

DRAINAGE

SUMMARY

SAFETY IMPROVEMENT
PROJ.: MIDDLE STREET TO PALI HIGHWAY

PROJ. NO.: F.A.I. PROJECT NO. I-HI-1(57) 18

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(57) 18	1972	44	171

STRUCTURES				ESTIMATED QUANTITIES																								REMARKS									
NUMBER	TYPE	STATION	ITEM NO.	200.	200.	503.	602.	603.	603.	604.	604.	604.	604.	604.	604.	605.	605.	605.	605.	609.	609.	609.	609.	609.	609.	637											
			DETAIL SHEET	01	80	001	101	1902	2000	201	232	233	239	301	305	006	912	112	200	706	711	712	713	714	10												
				Structure Excavation Other than at Bridges	Filter Material	Concrete Other than in Bridges	Reinforcing Steel Other than in Bridges	Remove, Clean & Relay Existing 24" Pipe	24-in Corrugated Metal Pipe, Sheet Thickness, 0.079 inch	Type 2" Cast Iron Frame & Cover	Type A-12 Steel Frame & Grate	Type G/G14 Steel Frame & Grate	Type 15" Steel Frame & Grate	Removing, Cleaning, & Relaying, # Reinforcing Type 4" C.I. Frame & Cover	Removing, Cleaning, & Relaying, Type 15" C.I. Frame & Cover	6-inch Perforated Underdrain Pipe	12-inch Perforated Underdrain Pipe	12-inch Nonperforated Underdrain Pipe	Cleanout	Gutter, Type 7(G/G14)	Gutter, Type 7G	Gutter, Type 7H	Gutter, Type 7J	Gutter, Type 7K	18-Inch Slotted Drain Pipe												
				UNIT USED	C.Y.	C.Y.	C.Y.	Lb.	L.F.	L.F.	Ea.	Ea.	Ea.	Ea.	Ea.	L.F.	L.F.	L.F.	Ea.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.												
1	C.B. #11 Type C	Sta. 358+00 W.B.	7H	4.6		2.0	333						3		1												For Sprinkler Detail, See Sht. No.35										
2	SDMH#5 Type E	Sta. 359+00 W.B.	8H	1.0		1.4	143							1													"	"	"	"	"	"	"	"	"	"	
3	C.B.#17 Type C	Sta. 9+50 W.B.	7H	3.8		2.7	344						2		1												"	"	"	"	"	"	"	"	"	"	
4	C.B.#25 Type C	Sta. 13+50 W.B.	7H	4.0		2.2	333						2		1												"	"	"	"	"	"	"	"	"	"	
5	SDMH#14 Type D	Sta. 16+00 W.B.	9H	12.4		4.1	264	5	2					1													"	"	"	"	"	"	"	"	"	"	
6	SDMH#14A Type D	Sta. 17+25 W.B.	9H	4.7		3.1	220							1													"	"	"	"	"	"	"	"	"	"	
7	C.B.#32 Type C	Sta. 18+45 W.B.	10H	7.6		6.3	322			1					1												"	"	"	"	"	"	"	"	"	"	
8	C.B.#36 Type D	"M-3" Sta. 22+87 ±																									Existing C.B. to remain. Contractor shall transition G/G14 Bituminous Gutter to existing C.B. For details, see sht. no 10H										
9	C.B.#39 Type B	"M-3" Sta. 25+50 ±	11H	4.0		2.5	33					1			1												"	"	"	"	"	"	"	"	"	"	
10	C.B.#38 Type D	"M-2" Sta. 3+75	8H	1.0		1.0	0				1				1												"	"	"	"	"	"	"	"	"	"	
11	C.B.#42 Type B	Sta. 32+00 E.B.	27H	4.7		2.5	294						2		1						10	37.3					For Bituminous Gutter Transition Details, See Sht. No. 30H										
12	C.B.#44 Type B	Sta. 35+55 E.B.	12H	2.8		2.2	212						3		1						71						"	"	"	"	"	"	"	"	"	"	
13	C.B.#46 Type B	Sta. 38+25 E.B.	13H	8.0		4.0	580			1					1								44	10			"	"	"	"	"	"	"	"	"	"	"
14	C.B.#48 Type B	"K-4" Sta. 0+00	14H	11.8		4.6	650						2		1																						
15	SDMH#212 Type B	"K-1" Sta. 5+03	15H	0.5		1.1	113								1																						
16	C.B.#50 Type C	"K-1" Sta. 5+93.54	15H	3.5		2.3	250						2		1																						
17	C.B.#52 Type C	"K-4" Sta. 4+10.19 ±	14H	11.5		4.0	655						2		1																						
18	C.B.#56 Type D	"K-4" Sta. 6+32	5H, 6H	4.2		2.2	300						2																								
19	C.B.#54 Type C	Sta. 46+50 E.B.	27H	5.0		2.8	294						2		1						10	37.3					For Bituminous Gutter Transition Details, See Sht. No. 30H										
20	C.B.#58 Type C	Sta. 48+55 E.B.	13H	8.0		4.0	580			1					1								44	10			"	"	"	"	"	"	"	"	"	"	"
21	C.B.#55 Type D	"K-2" Sta. 5+00	5H, 6H	4.2		2.2	300						2																								
22	C.B.#59 Type D	"K-2" Sta. 6+88	5H, 6H	4.2		2.2	300						2																								
23	C.B.#66 Type D	"K-2" Sta. 10+50	5H, 6H	4.2		2.2	300						2																								
24	C.B.#60 Type D	"K-5" Sta. 3+25 ±	5H, 6H	4.2		2.2	300						2																								
25	C.B.#84 Type D	"K-5" Sta. 5+10 ±	5H, 6H	4.2		2.2	300						2																								
26	C.B.#65 Type C	Sta. 50+75 E.B.	5H, 6H	4.2		2.2	300						2																								
27	C.B.#63 Type D	Sta. 50+90 ± W.B.	16H	1.0		1.0	204						2		1																						
Sub-Total - This Sheet					131.1		73.7	7933	5	2	3	1	1	36	4	15						20	212.9	88	20												
																												SHEET NO. 11 OF 65 SHEETS									

