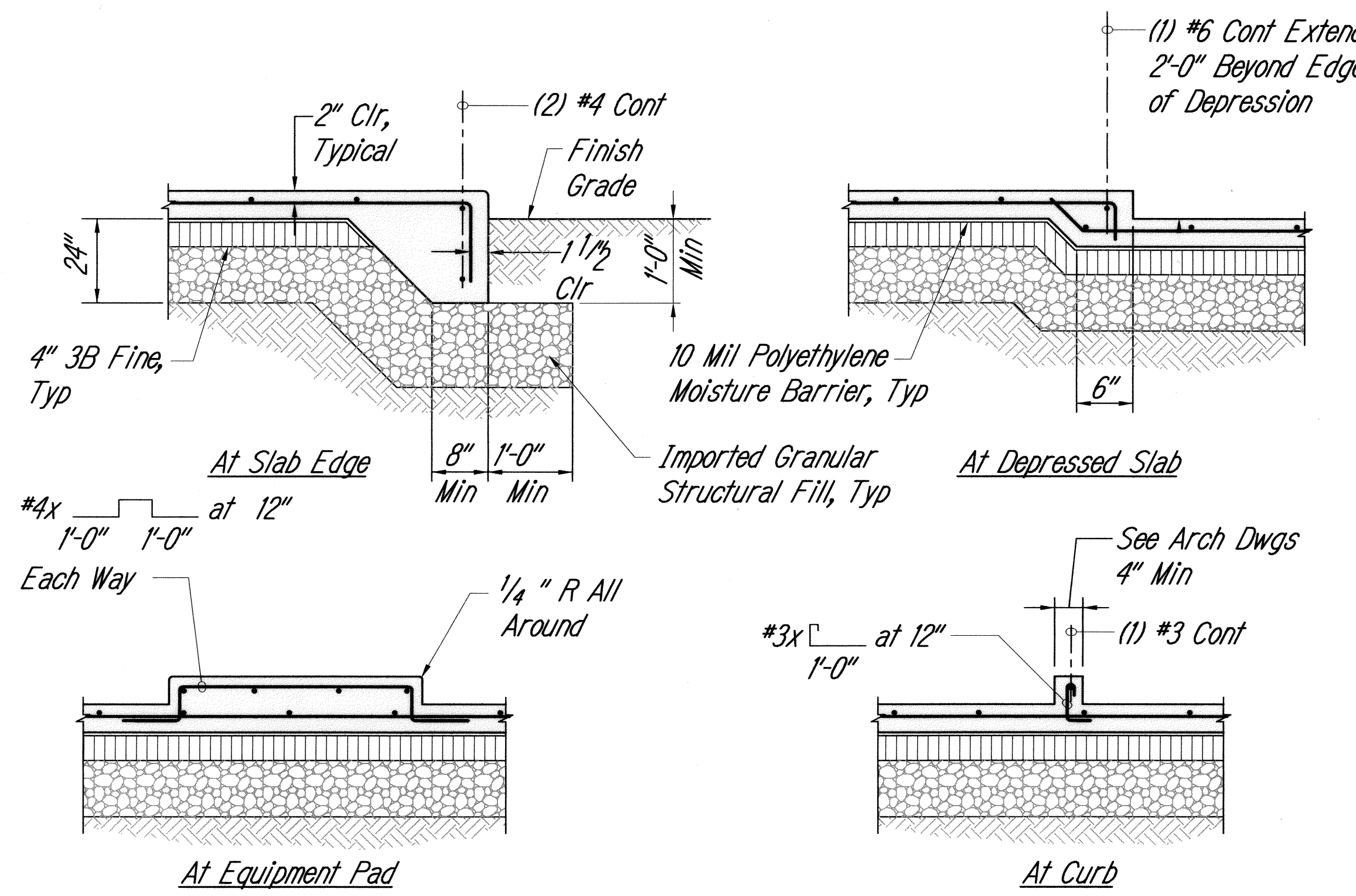
