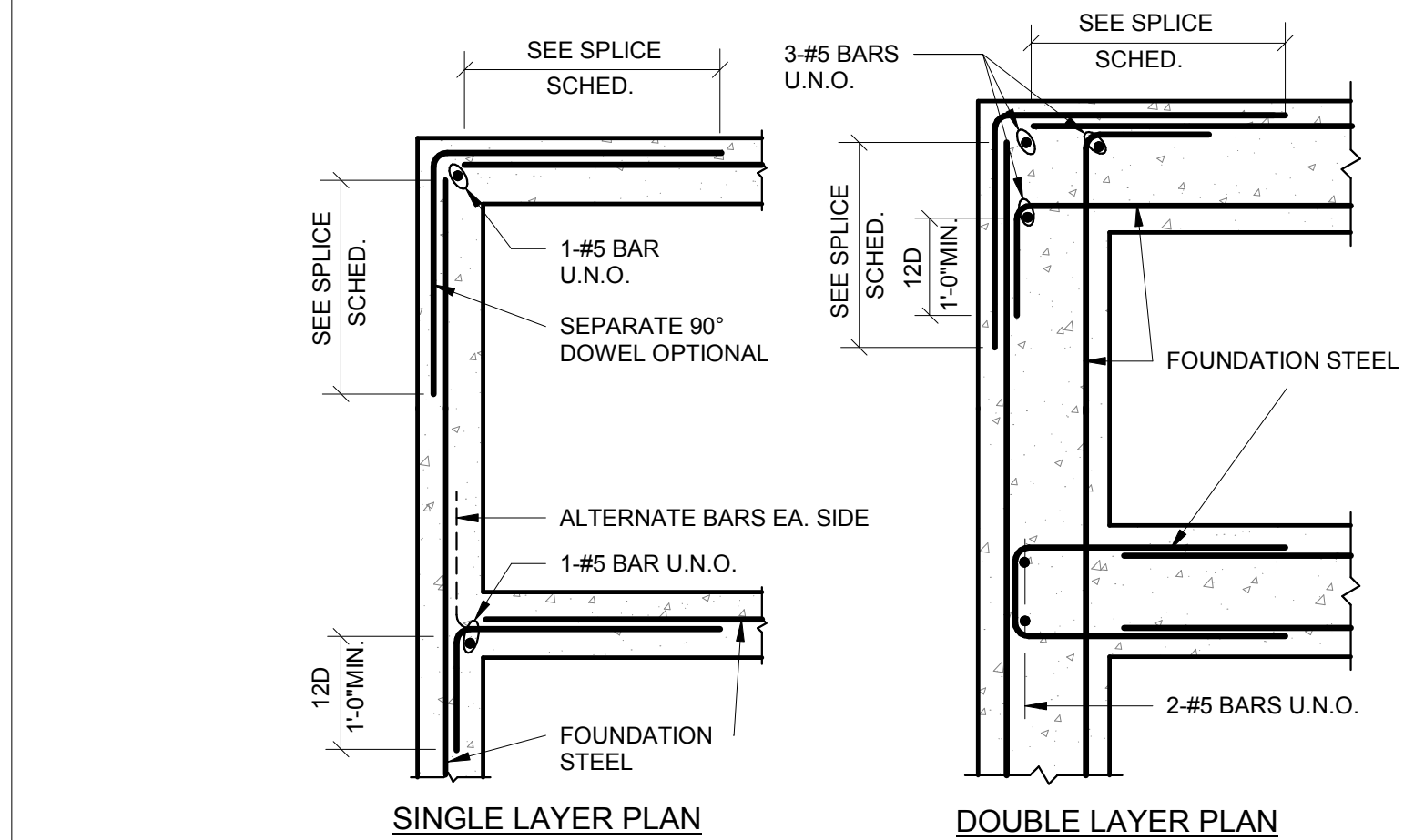