SHEET NO. 14 OF 35 SHEETS

4 4

DATE: _____
SURVEY PLOTTED BY: _____
DRAWN BY: _____
DESIGNED BY: _____
CHECKED BY: _____
NOTE BOOK: _____
No. _____

DRAINAGE

SUMMARY

SAFETY IMPROVEMENT
PROJ.: MIDDLE STREET TO PALI HIGHWAY

PROJ. NO.: F.A.I. PROJECT NO. I-HI-1(57) 18

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(57) 18	1972	45	171

STRUCTURES				ESTIMATED QUANTITIES																				REMARKS												
NUMBER	TYPE	STATION	ITEM NO.	200.	200.	503.	602.	603.	603.	604.	604.	604.	604.	604.	604.	605.	605.	605.	605.	609.	609.	609.	609.	609.	609.	637.										
				01	80	001	101	1002	2006	201	232		239	301	305	006	012	112	200	706	711	712	713	714	10											
			DETAIL SHEET	Structure Excavation Other Than At Bridges	Filter Material	Concrete Other Than In Bridges	Reinforcing Steel Other Than In Bridges	Remove, Clean & Relay Existing R4 Pipe	24-inch Corrugated Metal Pipe, Sheet Thickness .0070 inch	Type "A" Cast Iron Frame and Cover	Type A-1/2 Steel Frame and Grate	Type G/G1/4 Steel Frame and Grate	Type "S" Steel Frame and Grate	Removing, Cleaning, Painting & Reinstalling Type "A" C.I. Frame & Cover	Removing, Cleaning & Returning Type "B" C.I. Frame and Cover	6-inch Perforated Underdrain Pipe	12-inch Perforated Underdrain Pipe	12-inch Nonperforated Underdrain Pipe	Cleanout	Gutter, Type 7(G/G1/4)	Gutter, Type 7G	Gutter, Type 7H	Gutter, Type 7J	Gutter, Type 7K	18-inch Slotted Drain Pipe											
UNIT USED	C.Y.	C.Y.	C.Y.	Lb.	L.F.	L.F.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	L.F.	L.F.	L.F.	Ea.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.													
28	C.B.#68 Type C	Sta. 52+75 E.B.	5H, 6H	5.7		2.8	400						3																							
29	C.B.#70 Type D	Sta. 54+75 E.B.	5H, 6H	5.7		2.8	400						3																							
30	C.B.#72 Type C	"K-6" Sta. 9+50±	16H	1.2		1.5	66						2		1					10	37.3					For Bituminous Gutter Transition Details, See Sht. No. 30 H										
31	C.B.#74 Type C	"K-2" Sta. 15+95±	13H	4.9		4.9	580			1					1							44	10			For Sprinkler Detail, See Sht. No. 15, Detail "A" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
32	C.B.#2-F Type C	"K-2" Sta. 18+16±	13H	4.9		4.9	580			1					1							44	10			For Sprinkler Detail, See Sht. No. 15, Detail "A" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
33	C.B.#4-F Type C	Sta. 62+00 E.B.	13H	4.9		4.9	580			1					1							44	10			For Sprinkler Detail, See Sht. No. 15, Detail "A" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
34	C.B.#6-F Type C	Sta. 63+75 E.B.	17H	8.2		6.9	635		3	1					1							44	10			For Sprinkler Detail, See Sht. No. 15, Detail "A" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
35	C.B.#11-F Type C	Sta. 67+25 E.B.	17H	7.3		3.4	500		3	1					1							44	10			For Sprinkler Detail, See Sht. No. 15, Detail "A" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
36	C.B.#15-F Type C	Sta. 70+75 E.B.	18H	3.4		2.0	179						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15, Detail "D" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
37	C.B.#14-F Type B	Sta. 70+75 W.B.	18H	3.4		2.0	179						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 25 For Bituminous Gutter Transition Details, See Sht. No. 30 H										
