

P:\Drafting\2012-04-13_2130 hana hwy\2130_S0.2.dwg, 4/16/2012 11:51:39 AM, tamara.ha

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360B-01-03	2012	13	18

MINIMUM SPLICE & EMBEDMENT LENGTHS					
CONCRETE STRENGTH = 4,000 PSI					
BAR SIZE	LAP SPLICE		EMBEDMENT		
	OTHER BARS	TOP BAR	STRAIGHT		WITH STANDARD 90° HOOK
			OTHER BARS	TOP BAR	
#3, #4	21"	29"	12"	17"	7"
#5	26"	36"	15"	21"	9"
#6	31"	43"	18"	26"	10"
#7	39"	54"	23"	32"	12"
#8	51"	71"	30"	42"	14"
#9	64"	90"	38"	53"	15"
#10	81"	114"	48"	67"	17"
#11	100"	140"	59"	82"	19"

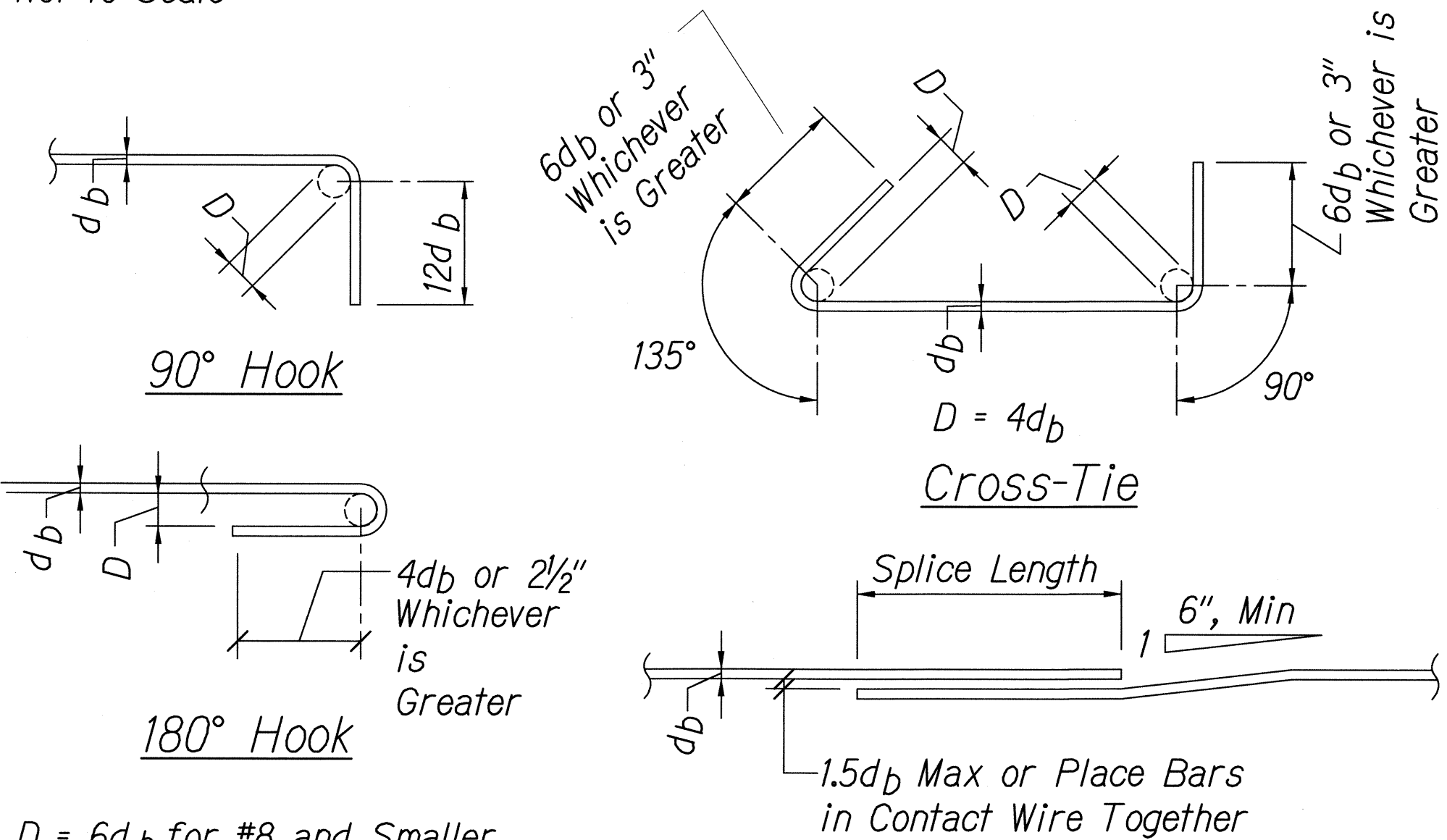
Notes:

- "Top Bars" are horizontal bars with 12" or more of concrete cast below.
- Splice lengths may be reduced by multiplying the tabulated values by 0.765 if the centerline of splice of adjacent bars are staggered 6'-0" o.c. for #9 bar and smaller and 9'-0" o.c. for #10 bar and larger.
- Embedment lengths for straight bars may be reduced by multiplying the tabulated values by 0.80 if the bars are spaced laterally not less than 6" center-to-center, with not less than 3" clear cover measured in the direction of the spacing.
- Embedment lengths for bars with 90° hook are bars with side cover, normal to plane of hook, of not less than 2½" and cover on bar extension beyond hook not less than 2". Increase embedment length by 43% for bars not meeting these requirements.

TYPICAL REBAR SPLICE AND EMBEDMENT LENGTH SCHEDULE

Not to Scale

1
S0.2 | S0.2

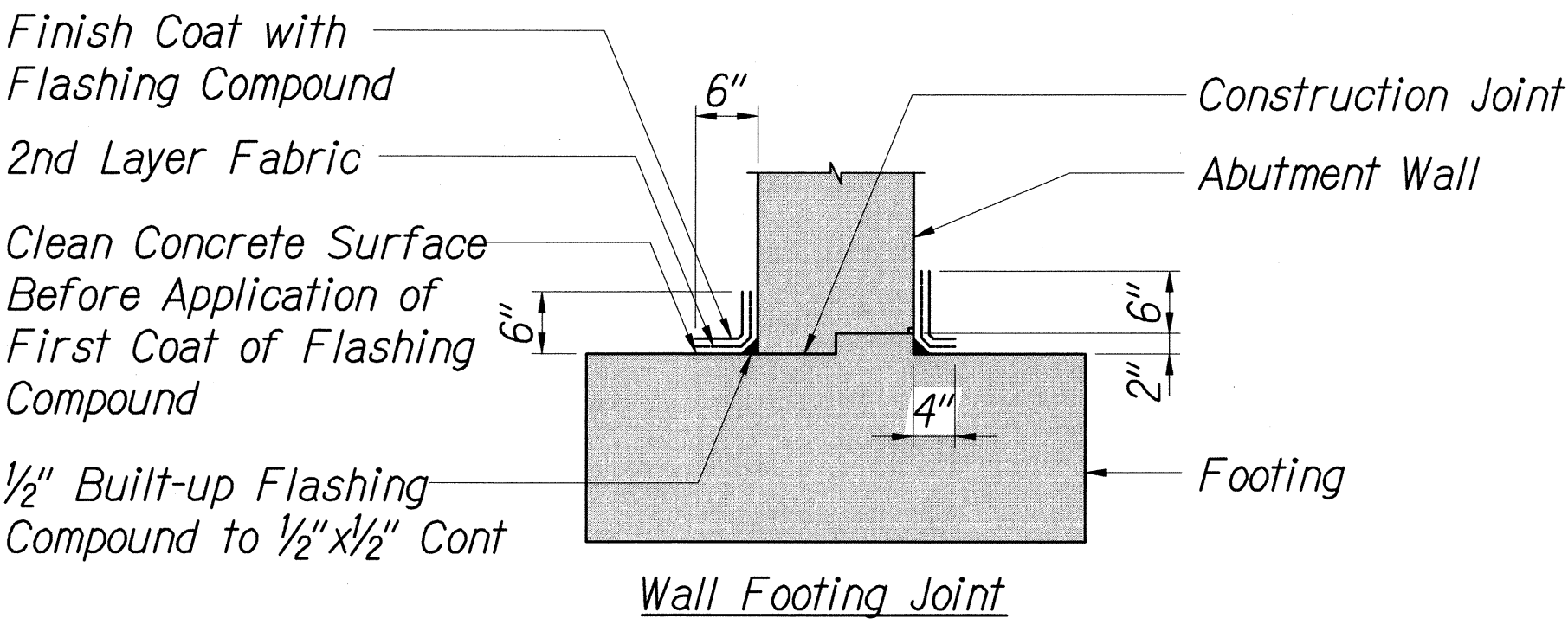
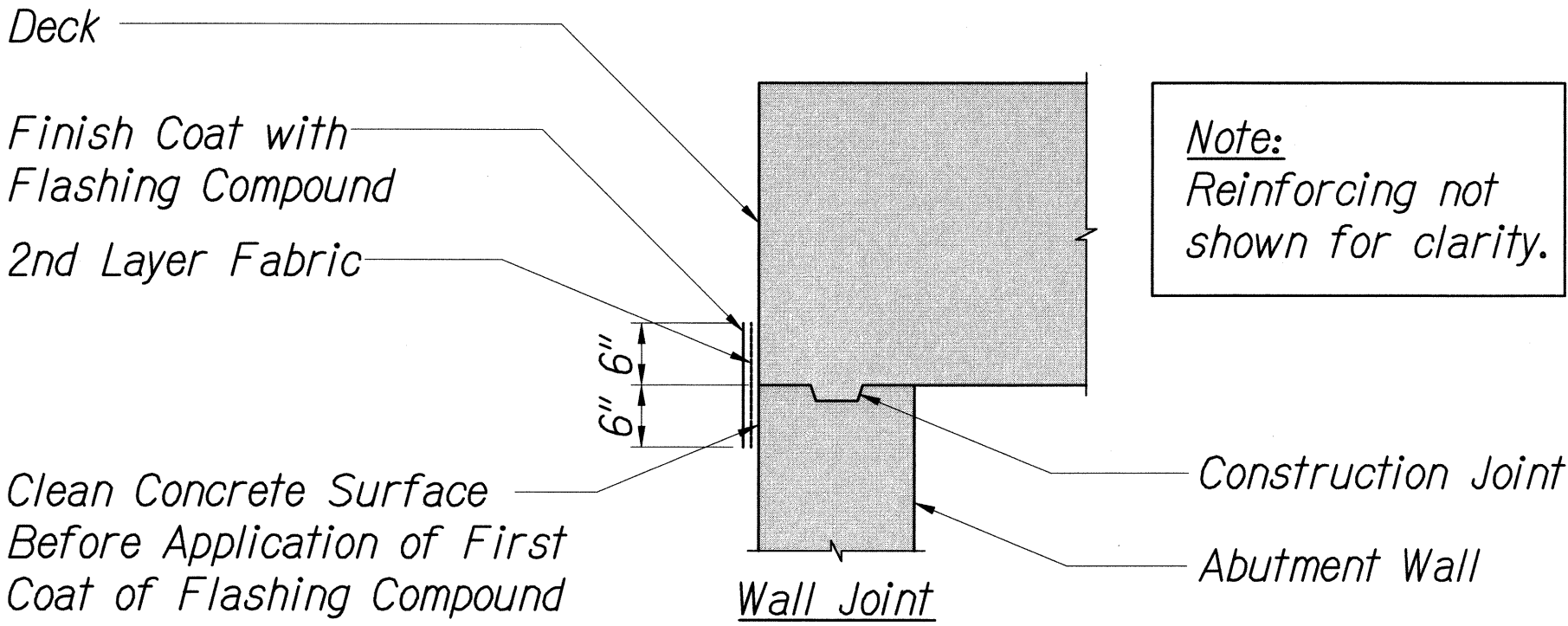