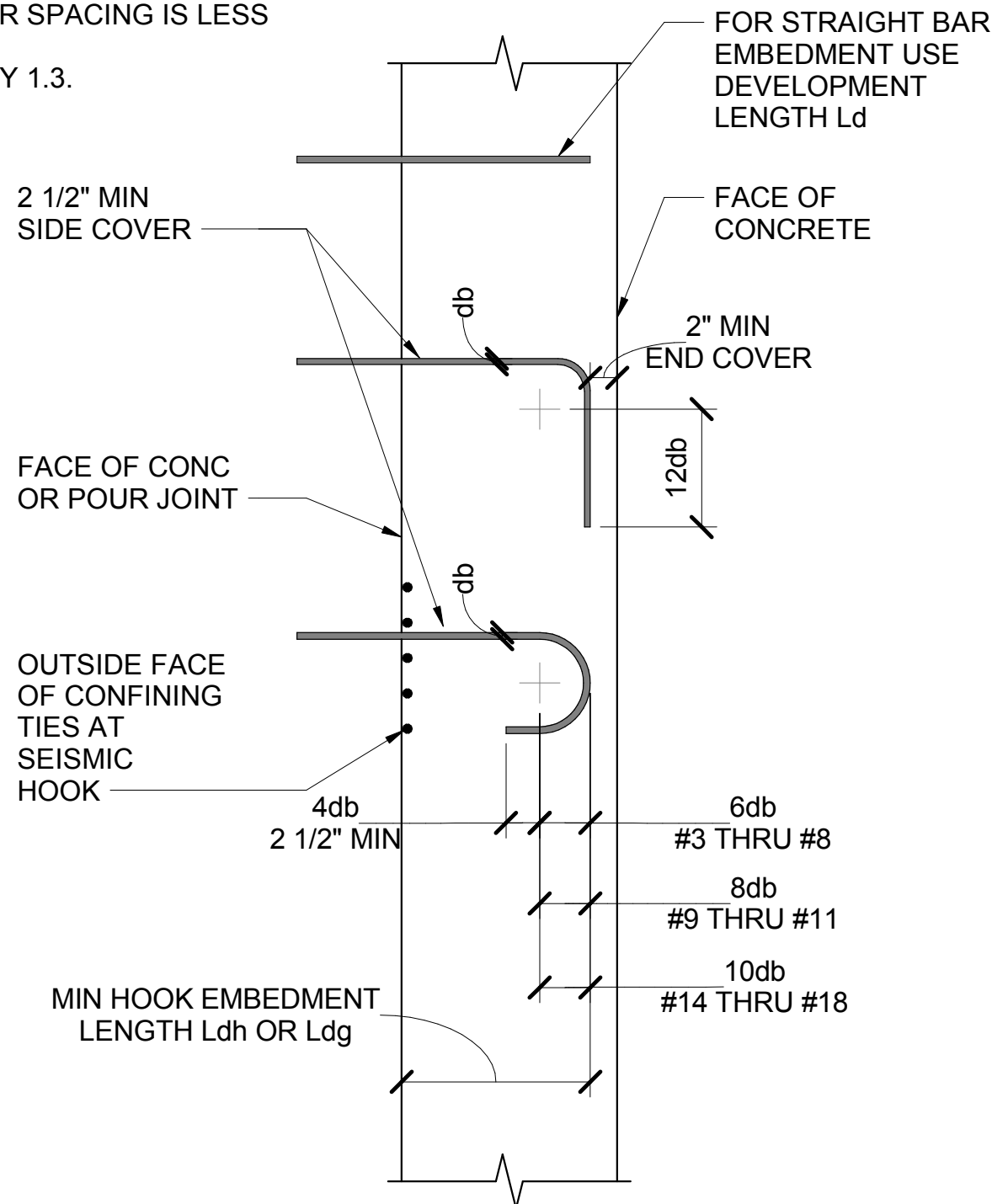