38	C.B.#17-F Type C	Sta. 73+25 E.B.	18H	3.4		2.0	179						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15, Detail "C" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
39	C.B.#18-F Type B	"R-1" Sta. 2+10	27H	7.5		3.0	366						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15, Detail "B" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
40	C.B.#20-F Type D	"R-1" Sta. 0+45	27H	7.7		3.0	366						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15, Detail "B" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
41	C.B.#24-F Type D	Sta. 77+00 W.B.	27H	8.1		3.2	366						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15, Detail "B" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
42	C.B.#28-F Type D	Sta. 78+80 W.B.	27H	8.1		3.2	366						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15, Detail "C" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
43	C.B.#30-F Type D	"R-4" Sta. 1+50	5H, 6H	4.2		2.2	300						2													For Sprinkler Detail, See Sht. No. 6H, Detail "A"										
44	C.B.#32-F Type A	Sta. 81+75 W.B.	27H	7.1		3.1	366						4		1						74.0					For Sprinkler Detail, See Sht. No. 15 For Bituminous Gutter Transition Details, See Sht. No. 30 H										
45	C.B.#50-F Type C	Sta. 101+00 E.B.	27H	7.8		4.4	366						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15, Detail "B" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
46	C.B.#52-F Type C	Sta. 106+00 E.B.	19H	3.4		2.5	302						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15, Detail "B" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
47	C.B.#55-F Type C	Sta. 108+25 E.B.	27H	5.2		2.8	366						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15, Detail "B" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
48	C.B.#56-F Type D	Sta. 110+00 W.B.	27H	4.0		2.3	328						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15, Detail "B" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
49	C.B.#57-F Type D	Sta. 110+05 E.B.	27H	5.7		2.8	366						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15 For Bituminous Gutter Transition Details, See Sht. No. 30 H										
50	C.B.#61-F Type A	Sta. 111+70 E.B.	5H, 6H	7.4		3.5	533						4													For Sprinkler Detail, See Sht. No. 6H, Detail "A"										
51	C.B.#60-F Type A	Sta. 111+70 W.B.	20H	4.2		3.6	354						2		1						67.3					For Sprinkler Detail, See Sht. No. 25 For Bituminous Gutter Transition Details, See Sht. No. 30 H										
52	C.B.#63-F Type B	Sta. 114+50 E.B.	5H, 6H	7.3		3.4	500						4													For Sprinkler Detail, See Sht. No. 6H, Detail "A"										
53	C.B.#62-F Type C	"R-7" Sta. 9+90	21H	2.1		1.4	154						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15, Detail "B" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
54	C.B.#64-F Type C	"R-7" Sta. 7+50	21H	2.1		1.4	154						2		1					10	37.3					For Sprinkler Detail, See Sht. No. 15, Detail "E" For Bituminous Gutter Transition Details, See Sht. No. 30 H										
Sub-Total - This Sheet				144.9		83.9	9831		6	5			52		22						150	700.8	220	50			SHEET NO. 2H OF 35 SHEETS									