D = 6db for #8 and Smaller
D = 8db for #9 to #11

STANDARD HOOKS AND CROSS-TIE DETAIL

Not to Scale

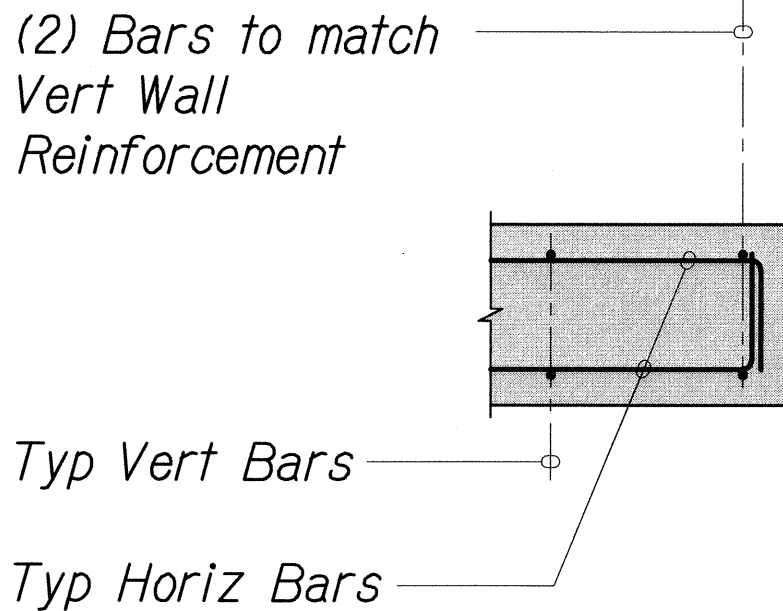
2
S0.2 | S0.2



WATERPROOFING DETAIL

Not to Scale

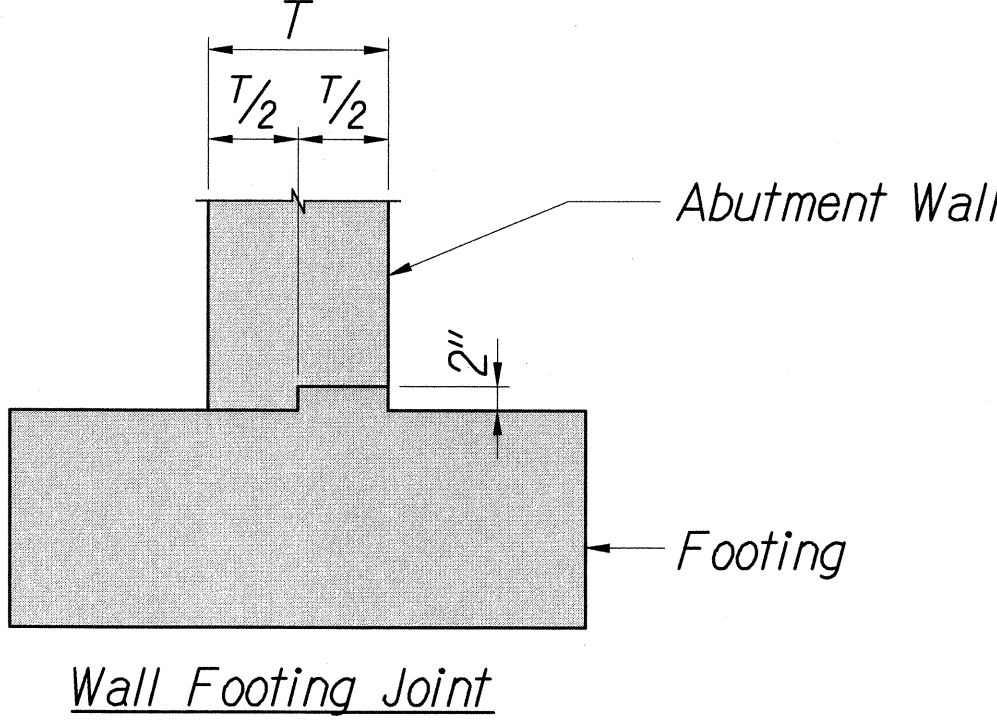
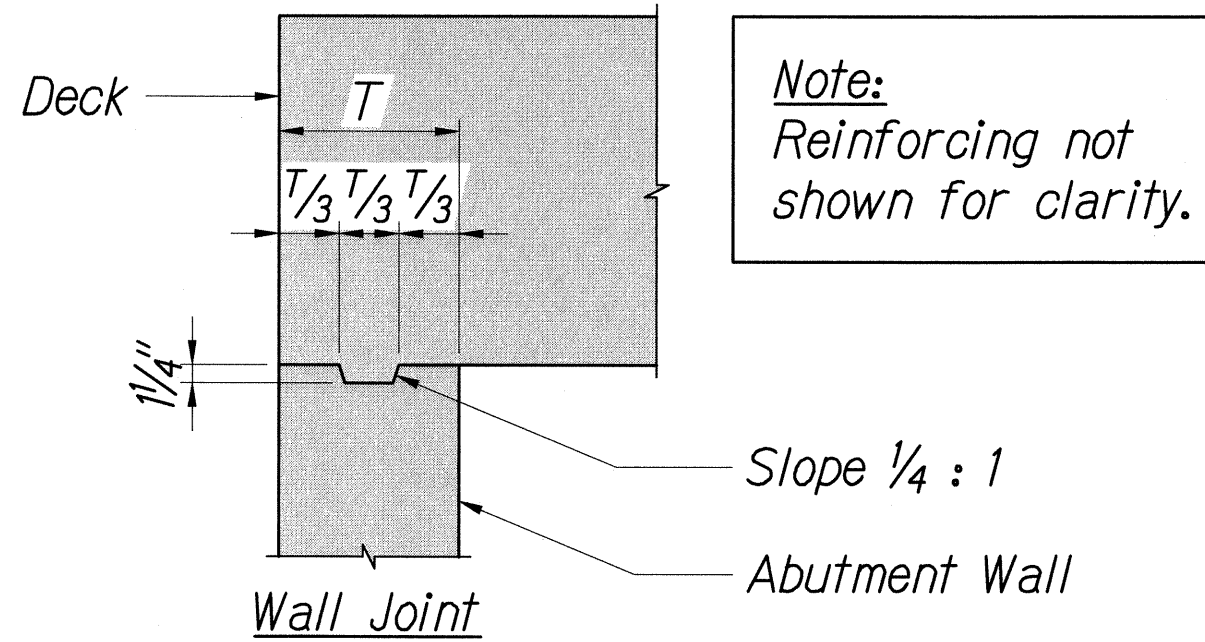
3
S0.2 | S0.2



TYPICAL WALL HORIZONTAL REINFORCEMENT DETAILS

Not to Scale

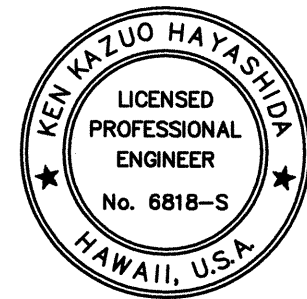
5
S0.2 | S0.2



TYPICAL CONSTRUCTION JOINT

Not to Scale

4
S0.2 | S0.2



EXPIRATION DATE OF THE LICENSE 4/30/2012
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL DETAILS

ROUTE 360 HANA HIGHWAY
IMPROVEMENTS
UAKEA ROAD TO KEAWA PLACE
Project No. 360B-01-03

Scale: As Noted Date: December 2011

SHEET No. S0.2 OF 7 SHEETS