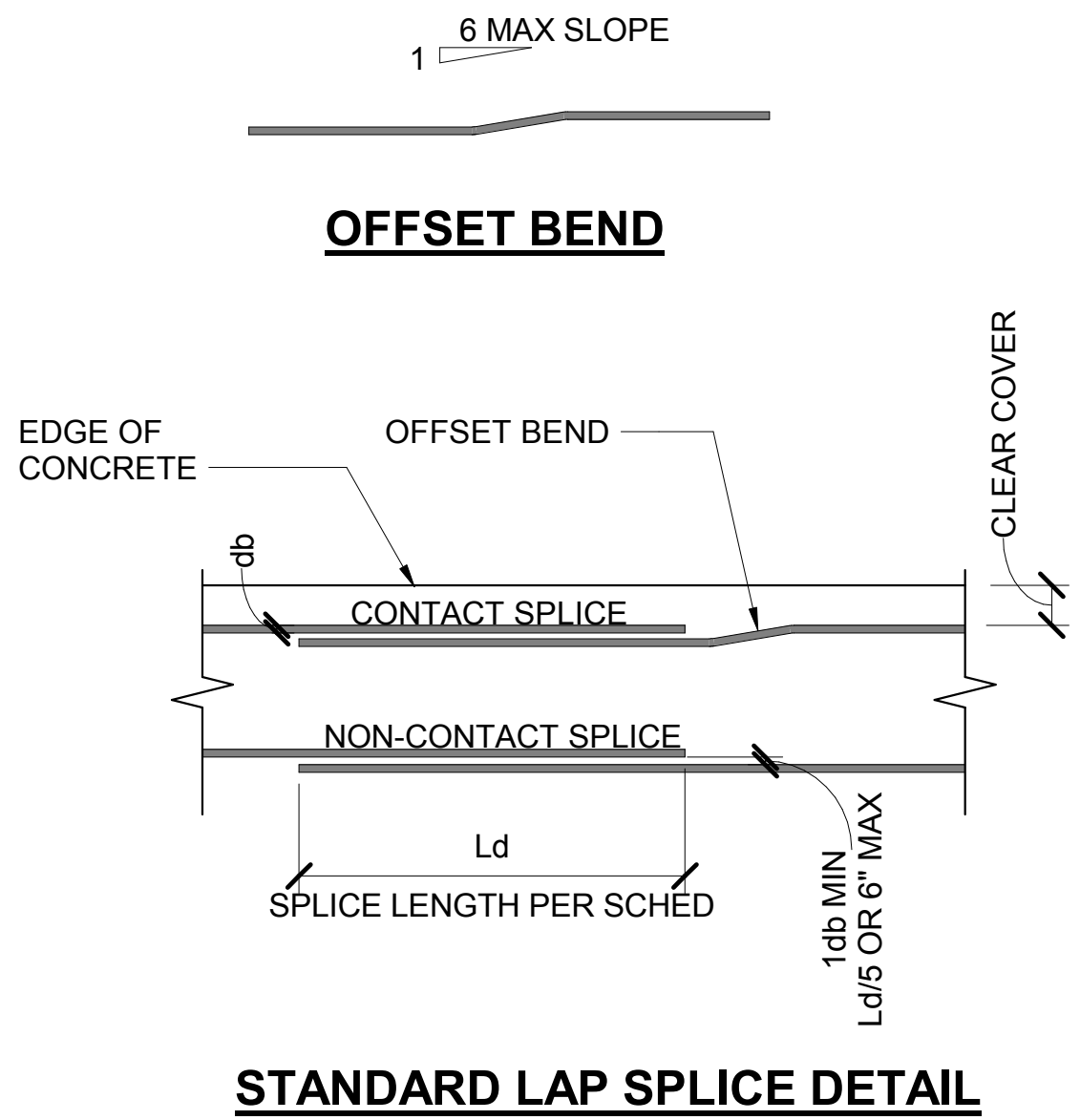


