0	5.8
6.2	334.1		327.70	6.4	6.3
5.6	334.3	334.1	327.65	6.7	7.0
5.3	334.7		327.60	7.1	7.3
5.4	334.8		327.55	7.2	7.3
5.6	334.9		327.50	7.4	7.1
5.2	334.8		327.00	7.8	8.0
5.1	335.2		326.25	9.0	8.9
4.8	335.4		326.50	8.9	8.9
4.6	335.6		326.0	9.6	9.6
5.0	335.4 / ~~335.9~~	335.20	325.95	9.4	9.3
			325.90		
3.8	334.3	334.2	325.85	8.5	8.4

Sta	+	π	−	El.	℄ −
657		338.03			3.7
+50					3.9
658					4.0
+50					4.3
659					4.4
+50					5.1
660	G.B.				5.3
+50					5.2
661					5.1
+50	P.I.				5.8
662					6.2
+50					6.1
	6.10	338.03 ✓ 335.30	3.37	331.93 ✓	

33.

Offset −	℄ El.	offset El	Grade	℄ cut	offset CUT.
3.7	334.3 ✓	334.3	325.80	✓ 8.5	8.5
4.4	334.1 ✓	333.6	325.75	✓ 8.3	7.9
4.1	334.0 ✓	333.9	325.70	✓ 8.3	8.2
4.3	333.7 ✓	333.7	325.65	✓ 8.1	8.1
4.3	333.6 ✓	333.7	325.60	✓ 8.0	8.1
5.3	332.6 ✓	332.7	325.55	✓ 7.0	7.2
5.4	332.7 ✓	332.6	325.50	✓ 7.2	7.1
5.2	332.8 ✓	332.8	325.45	✓ 7.4	7.4
5.4	332.9 ✓	332.6	325.40	✓ 7.5	7.2
5.9	332.2 ✓ ~~332.1~~	332.1	325.35	✓ 6.8	6.8
6.3	331.8 ✓ ~~331.7~~	331.7	325.30	✓ 6.5	6.4
6.0	331.9 ✓ ~~331.0~~	332.0	325.25	✓ 6.7	6.8

0.10 ℄

0.10 ℄

Sta.	+	π	−	El.	℄ −
		335.3			
663					3.2
+50					3.6
664					4.4
+50					4.4
665	G.B.				4.8
+50					4.5
666					4.9
+50					5.1
667					5.1
+50					5.4
668					5.8
+50					6.3
		335.30			

offset −	℄ El.	offset El.	Grade	℄ cut
3.7	332.1	332.1	325.20	6.9
3.6	331.7	331.7	325.15	6.5
4.2	330.9	331.1	325.10	5.8
4.3	330.9	331.0	325.05	5.8
4.4	330.5	330.9	325.00	5.5
4.2	330.8	331.1	324.67	6.1
4.6	330.4	330.7	324.33	6.1
4.7	330.2	330.6	324.00	6.2
4.8	330.2	330.5	323.67	6.5
5.0	329.9	330.3	323.33	6.6
5.7	329.5	329.6	223.00	6.5
6.1	329.0	329.2	322.66	6.3

offset CUT.
6.9
6.6
6.0
6.0
5.9
6.5
6.4
6.6
6.9
7.0
6.6
6.6

Sta.	+	T	−	El.	℄ −
669					7.0
	+50				7.2
	7.13	335.30			
670			2.74	328.17	3.1
	+50				3.6
671					4.3
	+35 P.O.T.				
	+50				4.5
672					5.0
	+50 G.B.				4.5
673					4.9
	+50				5.4
674					5.8
	+50				5.9
		330.91			

offset −	℄ El.	offset El.	Grade	℄ cut	offset cut.
6.6	328.3	328.7	322.33	6.0	6.4
6.8	328.1	328.5	321.99	6.1	7.3
3.0	327.8	327.9	321.66	6.1	6.3
3.5	327.3	327.4	321.33	6.0	6.1
3.8	326.6	327.1	320.99	5.6	7.1
			320.78		
3.9	326.4	327.0	320.66	5.7	6.1
4.3	325.9	326.6	320.33	5.6	6.3
3.7	326.4	327.2	320.00	6.4	7.2
4.6	326.0	326.3	319.82	6.2	6.5
4.8	325.5	326.1	319.64	5.9	6.5
5.0	325.1	325.9	319.45	5.7	6.5
5.5	325.0	325.4	319.27	5.7	6.2

Sta.	+	=	−	El.	℄ −
675					5.5
+50					6.0
676					5.8
+50					5.5
	5.60	330.91 ✓			
677			5.89	325.31 ✓	6.1
+50					6.1
678	G.B.				6.4
+50					6.4
679					7.2
+50					6.5
680					6.7
+50	G.B.				9.0
		331.20			

Offset −	℄ El.	Offset El.	Grade	℄ Cut	36.0 Offset Cut.
5.7	328.4 ✓	325.2	319.09	6.3 ✓	6.2
5.5	324.9 ✓	325.4	318.91	6.0 ✓	6.5
5.5	325.1 ✓	325.4	318.73	6.4 ✓	6.7
5.9	325.4 ✓	325.0	318.59	6.9 ✓	6.5
6.4	325.1 ✓	324.8	318.36	6.7 ✓	6.5
5.5	325.1 ✓	325.1	318.18	6.9 ✓	7.6
6.6	324.8 ✓	324.6	318.00	6.8 ✓	6.6
6.5	324.8 ✓	324.7	316.86	8.0 ✓	7.9
6.6	324.0 ✓	324.6	315.66	8.4 ✓	9.0
6.4	324.7 ✓	324.8	314.40	10.3 ✓	10.4
	324.5 ✓				
7.7	~~323.5~~	323.5	313.20	11.3 ✓	10.3
9.4	322.2 ✓	321.8	312.00	10.2 ✓	9.8