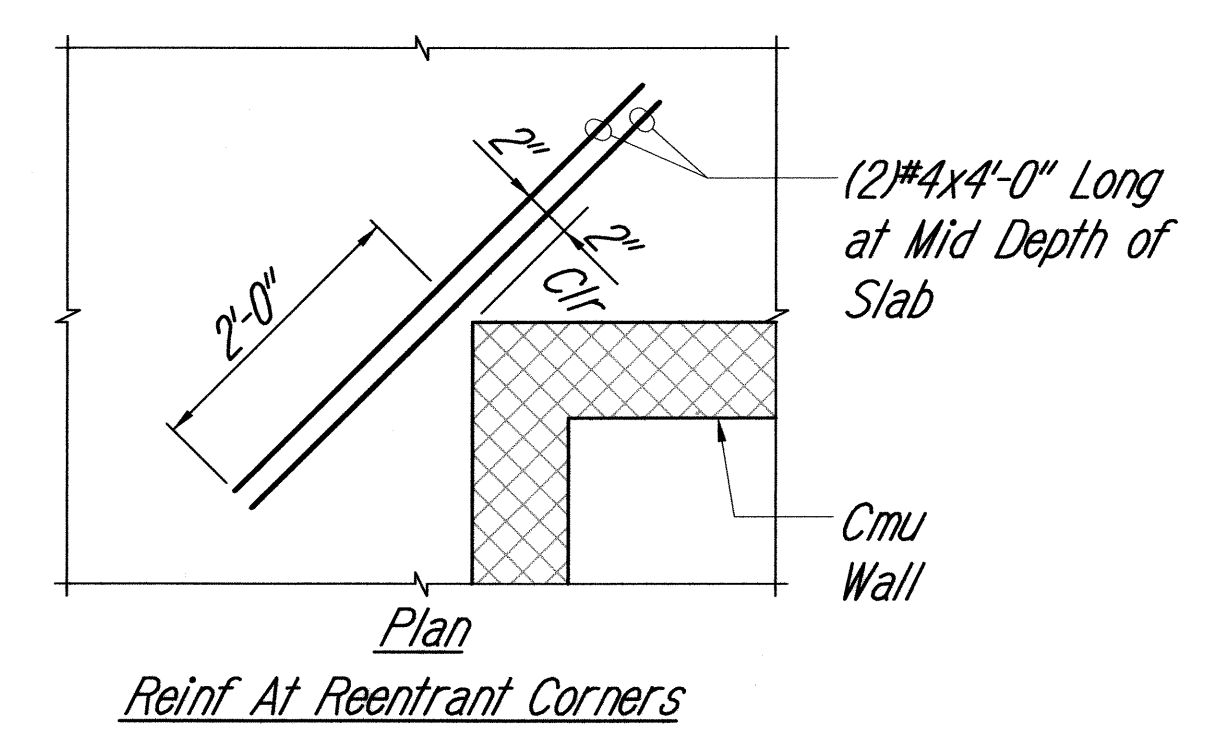