BAR SIZE	LAP SPLICE LENGTH							
	f'c = 3,000 PSI				f'c = 4,000 PSI			
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	28	42	22	32	24	36	19	28
#4	37	56	29	43	32	48	25	37
#5	47	70	36	54	40	60	31	47
#6	56	84	43	64	48	72	37	56
#7	81	122	63	94	70	106	54	81
#8	93	139	72	107	80	121	62	93

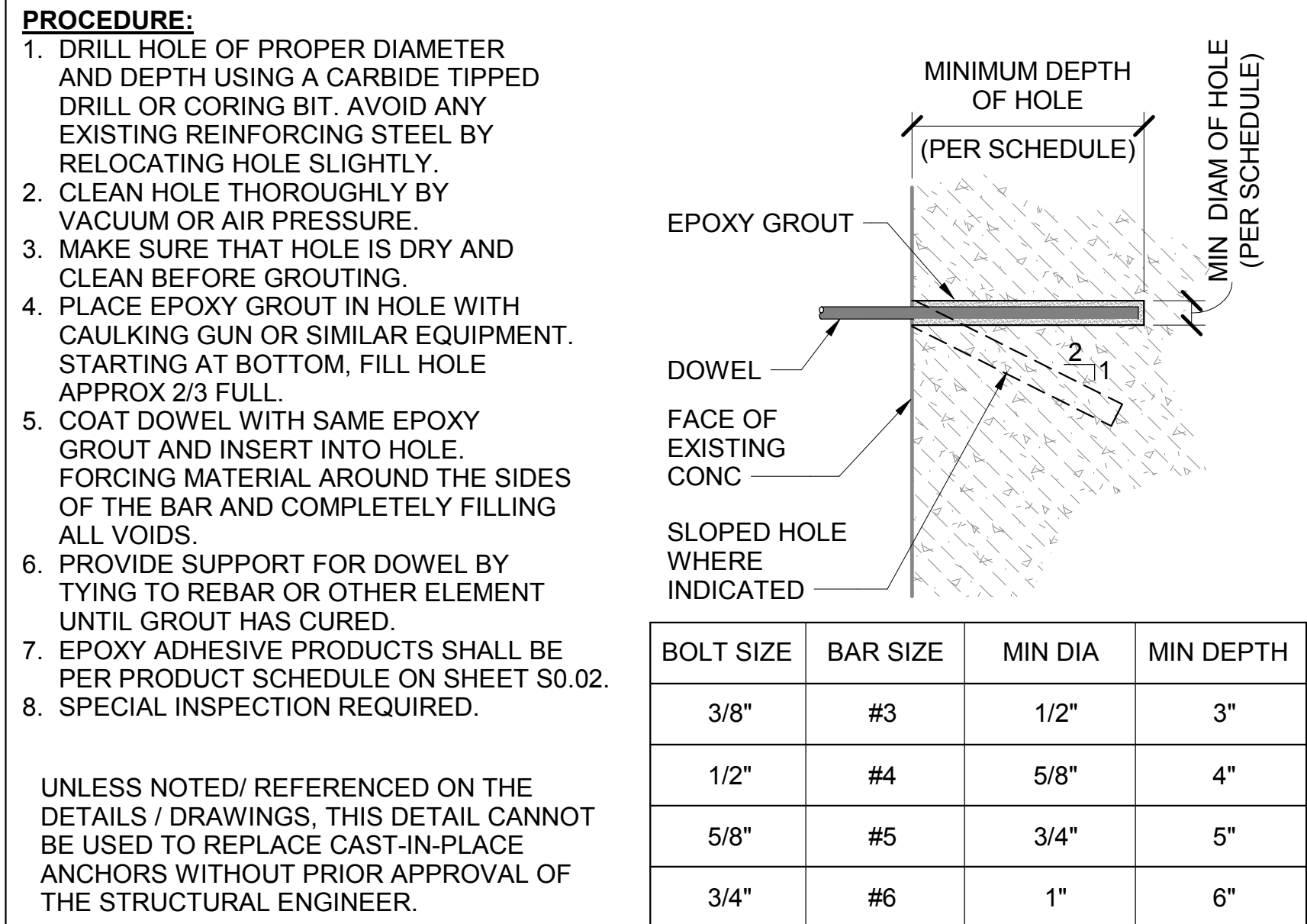
BAR SIZE	HOOK LENGTH			
	f'c = 3,000 PSI		f'c = 4,000 PSI	
	STD HOOK DEVELOPMENT LENGTH Ldh (IN)	CONFINED HOOK LENGTH Ldg (IN)	STD HOOK DEVELOPMENT LENGTH Ldh (IN)	CONFINED HOOK LENGTH Ldg (IN)
#3	6	6	6	6
#4	8	6	7	6
#5	10	8	9	7
#6	12	10	10	8
#7	14	11	12	10
#8	16	13	14	11