Sta.	+	π	−	El.	℄ −
681					6.4
+50					6.4
682					7.1
+50	G.B.				8.0
	7.99	331.20 ✓			
683			5.48	323.21 ✓	5.3
+50					5.4
684					5.6
+50					5.0
685					5.5
+50					5.5
686					5.3
+50					5.3
		328.69			

Offset −	℄ El.	Offset El.	Grade	℄ Cut	Offset Cut.
8.9	324.8	322.3	313.25	11.6 ✓	9.1
7.1	324.8	324.1	314.50	10.3 ✓	9.6
7.4	324.1	323.8	315.75	8.3 ✓	8.1
8.1	323.2	323.1	317.00	6.2 ✓	6.1
5.7	323.4	323.10	317.08	6.3 ✓	6.0
5.3	323.3	323.4	317.15	6.1 ✓	6.3
5.2	323.1	323.5	317.23	5.9 ✓	6.3
5.0	323.7	323.7	317.31	6.4 ✓	6.4
5.6	323.2	323.1	317.39	5.8 ✓	5.7
4.6	323.2	324.N	317.46	5.7 ✓	6.7
5.2	323.4	323.5	317.54	5.9 ✓	6.0
5.1	323.4	323.6	317.62	5.8 ✓	6.0

3.7

Sta.	Ft	+	−	El.	℄ −
687					5.1
+50					4.8
688					5.0
+50					4.9
	3.40	328.69			
689			4.81	325.29	6.3
+50					6.0
690					5.2
+50					5.5
691					5.9
+50					5.6
692					5.5
+39	B.C				5.4
	3.11	330.10			
				326.99	−B.M.

Offset −	℄ El.	Offset El.	Grade	℄ Cut	Offset Cut.
5.0	323.6	323.7	317.69	5.9	6.0
4.7	323.9	324.0	317.77	6.1	6.2
4.7	323.7	324.0	317.85	5.9	6.2
4.4	323.8	324.3	317.92	5.9	6.4
5.9	~~324.2~~ 323.8	324.2	318.00	5.8	6.2
5.5	324.1	324.6	318.08	6.0	6.5
5.1	324.9	325.0	318.15	6.7	6.9
5.6	324.6	324.5	318.23	6.4	6.3
5.8	324.2	324.3	318.31	5.9	6.0
5.6	324.5	324.5	318.39	6.1	6.1
5.9	324.6	324.2	318.46	6.1	5.7
5.6	324.7	324.5	318.52	6.2	6.0

Sta.	+	x		El.	℄ −	Offset −	℄ El	offset El.	Grade	℄ cut	offset cut.
692+64	1				5.8	6.0	324.5	324.3	318.56	5.9	5.7
+89	4				5.8	5.4	324.5	324.9	318.60	5.9	6.3
693+14	4				5.5	5.4	324.8	324.9	318.64	6.2	6.3
+39	4				5.5	5.4	324.8	324.9	318.68	6.1	6.2
+64	4				5.5	5.3	324.8	325.0	318.72	6.1	6.3
+89	4				5.2	5.4	325.1	324.9	318.75	6.3	6.1
694+08	8	E.C.			5.7	5.3	324.6	325.0	318.78	5.8	6.2
+50					5.5	5.2	324.8	325.1	318.84	6.0	6.3
695					5.0	5.3	325.3	325.0	318.92	6.4	6.1
	4.42	330.32									
				325.90							

+0.154

3435

Sta. 510+05 48 For End.

Grade = 367.00

588+44.9
587+50
94.9

	El.
Sta. 635+00	331.0
Sta. 650+00	329.0
660+00	327.0

30.75

Sta	+	↗	−	Elev
				377.23
	3.88	381.11		
490+50			13.11	368.00

377.23
3.88
381.11
368.00
13.11

110
75
550
770
5.0
.83

2 | 1.330
.665
.67

608+50 : 345.13
609+00 344.75

64
45
.19

615
8+90
6 10

347

610
75
3050
427
4.575.0

4.58

290
75
1450
2030
2.175.0

347
2.17
344.83

1 25/5

4/4 1

305.75 | .50000000 = 1635

30575

194250

183450

108000

91725

162750

10 142 to Sta. 747+95

① unit

115

548+85
90
95

142 - 747+95

23

39+34.8
36+50
2.848

366.5
364.5
2.0

2,84.8 | .5000
2848
21520
19936
15840
14240

.0028
250 | 2000
2000

34+00.0
31+02.65
297.35

31+02.65
29+00
02.65

.00336
297.35 | 1.00,000
89205
1107950
889205
187450
178410

202.65

.00493
292.65 | 1,00.0000
81060
189400
182385
70150
60795
9355

.02.00
1,50 | 3.00

3.5

368.25
367.50
.75

.1210
619.64 | .75000000
61964
130360
123928
64320
61964
23560