TYPICAL SLAB-ON GRADE DETAILS

Not To Scale

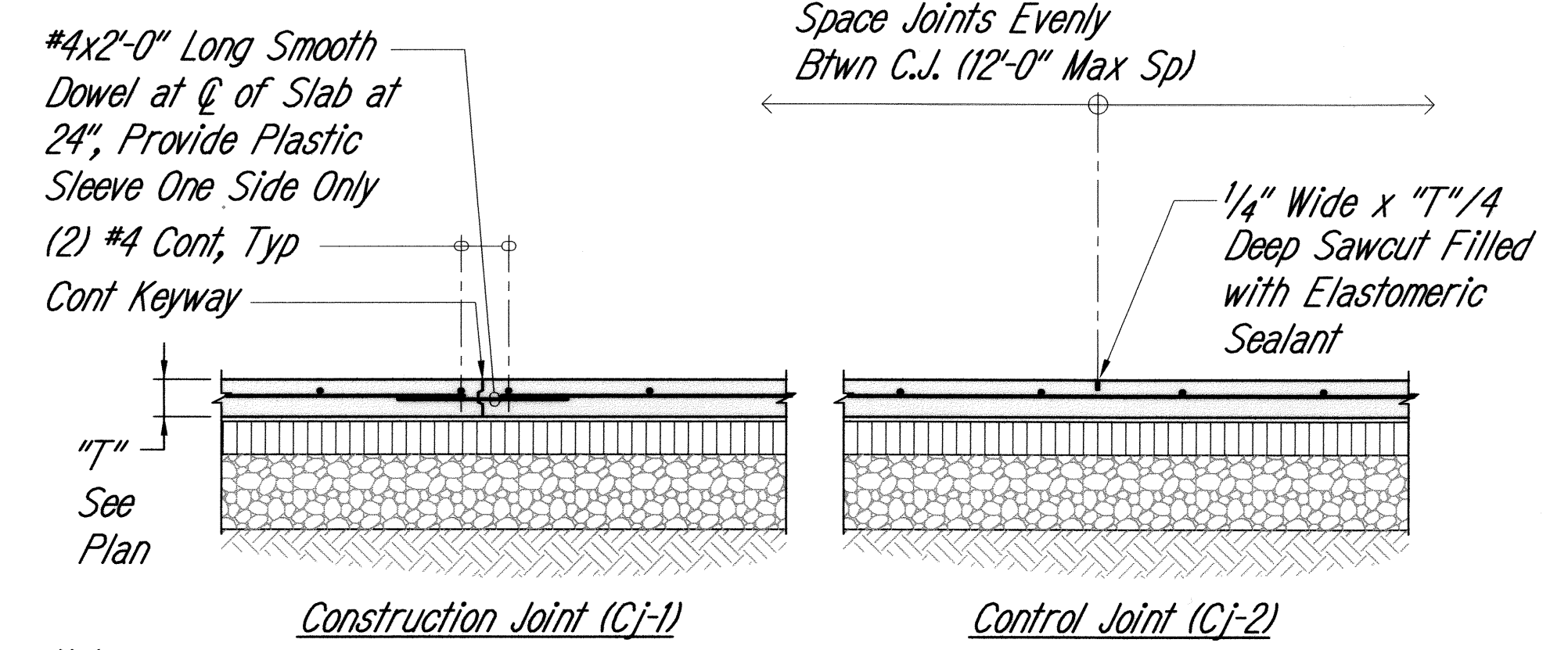
1
S-001 S-001



TYPICAL REINFORCING AT RE-ENTRANT CORNER DETAIL

Not To Scale

4
S-001 S-001



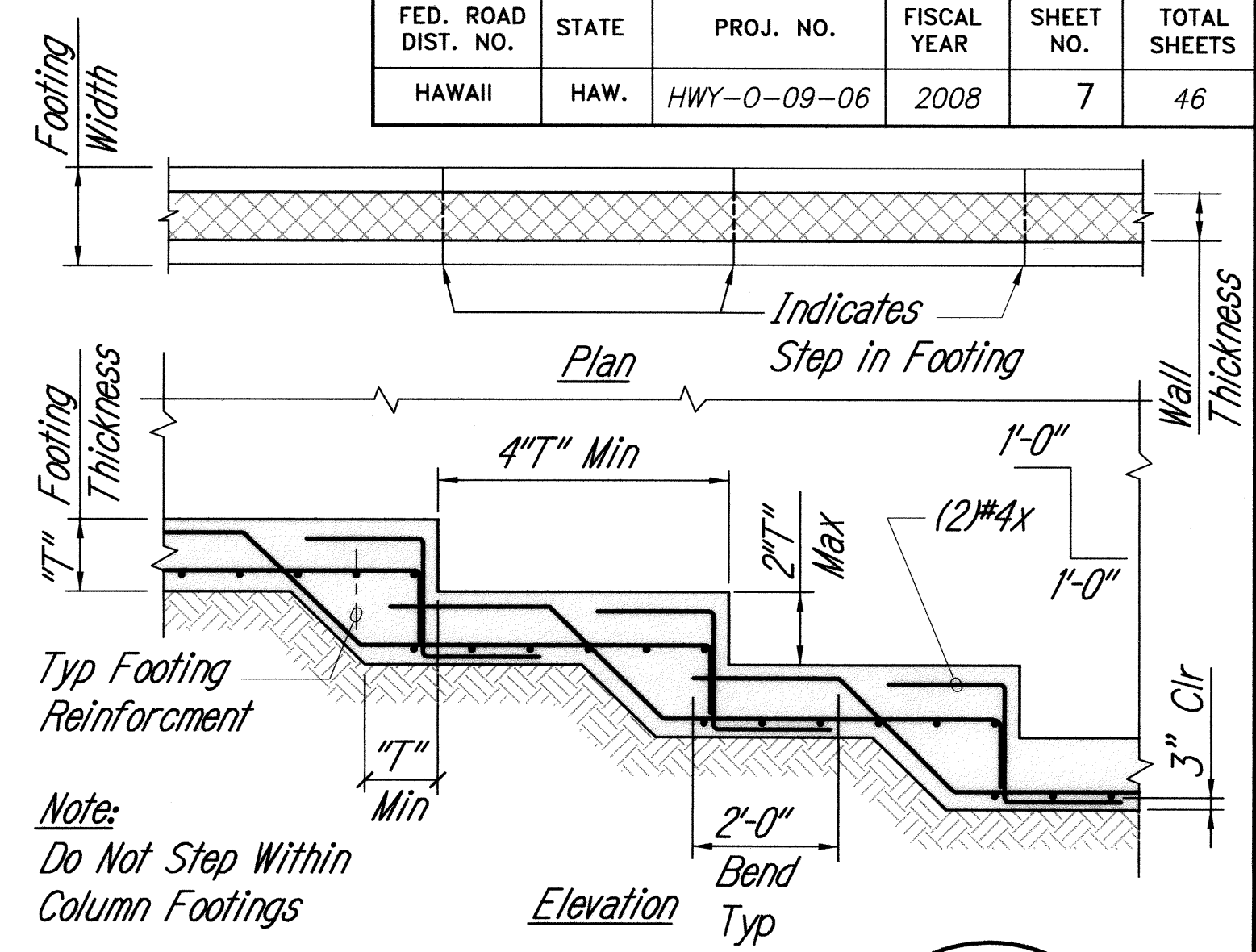
TYPICAL SLAB-ON GRADE DETAILS

TYPICAL SLAB-ON GRADE DETAILS

Not To Scale

2
S-001 S-001

Note:
 1. Saw Cutting shall occur as soon as concrete surface is firm enough to not be torn by cutting blade and before shrinkage cracking occurs, but no later than 12 hours after concrete has been poured.
 2. Submit jointing plans for review.