- NOTES:**
- ALL LAP SPLICES SHALL BE CLASS B UNO. LENGTHS ARE IN INCHES.
  - VALUES ARE BASED ON GRADE 60 (Fy=60 KSI) REINFORCING.
  - TOP BARS REFERS TO HORIZONTAL REINFORCING WITH MORE THAN 12" OF CONCRETE PLACED BELOW REINFORCING BAR DURING POUR. OTHER BARS ARE ALL BOTTOM BARS ARE HORIZONTAL BARS WITH LESS THAN 12" OF CONCRETE PLACED BELOW REINFORCING BAR DURING POUR AND ALL VERTICAL BARS.
  - WHERE REQUIRED EMBEDMENT CANNOT BE ACHIEVED WITH STRAIGHT BARS, PROVIDE 180 OR 90 DEGREE HOOKS WITH ADEQUATE HOOKED BAR EMBEDMENT.
  - FOR LIGHTWEIGHT CONCRETE, MULTIPLY TABULATED VALUES BY 1.33.
  - TABULATED VALUES SHALL BE MULTIPLIED BY 1.25 FOR ALL SPLICES OF CHORD BARS, VERTICAL BOUNDARY REINFORCING SPLICES, AND DRAG BAR EMBEDMENT OR SPLICE.
  - SEE BUILDING CODE AND LATEST VERSION OF ACI FOR ALL REQUIREMENTS NOT NOTED.
  - FOR EPOXY COATED REINFORCEMENT, SEE CURRENT BUILDING CODE FOR ADJUSTMENT FACTORS.
  - WHERE BARS OF DIFFERENT SIZES ARE LAP SPICED IN TENSION, SPLICE LENGTH SHALL BE THE LARGER OF THE DEVELOPMENT LENGTH Ld OF THE LARGER BAR AND THE TENSION LAP SPLICE LENGTH OF THE SMALLER BAR.
  - ALL HOOKED BARS SHALL EXTEND AS FAR AS POSSIBLE TO THE OPPOSITE FACE WITH A MINIMUM 2" END COVER AND EMBEDMENT NOT LESS THAN THE SCHEDULE.
  - CASE #1 AND #2 ARE DEFINED AS FOLLOWS:  
CASE #1 = CONCRETE COVER IS AT LEAST 1.0db AND CENTER-TO-CENTER SPACING IS AT LEAST 2.0db  
CASE #2 = CONCRETE COVER IS LESS THAN 1.0db OR CENTER-TO-CENTER SPACING IS LESS THAN 2.0db
  - FOR CLASS A STRAIGHT DEVELOPMENT LENGTHS, Ld, DIVIDE SPLICE LENGTHS BY 1.3.