SHEET NO. 24 OF 35 SHEETS

DRAINAGE

SUMMARY

SAFETY IMPROVEMENT
PROJ.: MIDDLE STREET TO PALI HIGHWAY

PROJ. NO.: F.A.I. PROJECT NO. I-HI-1(57)18

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(57)18	1972	46	171

STRUCTURES				ESTIMATED QUANTITIES																			REMARKS												
NUMBER	TYPE	STATION	ITEM NO.	206	206	503	602	603	603	604	604	604	604	604	605	605	605	605	609	609	609	609	609	637											
			DETAIL SHEET	01	80	001	101	190R	206G	201	232		239	301	305	006	012	112	200	706	711	712	713	714	10										
			UNIT USED	Structure Excavation Other Than At Bridges	Filter Material	Concrete Other Than In Bridges	Reinforcing Steel Other Than In Bridges	Remove, Clean & Relay Existing 24" Pipe	24-Inch Corrugated Metal Pipe, Sheet Thickness .0075 Inch	Type "A" Cast Iron Frame and Cover	Type A-12 Steel Frame and Grate	Type G1G14 Steel Frame and Grate	Type "S" Steel Frame and Grate	Removing, Cleaning, Patching & Reinstalling Type "A" C.I. Frame & Cover	Removing, Cleaning & Returning Type "B" C.I. Frame and Cover	6-Inch Perforated Under-drain Pipe	12-Inch Perforated Under-drain Pipe	12-Inch Nonperforated Under-drain Pipe	Cleanout	Gutter, Type 7(G1G14)	Gutter, Type 7G	Gutter, Type 7H	Gutter, Type 7J	Gutter, Type 7K	18-Inch Slotted Drain Pipe										
55	C.B.#66-F Type C	"R-6" Sta. 5+00	22H	5.7		2.9	349						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 13, Detail "C" For Bituminous Gutter Transition Details See Sht. No. 30H	
56	C.B.#67-F Type A	"R-6" Sta. 7+25	22H	5.7		2.9	540						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 25 For Bituminous Gutter Transition Details See Sht. No. 30H	
57	C.B.#69-F Type B	Sta. 121+00 W.B.	19H	1.7		1.9	256						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 13, Detail "B" For Bituminous Gutter Transition Details See Sht. No. 30H	
58	C.B.#70-F Type C	"R-6" Sta. 9+25	22H	5.7		2.9	349						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 13, Detail "B" For Bituminous Gutter Transition Details See Sht. No. 30H	
59	C.B.#72-F Type C	"R-6" Sta. 11+50	20H	2.0		2.0	299						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 13, Detail "B" For Bituminous Gutter Transition Details See Sht. No. 30H	
60	C.B.#71-F Type B	Sta. 123+75 W.B.	27H	5.3		2.9	366						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 13 For Bituminous Gutter Transition Details See Sht. No. 30H	
61	C.B.#75-F Type C	"R-6" Sta. 13+50	5H, 6H	7.4		3.5	533						4																					For Sprinkler Detail, See Sht. No. 6H, Detail "A"	
62	C.B.#74-F Type B	Sta. 125+75 W.B.	19H	4.7		2.8	323						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 13, Detail "B" For Bituminous Gutter Transition Details See Sht. No. 30H	
63	C.B.#2-F(T) Type D	Sta. 128+25 E.B.	23H	2.6		2.2	45			10			2		1																			For Sprinkler Detail, See Sht. No. 55	
64	C.B.#1-F(T) Type D	Sta. 128+25 W.B.	24H	2.5		1.8	223						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 13, Detail "E" For Bituminous Gutter Transition Details See Sht. No. 30H	
65	C.B.#4-F(T) Type D	Sta. 120+75 W.B.	24H	2.5		1.8	223						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 52 For Bituminous Gutter Transition Details See Sht. No. 30H	
66	C.B.#5-F(T) Type D	Sta. 130+25 E.B.	23H	6.0		2.5	49			16			2		1																			For Sprinkler Detail, See Sht. No. 53	
67	C.B.#7-F(T) Type A	Sta. 132+75 E.B.	23H	6.0		2.5	49			16			2		1																			For Sprinkler Detail, See Sht. No. 53	
68	C.B.#6-F(T) Type A	Sta. 132+75 W.B.	25H	2.1		2.2	119						4		1						44													For Sprinkler Detail, See Sht. No. 23 For Bituminous Gutter Transition Details See Sht. No. 30H	
69	C.B.#9-F(T) Type D	Sta. 134+40 E.B.	23H	4.9		2.3	48			16					1																			For Sprinkler Detail, See Sht. No. 53	
70	C.B.#2-L(T) Type A	Sta. 136+75 W.B.	26H	8.9		3.5	304						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 13, Detail "D" For Bituminous Gutter Transition Details See Sht. No. 30H	
71	C.B.#4-L(T) Type D	Sta. 137+42 E.B.	5H, 6H	7.3		3.4	500						4																						
72	C.B.#9-L(T) Type C	Sta. 140+25 W.B.	26H	8.9		3.5	304						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 13, Detail "E" For Bituminous Gutter Transition Details See Sht. No. 30H	
73	C.B.#6-L(T) Type D	Sta. 140+50 E.B.	27H	7.3		3.3	366						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 13, Detail "B" For Bituminous Gutter Transition Details See Sht. No. 30H	
74	C.B.#10-L(T) Type C	Sta. 141+06 W.B.	26H	6.4		2.9	303						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 23 For Bituminous Gutter Transition Details See Sht. No. 30H	
75	C.B.#11-L(T) Type D	"R-6" Sta. 3+50	27H	7.3		3.3	366						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 13, Detail "D" For Bituminous Gutter Transition Details See Sht. No. 30H	
76	C.B.#13-L(T) Type D	Sta. 145+75 W.B.	27H	6.7		3.2	366						2		1						10	37.3												For Sprinkler Detail, See Sht. No. 13, Detail "B" For Bituminous Gutter Transition Details See Sht. No. 30H	
77	C.B.#16-L(T) Type D	Sta. 148+00 W.B.	5H, 6H	4.2		2.2	300						2																					For Sprinkler Detail, See Sht. No. 6H, Detail "A"	
Sub-Total - This Sheet				121.8		62.4	6589		58				50		20						150	6035												SHEET NO. 34 OF 35 SHEETS	