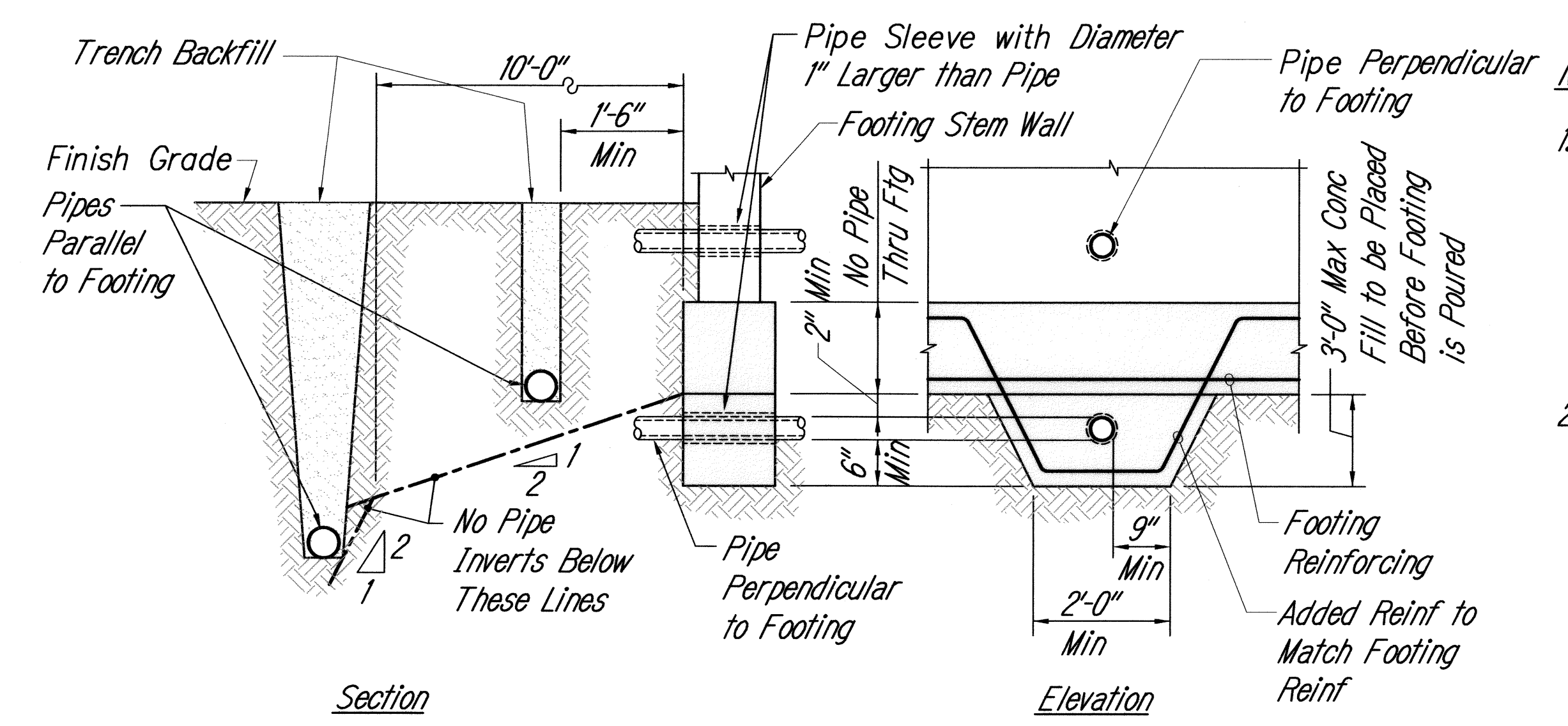


TYPICAL STEP FOOTING DETAIL

Not To Scale

3
S-001 S-001

Note:
 Do Not Step Within Column Footings

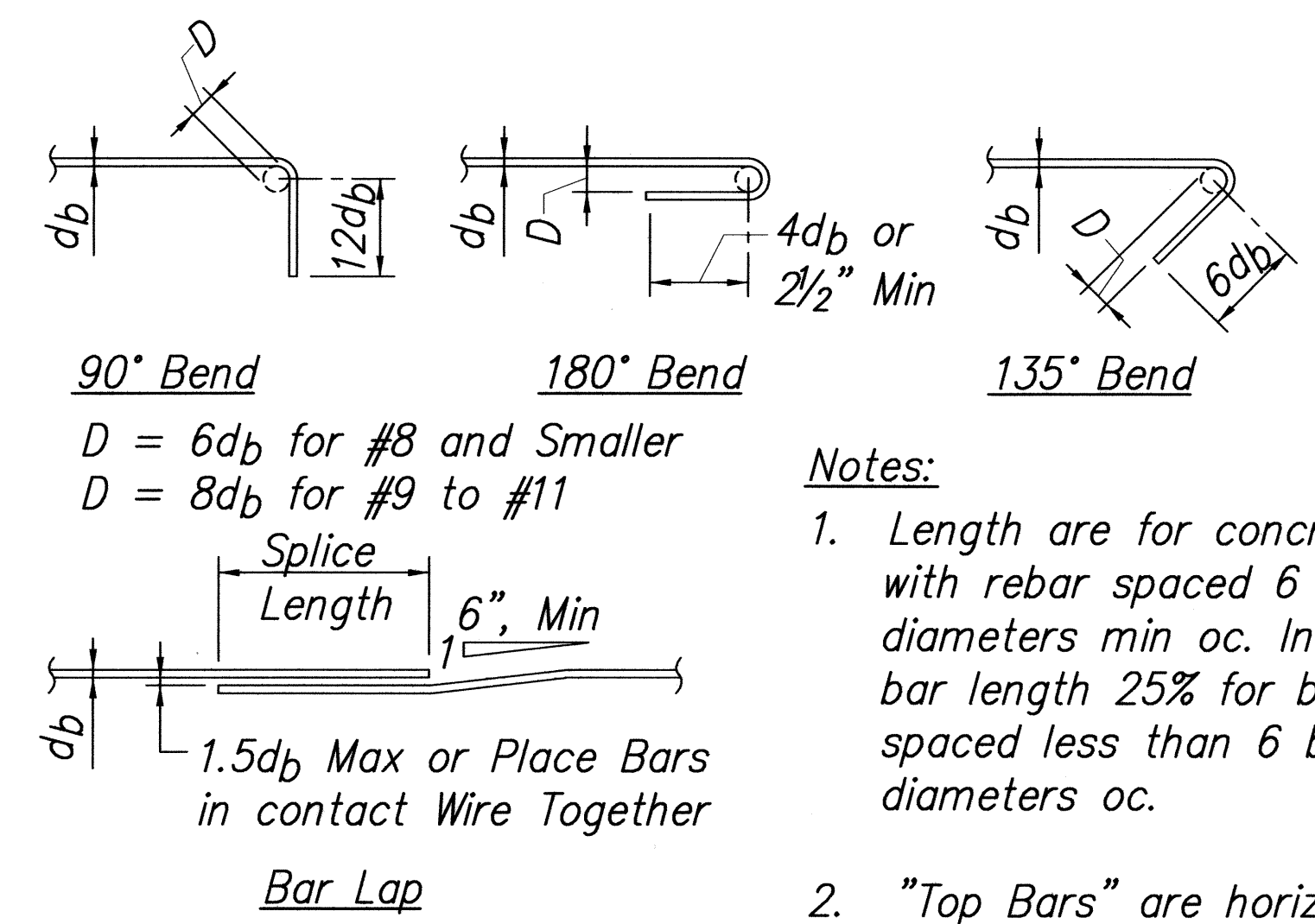


TYPICAL PIPE AT FOOTING DETAIL

Not To Scale

5
S-001 S-001

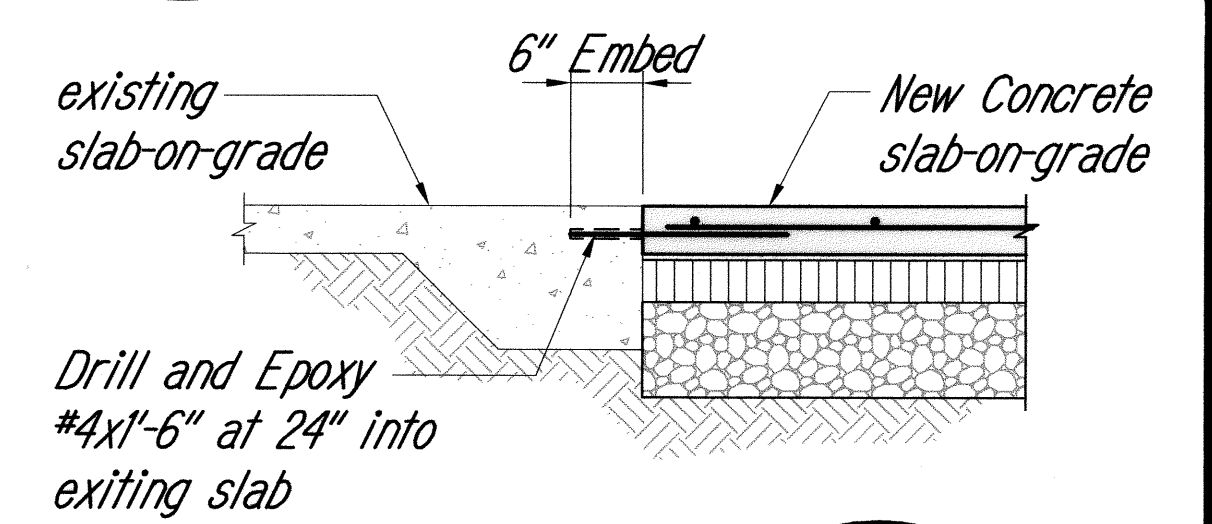
Notes:
 1. For pipe perpendicular to footing more than 3'-0" below bottom of footing, trench may be backfilled with compacted fill.
 2. Depth of footing may be affected by location of pipes. General Contractor shall determine exact depth and location of pipe prior to excavation for footings.



TYPICAL REBAR SPLICE AND EMBEDMENT LENGTH SCHEDULE