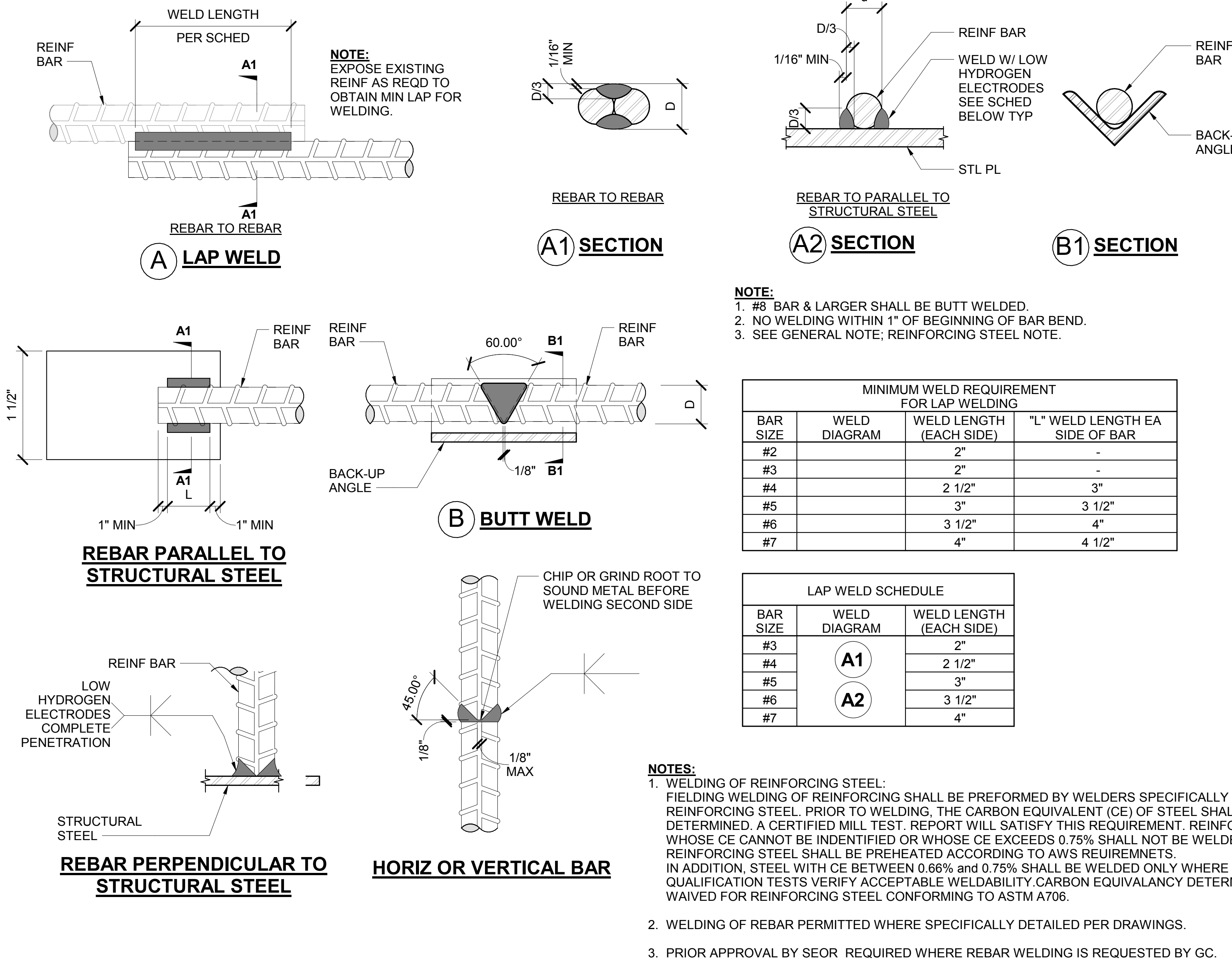
**REBARS AT CORNER AND INTERSECTION**

DETAIL ID: CR-REBAR-01



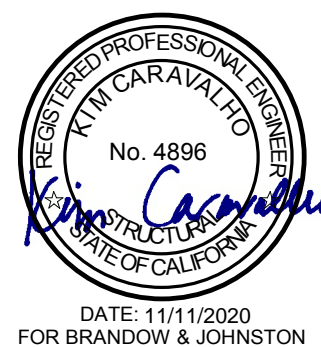
**TYPICAL LAP SPLICE AND HOOK LENGTH SCHEDULE**

SCALE: NTS



REVISIONS

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NORWALK LA MIRADA UNIFIED SCHOOL DISTRICT  
**LA MIRADA HIGH SCHOOL EXISTING RAMP & RETAINING WALLS REHABILITATION PROJECT**  
13520 ADELFA DRIVE, LA MIRADA, CA 90638

DSA # 03-120869

**NAC**  
ARCHITECTURE

NAC NO. 161-19015  
DATE 7/16/2020

DSA SUBMISSION

TYPICAL CONCRETE DETAILS

**S1.01**