DATE	
SURVEY PLOTTED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

DRAINAGE

SUMMARY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(57)18	1972	47	171

SAFETY IMPROVEMENTS
PROJ.: MIDDLE STREET TO PALI HIGHWAY

PROJ. NO.: F.A.I. PROJECT NO. I-HI-1(57) 18

STRUCTURES			ESTIMATED QUANTITIES																								REMARKS										
NUMBER	TYPE	STATION	ITEM NO.	209	209	503	602	603	603	604	604	604	604	604	604	605	605	605	605	609	609	609	609	609	637												
			DETAIL SHEET	Structure Excavation Other Than At Bridges	Filter Material	Concrete Other Than In Bridges	Reinforcing Steel Other Than In Bridges	Remove Clean & Relay Existing 24" Pipe	24-Inch Corrugated Metal Pipe, Sheet Thickness .0079 Inch	Type "A" Cast Iron Frame and Cover	Type A-12 Steel Frame and Grate	Type GIG14 Steel Frame and Grate	Type "S" Steel Frame and Grate	Removing, Cleaning, Painting & Reinstalling Type "A" C.I. Frame & Cover	Removing, Cleaning, & Returning Type "B" C.I. Frame & Cover	G-Inch Perforated Underdrain Pipe	12-Inch Perforated Underdrain Pipe	12-Inch Nonperforated Underdrain Pipe	Cleanout	Gutter, Type 7(GIG14)	Gutter, Type 7G	Gutter, Type 7H	Gutter, Type 7J	Gutter, Type 7K	18-Inch Slotted Drain Pipe												
			UNIT USED	C.Y.	C.Y.	C.Y.	Lb.	L.F.	L.F.	Ea.	Ea.	Ea.	Ea.	Ea.	Ea.	L.F.	L.F.	L.F.	Ea.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.												
78	6-Inch Underdrain	# Sta. 134 + 40 ± to # Sta. 134 + 59 ±	23H	3.5	4.0											22																					
79	18-Inch Slotted Drain	Ramp M-2 Sta. 1+91.33 ± to Ramp M-2 Sta. 3+73.50 ±	32H																						180												
80	Bituminous Gutter Type GIG14	Ramp M-3 Sta. 22+87 ± to Ramp M-3 Sta. 27+51.97	31H																	460							For locations, see Roadway Plans sht. no. 4										
81	12-Inch Underdrain	Ramp "K-1" Sta. 5+00 ± to # Sta. 35+53 ±		108	34.0												608	240	5																		
Sub-Total - This Sheet				111.5	38.9											22	608	240	5	460						180											
Total - Sheet Nos. 35, 36, 37 & 38				509.3	38.9	220	24,353	5	66	8	1	1	138	4	57	22	608	240	5	460	320	151.2	308	70	180												
Rounded - Total				510	40	220	24,360	5	66	8	1	1	138	4	57	22	608	240	5	460	320	152.0	310	70	180												
																												SHEET NO. 41 OF 55 SHEETS									

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