Not To Scale

6
S-001 S-001



SECTION

Not To Scale

7
S-001 S-001

Minimum Splice and Embedment Lengths					
Concrete Strength = 3,000 PSI					
Bar Size	Lap Splice		Embedment		Standard Hook
	Top Bars	Other Bars	Top Bar	Other Bars	
#3	28"	22"	22"	18"	10"
#4	38"	30"	30"	22"	12"
#5	48"	36"	36"	28"	14"
#6	56"	44"	44"	34"	18"
#7	82"	64"	64"	48"	20"
#8	94"	72"	72"	56"	22"
#9	106"	82"	82"	62"	26"
#10	118"	92"	92"	70"	28"
#11	132"	102"	102"	78"	32"

Minimum Splice and Embedment Lengths					
Concrete Strength = 4,000 PSI					
Bar Size	Lap Splice		Embedment		Standard Hook
	Top Bars	Other Bars	Top Bar	Other Bars	
#3	26"	20"	20"	16"	8"
#4	34"	26"	26"	20"	10"
#5	42"	32"	32"	24"	12"
#6	50"	38"	38"	30"	16"
#7	72"	54"	54"	42"	18"
#8	82"	62"	62"	48"	20"
#9	92"	70"	70"	54"	22"
#10	102"	80"	80"	62"	26"
#11	114"	88"	88"	68"	28"

DATE: _____
 SURVEY PLOTTED BY: _____
 DRAWN BY: _____
 DESIGNED BY: _____
 CHECKED BY: _____
 NO. _____

KEN KAZUO HAYASHIDA
 LICENSED PROFESSIONAL ENGINEER
 No. 6818-S
 HAWAII, U.S.A.
 EXPIRATION DATE OF THE LICENSE 4/30/2010
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STRUCTURAL TYPICAL DETAILS

KANEOHE, PEARL CITY AND WAIANAE
 BASEYARD WASHDOWN RACKS
 Project No. HWY-0-09-06

SCALE: AS NOTED DATE: MAY 2008

SHEET No. S-001 OF 46 SHEETS